

AP - 115

2012 AGWMR

04/16/2013



www.CRAworld.com



Annual Groundwater Monitoring and Remediation Report

January Through December 2012
Maljamar E&P
Maljamar, Lea County, New Mexico

Prepared for: ConocoPhillips Company

Conestoga-Rovers & Associates
2270 Springlake Road, Suite 800
Dallas, Texas 75234

April 2013 • #075019
Report Number:4

TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1
2.0 BACKGROUND INFORMATION AND SITE HISTORY	2
3.0 SAMPLING METHODOLOGY AND ANALYTICAL RESULTS.....	3
3.1 GROUNDWATER SAMPLING METHODOLOGY	3
3.2 GROUNDWATER ANALYTICAL RESULTS.....	4
4.0 GROUNDWATER REMEDIAL ACTIVITIES.....	6
5.0 SUMMARY AND RECOMMENDATIONS.....	7

LIST OF FIGURES
(Following Text)

FIGURE 1	SITE LOCATION MAP
FIGURE 2	SITE PLAN MAP
FIGURE 3	GROUNDWATER GRADIENT MAP - JULY 2012
FIGURE 4	GROUNDWATER ANALYTICAL RESULTS -CHLORIDE & TDS - JULY 2012
FIGURE 5	CHLORIDE CONCENTRATION MAP - JULY 2012

LIST OF TABLES
(Following Text)

TABLE 1	WELL CONSTRUCTION DETAILS
TABLE 2	WATER LEVEL MEASUREMENTS - JANUARY THROUGH DECEMBER 2012
TABLE 3	GROUNDWATER ANALYTICAL RESULTS SUMMARY - 2012
TABLE 4	EW-1 EXTRACTION WELL RECOVERY VOLUMES

LIST OF APPENDICES

APPENDIX A	GROUNDWATER LABORATORY ANALYTICAL REPORTS – JULY 2012
APPENDIX B	HISTORICAL WATER LEVEL MEASUREMENTS
APPENDIX C	CONCENTRATION VS. EXTRACTION VOLUME GRAPH
APPENDIX D	GROUNDWATER ANALYTICAL RESULTS SUMMARY-BTEX- 2007 THROUGH 2012
APPENDIX E	GROUNDWATER ANALYTICAL RESULTS SUMMARY-INORGANICS- 2007 THROUGH 2012
APPENDIX F	GROUNDWATER ANALYTICAL RESULTS SUMMARY-METALS- 2007 THROUGH 2012

1.0 INTRODUCTION

On behalf of ConocoPhillips Company (COP), Conestoga-Rovers & Associates (CRA) is performing environmental and remedial project related activities at the Maljamar E&P site (Site). The Site is located in Lea County, New Mexico (Figure 1). The information in this report includes a brief review of previous Site activities, groundwater sampling data collected in July 2012, and groundwater extraction data collected from January through December 2012 during operation of the groundwater extraction well (EW-1) at the Site. The report presents the following in detail.

- Background information and Site characteristics
- Groundwater monitoring activities and results
- Summary and recommendations

2.0 BACKGROUND INFORMATION AND SITE HISTORY

The Site is located in Lea County, New Mexico (Sec 21, T17S, R32E; Figure 1). The Site is located west of a produced water release that was discovered on July 6, 2006. During previous investigative and remedial activities at the Site, a groundwater extraction well was installed, groundwater samples and water level data were collected, surface and borehole geophysical surveys were performed, an aquifer pump test was conducted, and a groundwater extraction well was installed and operated. The Site is assessed in conjunction with the Phillips 66 Maljamar Gas Plant. The following is a summary of those activities:

- An aquifer pump test was performed at the site in September 2003 to gather hydrogeologic data from the uppermost saturated zone, exhibiting chloride impacts, in order to develop a remediation plan. The data were also used to develop a water balance for the uppermost aquifer and an interpretive groundwater flow model to aid in estimating the effects of pumping a proposed well to be sited near wells SK-1 and MW-7.
- The results of the aquifer pump test and the magnetometer and borehole geophysical surveys were submitted to the NMOCD in the *Comprehensive Groundwater Report*, dated March 1, 2004 (Maxim, 2004a).
- A subsurface assessment report detailing the findings regarding the release of produced water was submitted to the NMOCD on November 10, 2006 (Tetra Tech, 2006).
- Groundwater extraction well EW-1 was installed adjacent to monitoring well MW-12 in June 2007, and was developed in August 2007. Continuous groundwater extraction at EW-1 began in September 2007. Extracted groundwater from EW-1 is pumped into a flowline connected to off-site Maljamar Gas Plant extraction well MW-6. Installation details for EW-1 are discussed in the 2007 Annual Report dated March 21, 2008 (Tetra Tech, 2008).
- In December 2007, EW-1 was surveyed for location coordinates and elevation of top of casing.
- On behalf of Phillips 66, CRA assumed remedial oversight duties of the Site in August 2011. Monthly groundwater level measurements were recorded and an annual groundwater monitoring and sampling event was conducted.

3.0 SAMPLING METHODOLOGY AND ANALYTICAL RESULTS

3.1 GROUNDWATER SAMPLING METHODOLOGY

CRA performed groundwater monitoring activities on existing Site and off-site (Gas Plant) monitoring and recovery wells from January through December 2012. Activities included performing groundwater sampling and analyses in July 201 and collecting monthly groundwater level measurements at the Site and off-site monitoring wells.

Groundwater Level and Water Quality Data Collection

Monthly groundwater level measurements were recorded at the Site from January to December 2012. An oil/water interface probe was used to measure groundwater depth and check for the presence hydrocarbon in each of the monitor wells. Groundwater measurements proceeded from the cleanest wells to the wells containing hydrocarbons. These data, along with casing diameter and total depth information, were used to calculate the water volume in each monitor well. Before and after each use, the oil/water interface probe was cleaned with an Alconox®/de-ionized water solution and rinsed with de-ionized water.

Table 1 presents the well construction details for all the off-site monitoring and on-site remediation well installed at the Site. Groundwater and hydrocarbon depth measurements and elevations for January through December 2011 are summarized in Table 2. A summary of historical groundwater monitoring well gauging data is presented in Appendix B.

Groundwater Monitoring and Sampling

On July 18, 2012, groundwater samples were collected from extraction well EW-1 at the Site. Groundwater level measurements were recorded from each monitoring well at the Site to check for presence of hydrocarbon. During the July 2012 groundwater sampling event, the groundwater flow direction was predominately to the southeast at an approximate gradient of 0.0081 ft/ft to northeast and 0.0025 ft/ft to the southeast. A potentiometric groundwater surface elevation map is presented in Figure 3. Table 2 presents the groundwater gauging data for January through December 2012.

Following groundwater measurement activities water was purged and sampled utilizing hand bailing techniques. The wells were purged of three well volumes of groundwater prior to sample collection with single-use, polyethylene hand bailers suspended with new string. Disposable nitrile gloves were worn by sampling personnel and were changed at each well location.

Each sample was transferred to laboratory-provided containers that were subsequently sealed, labeled, and placed in an ice-cooled chest for storage and transport to Pace Analytical Services, Inc. in Lenexa, Kansas. Proper chain of custody documentation was maintained throughout the sampling, storage, and shipping process.

Groundwater Extraction and Hydrocarbon Recovery Operations

Groundwater extraction well EW-1 was operated continuously from January through December 2012. Extracted groundwater was pumped from the well to a flowline connected with off-site extraction well MW-6 and then continued to the off-site 210 barrel (bbl) fluid storage tank. The fluid storage tank is fitted with automated tank gauging and pumping controls and automatically injects the tank contents into MCA Station water flood system. A dedicated flowmeter, installed on the extraction well piping system, gauges the volume of groundwater removed by the extraction well. Since initial startup on September 17, 2007 to December 13, 2012, approximately 164,965 gallons of groundwater have been extracted from EW-1. Table 4 presents a summary of the groundwater extraction well recovery volumes at EW-1.

3.2 GROUNDWATER ANALYTICAL RESULTS

During the July 2012 sampling event, groundwater samples collected from extraction well EW-1 were submitted to Pace Analytical Services, Inc. of Lenexa, Kansas for analyses of benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8260; semi-volatile organic compounds-polynuclear aromatic hydrocarbons (PAHs) by Method 8270; calcium, magnesium, sodium, and potassium by Method 6010B; bromide, chloride, nitrate, and sulfate by Method 300.0A; total dissolved solids (TDS) by Method 160.1; and alkalinity (carbonate, bicarbonate, and total) by Method 310.1. The analytical results have been summarized and are presented in Table 3. Analytical results were compared to the New Mexico Water Quality Control Commission (NMWQCC) groundwater quality standards contained in Title 20, Chapter 6, Part 2, Section 3103 of the New Mexico Administrative Code (20.6.2.3103 NMAC).

The following results were noted from the July 2012 annual groundwater sampling event:

- Chloride was detected above the NMWQCC standard (250 mg/L) in EW-1 at 26,500 mg/L.

- Sulfate was detected above the NMWQCC standard (600 mg/L) in EW-1 at 746 mg/L.
- TDS was detected above the NMWQCC standard (1,000 mg/L) in EW-1 at 59,600 mg/L.

Groundwater analytical data is summarized in Table 3. Analytical results for chloride and TDS for July 2012 are presented in Figure 4. Concentration maps for chloride are presented as Figures 5. The laboratory groundwater analytical report is presented as Appendix A. A concentration vs. volume graph for EW-1 is presented in Appendix C.

4.0 GROUNDWATER REMEDIAL ACTIVITIES

CRA performed groundwater remedial activities on existing Site and off-site (Gas Plant) monitoring and recovery wells from January through December 2012. Activities included operating groundwater extraction well EW-1 and collecting periodic water quality data during the operation of extraction well EW-1.

Groundwater Extraction and Hydrocarbon Recovery Operations

Groundwater extraction well EW-1 was operated continuously from January through December 2012. Extracted groundwater was pumped from the well to a flowline connected with off-site extraction well MW-6 and then continued to the off-site 210 barrel (bbl) fluid storage tank. The fluid storage tank is fitted with automated tank gauging and pumping controls and automatically injects the tank contents into MCA Station water flood system. A dedicated flowmeter, installed on the extraction well piping system, gauges the volume of groundwater removed by the extraction well. Since initial startup on September 17, 2007 to December 13, 2012, approximately 164965 gallons of groundwater have been extracted from EW-1. Table 4 presents a summary of the groundwater extraction well recovery volumes at EW-1.

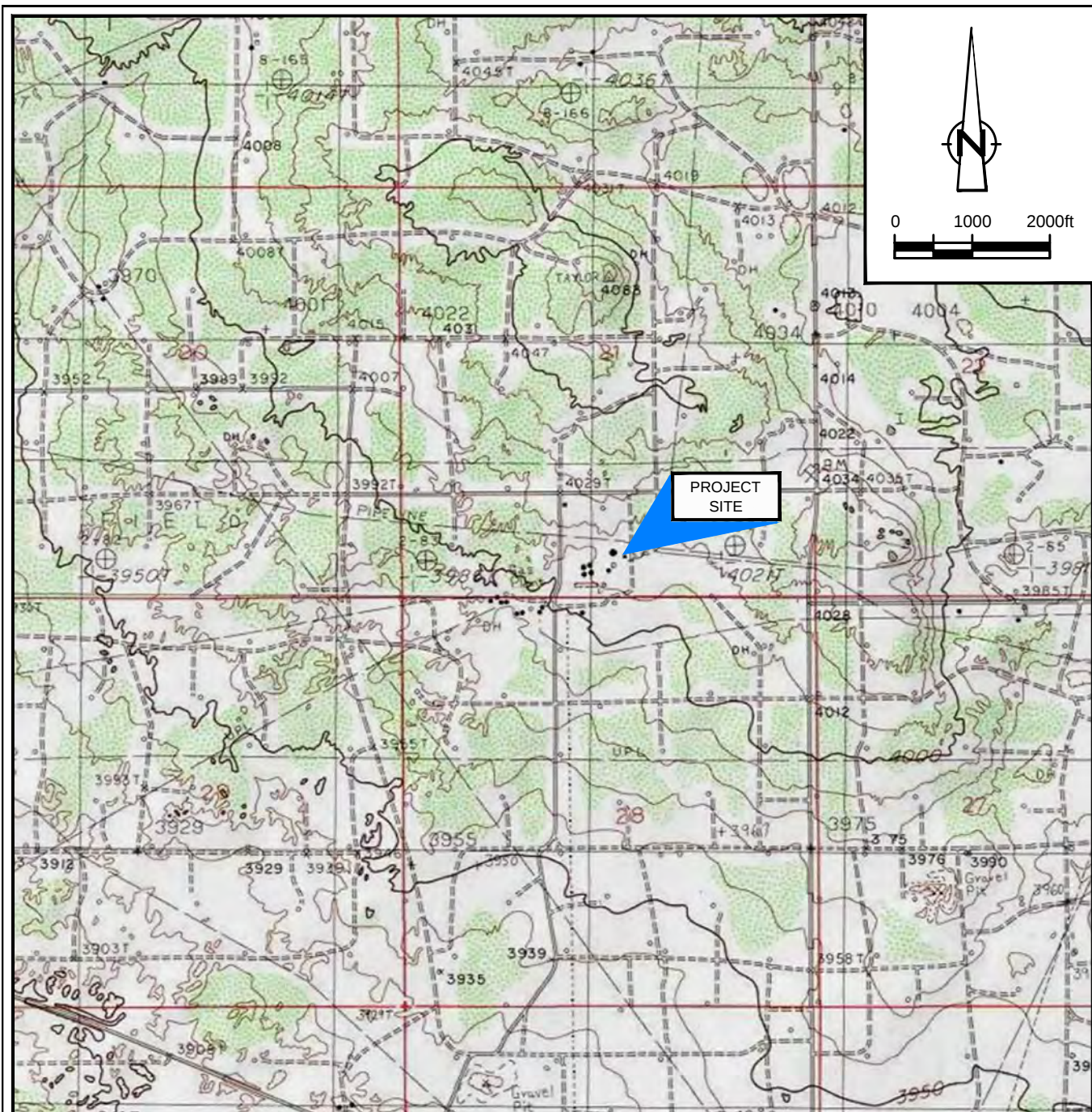
5.0 SUMMARY AND RECOMMENDATIONS

Results of the July 2012 groundwater sampling event show concentrations of chloride, sulfate, and TDS exceeded NMWQCC standards in EW-1 at the Site.

Based on the data, results and evaluations presented in this report, CRA recommends the following:

- Continue operation of groundwater extraction well EW-1.
- Annual groundwater monitoring and sampling at the Site. Groundwater samples will be collected and submitted to an analytical laboratory for analyses of volatile organic compounds, semi-volatile organic compounds, major ions, total dissolved solids, and chloride.

FIGURES



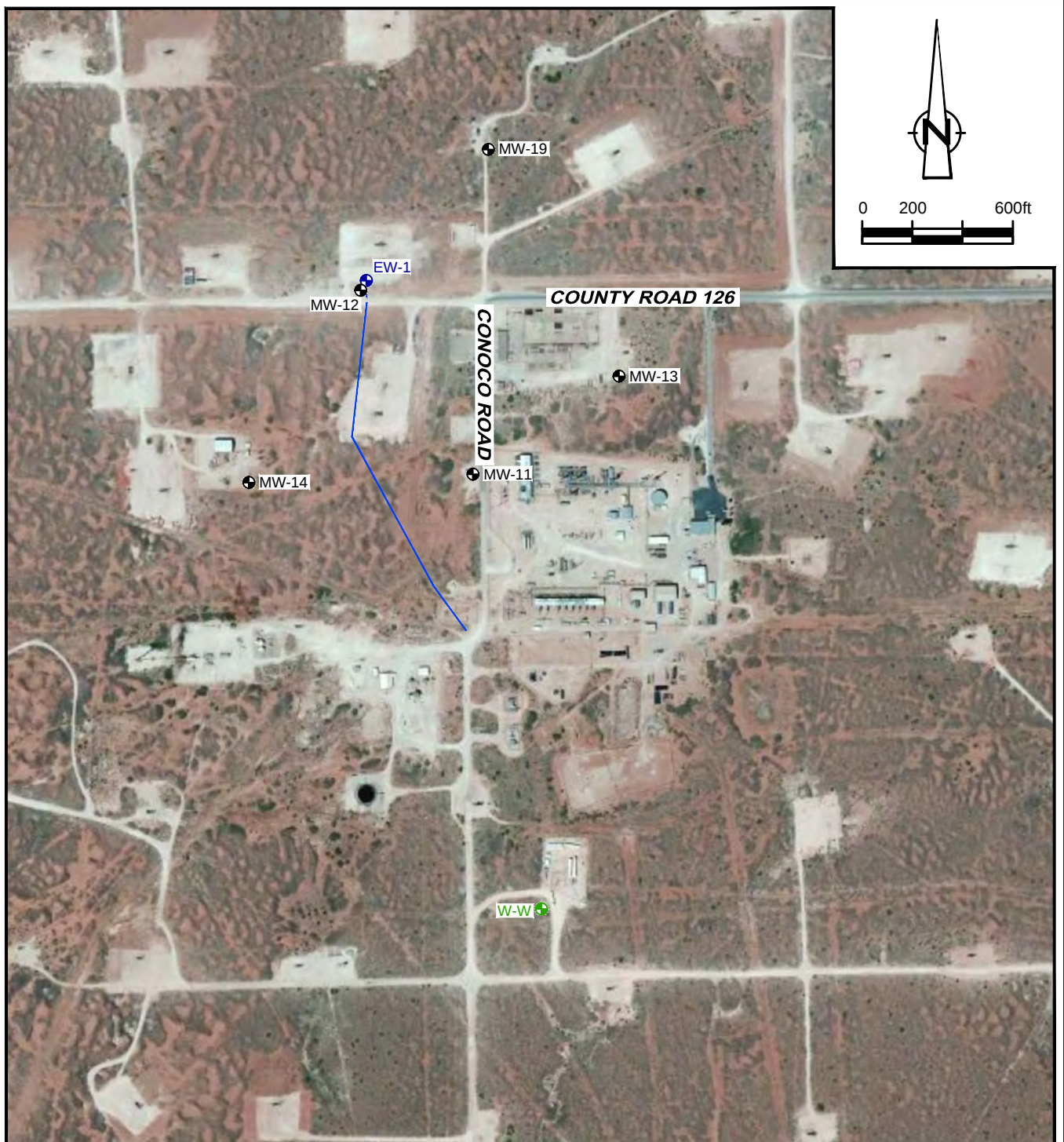
SOURCE: USGS 7.5 MINUTE QUAD
"MALJAMAR, NEW MEXICO"

LAT/LONG: 32.8153°N, 103.7719°W
COORDINATE: NAD83 DATUM, U.S. FOOT
STATE PLANE ZONE - NEW MEXICO EAST

figure 1

SITE LOCATION MAP
MALJAMAR E&P
LEA COUNTY, NEW MEXICO
ConocoPhillips Company





LEGEND

-  Off-Site Monitoring Well Location
-  Extraction Well Location
-  Water Well Location
-  Produced Water Line

LAT/LONG: 32.8153°NORTH, 103.7719°WEST
 COORDINATE: NAD83 DATUM, U.S. FOOT
 STATE PLANE ZONE - NEW MEXICO EAST

figure 2

SITE PLAN MAP
 MALJAMAR E&P
 LEA COUNTY, NEW MEXICO
ConocoPhillips Company



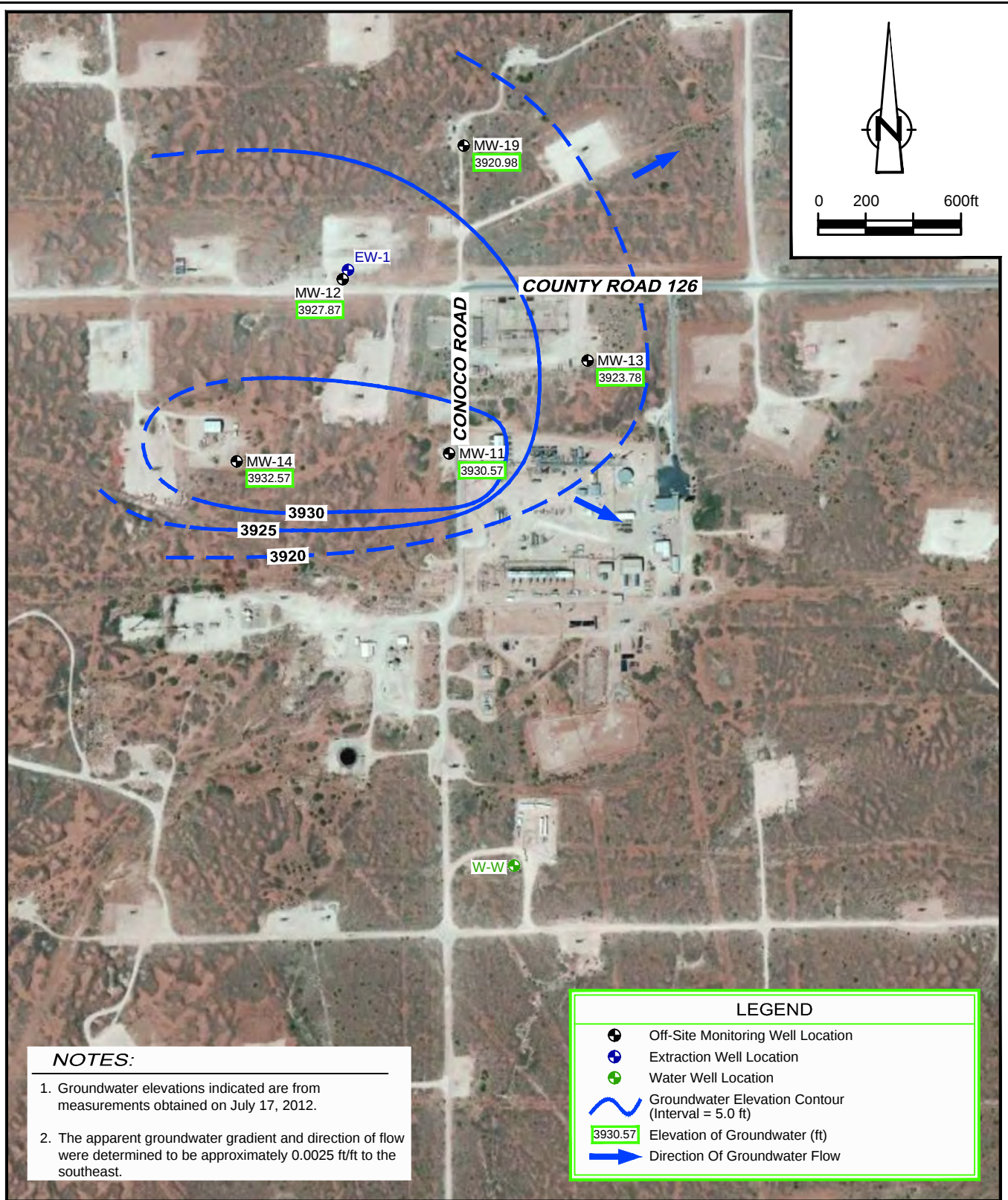


figure 3
 GROUNDWATER GRADIENT MAP - JULY 2012
 MALJAMAR E&P
 LEA COUNTY, NEW MEXICO
ConocoPhillips Company



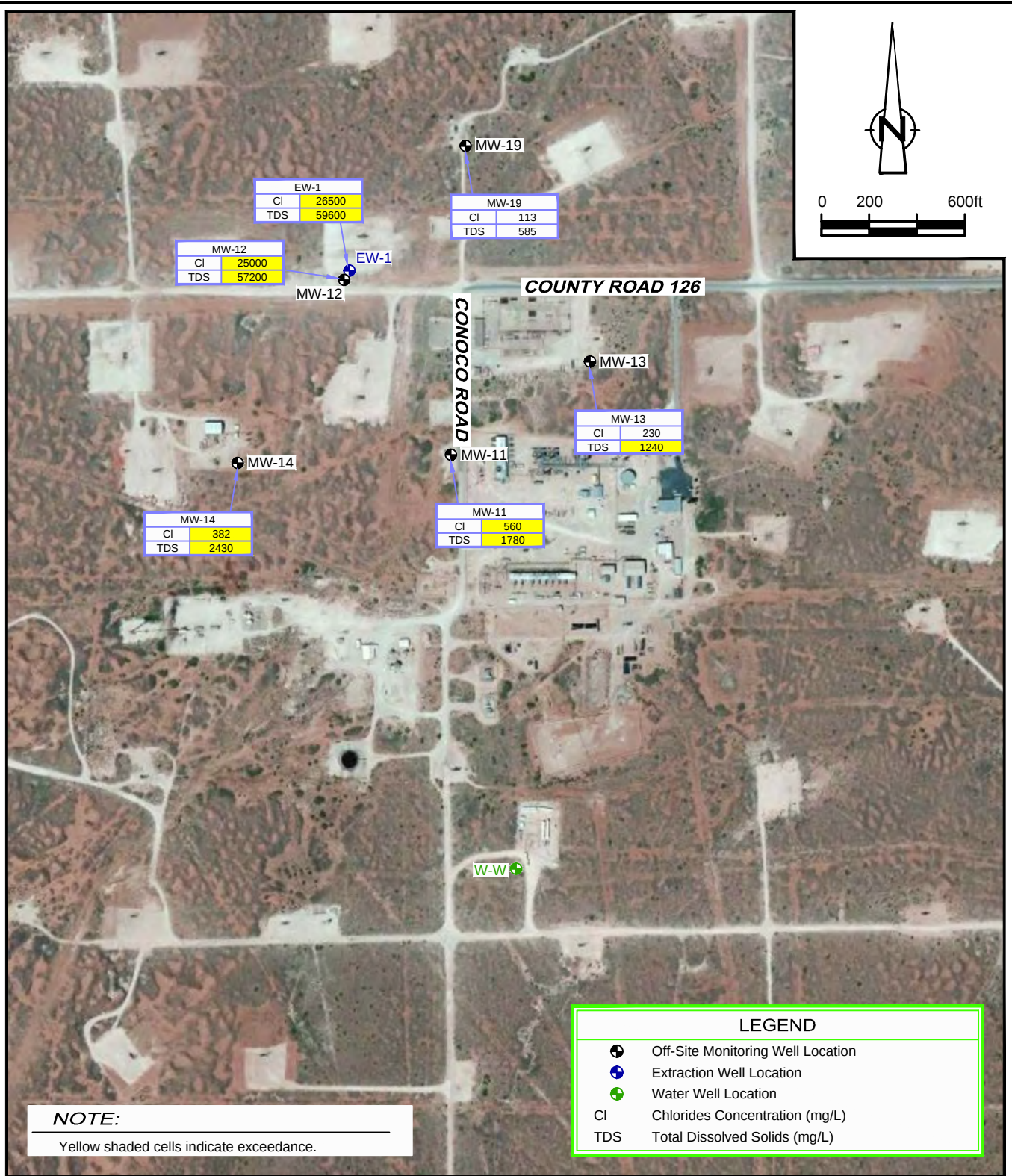


figure 4

GROUNDWATER ANALYTICAL RESULTS -
CHLORIDE & TDS - JULY 2012
MALJAMAR E&P
LEA COUNTY, NEW MEXICO
ConocoPhillips Company



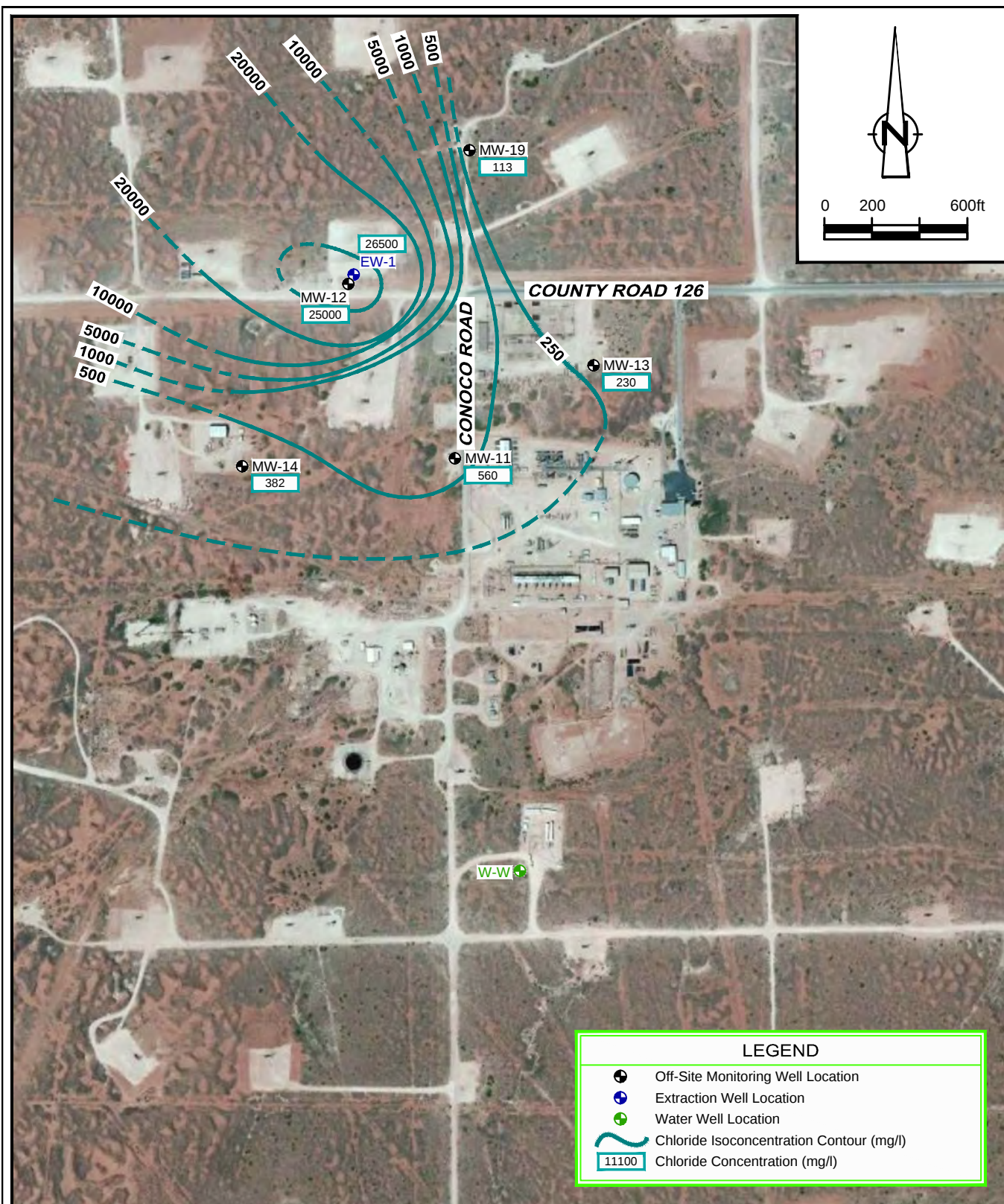


figure 5

CHLORIDE CONCENTRATION MAP - JULY 2012
MALJAMAR E&P
LEA COUNTY, NEW MEXICO
ConocoPhillips Company



TABLES

TABLE 1

**WELL CONSTRUCTION DETAILS
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO**

Monitoring Well Number	Location Coordinates**		Top of Casing Elevation (famsl)	Depth				Screen Interval (fbgs)	Screen Slot Size*** (inches)	Casing Diameter (inches)	Well Installation Date
	Northing	Easting		Total (fbgs)	Casing (fbgs)	Water (fbgs)	Condensate (fbgs)				
EW-1	32.8165	-103.77452	4022.04	125	0-95	92.58		95-125	0.020	6	05/15/2007
Off-Site Wells											
MW-11	32.81442	-103.77314	4015.54	120	0-98	83.46		98-118	0.010	2	12/04/2001
MW-12*	32.81646	-103.77455	4022.53	120	0-99	94.39		99-119	0.010	2	12/04/2001
MW-13	32.81547	-103.77128	4031.96	127	0-105	106.68		105-125	0.010	2	12/03/2001
MW-14	32.81436	-103.77603	4006.98	120	0-80	75.00		80-100	0.010	4	03/20/2002
MW-19	32.81796	-103.77289	4037.34	120	0-98	117.23		98-118	0.010	2	09/17/2002

Notes:

famsl = feet above mean sea level

fbgs = feet below ground surface

Blank Fields Indicate No Data

* Wells re-surveyed for location and elevation of top of casing on 12/21/07

** Section 21, T-17-S, R-32-E, New Mexico Principal Meridian

*** Schedule 40 PVC

WATER LEVEL MEASUREMENTS JANUARY THROUGH DECEMBER 2012
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Casing Elevation (ft)	Depth to Water (ft)	Depth to L.P.H. (ft)	L.P.H. Thickness (ft)	L.P.H. Thickness X (ft)	Adjusted Depth to Water (ft)	Groundwater Elevation (ft)
EW-1	01/31/12	4022.04						
	02/29/12	4022.04						
	03/08/11	4022.04						
	03/27/12	4022.04						
	04/18/12	4022.04						
	05/21/12	4022.04						
	07/17/12	4022.04						
	08/21/12	4022.04						
	09/17/12	4022.04						
	12/13/12	4022.04						
Off-Site Wells								
MW-11	01/31/12	4015.54	84.77		0.00	0.00	84.77	3930.77
	02/29/12	4015.54	84.81		0.00	0.00	84.81	3930.73
	03/27/12	4015.54	84.85		0.00	0.00	84.85	3930.69
	04/18/12	4015.54	84.91		0.00	0.00	84.91	3930.63
	05/21/12	4015.54	85.15		0.00	0.00	85.15	3930.39
	07/17/12	4015.54	84.97		0.00	0.00	84.97	3930.57
	08/21/12	4015.54	84.97		0.00	0.00	84.97	3930.57
	09/17/12	4015.54	84.83		0.00	0.00	84.83	3930.71
	12/13/12	4015.54	85.15		0.00	0.00	85.15	3930.39
MW-12	01/31/12	4022.53	97.73		0.00	0.00	97.73	3924.80
	02/29/12	4022.53	97.83		0.00	0.00	97.83	3924.70
	03/27/12	4022.53	97.78		0.00	0.00	97.78	3924.75
	04/18/12	4022.53	97.80		0.00	0.00	97.80	3924.73
	05/21/12	4022.53	98.02		0.00	0.00	98.02	3924.51
	07/17/12	4022.53	94.66		0.00	0.00	94.66	3927.87
	08/21/12	4022.53	97.65		0.00	0.00	97.65	3924.88
	09/17/12	4022.53	97.62		0.00	0.00	97.62	3924.91
	12/13/12	4022.53	97.87		0.00	0.00	97.87	3924.66
MW-13	01/31/12	4031.96	108.14		0.00	0.00	108.14	3923.82
	02/29/12	4031.96	108.06		0.00	0.00	108.06	3923.90
	03/27/12	4031.96	108.05		0.00	0.00	108.05	3923.91
	04/18/12	4031.96	108.12		0.00	0.00	108.12	3923.84
	05/21/12	4031.96	108.36		0.00	0.00	108.36	3923.60
	07/17/12	4031.96	108.18		0.00	0.00	108.18	3923.78
	08/21/12	4031.96	108.21		0.00	0.00	108.21	3923.75
	09/17/12	4031.96	108.08		0.00	0.00	108.08	3923.88
	12/13/12	4031.96	108.40		0.00	0.00	108.40	3923.56
MW-14	01/31/12	4006.98	74.05		0.00	0.00	74.05	3932.93
	02/29/12	4006.98	74.12		0.00	0.00	74.12	3932.86
	03/27/12	4006.98	74.05		0.00	0.00	74.05	3932.93
	04/18/12	4006.98	74.23		0.00	0.00	74.23	3932.75
	05/21/12	4006.98	74.49		0.00	0.00	74.49	3932.49
	07/17/12	4006.98	74.41		0.00	0.00	74.41	3932.57
	08/21/12	4006.98	74.46		0.00	0.00	74.46	3932.52
	09/17/12	4006.98	74.36		0.00	0.00	74.36	3932.62
	12/13/12	4006.98	74.26		0.00	0.00	74.26	3932.72

WATER LEVEL MEASUREMENTS JANUARY THROUGH DECEMBER 2012
 CONOCOPHILLIPS
 MALJAMAR GAS PLANT
 MALJAMAR, LEA COUNTY, NEW MEXICO

<i>Well Number</i>	<i>Sample Date</i>	<i>Casing Elevation (ft)</i>	<i>Depth to Water (ft)</i>	<i>Depth to L.P.H. (ft)</i>	<i>L.P.H. Thickness (ft)</i>	<i>L.P.H. Thickness X (ft)</i>	<i>Adjusted Depth to Water (ft)</i>	<i>Groundwater Elevation (ft)</i>
MW-19	01/31/12	4037.34	116.35		0.00	0.00	116.35	3920.99
	02/29/12	4037.34	116.39		0.00	0.00	116.39	3920.95
	03/27/12	4037.34	116.30		0.00	0.00	116.30	3921.04
	04/18/12	4037.34	116.39		0.00	0.00	116.39	3920.95
	05/21/12	4037.34	116.54		0.00	0.00	116.54	3920.80
	07/17/12	4037.34	116.36		0.00	0.00	116.36	3920.98
	08/21/12	4037.34	116.33		0.00	0.00	116.33	3921.01
	09/17/12	4037.34	116.25		0.00	0.00	116.25	3921.09
	12/13/12	4037.34	116.42		0.00	0.00	116.42	3920.92

Notes:

L.P.H. = Liquid Phase Hydrocarbon

Blank Fields Indicate No Data

ft - feet

GROUNDWATER ANALYTICAL RESULTS SUMMARY - 2012
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Parameters (mg/L)	EW-1 <i>July 2012</i>	NM WQ Std	Off-Site Wells				
			MW-11 <i>July 2012</i>	MW-12 <i>July 2012</i>	MW-13 <i>July 2012</i>	MW-14 <i>July 2012</i>	MW-19 <i>July 2012</i>
Total Metals							
Calcium	2,450		215	3,420	252	455	422
Magnesium	748		64.2	812	53.4	137	50.3
Potassium	67.6		3.6	56.50	6.24	9	8.67
Sodium	13,000		80.6	11,400	71.5	49.80	49.4
Volatile Organic Compounds							
Benzene	<0.001	0.01	<0.001	<0.001	<0.001	<0.001	<0.001
Ethylbenzene	<0.001	0.75	<0.001	<0.001	<0.001	<0.001	<0.001
Toluene	<0.001	0.75	<0.001	<0.001	<0.001	<0.001	<0.001
Xylenes (total)	<0.003	0.62	<0.003	<0.003	<0.003	<0.003	<0.003
Semivolatile Organic Compounds							
1-Methylnaphthalene	---	0.03	---	---	---	---	---
2-Methylnaphthalene	---	0.03	---	---	---	---	---
Acenaphthene	<0.001		0.0001	<0.0001	0.00012	<0.0001	0.00066
Acenaphthylene	<0.001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Anthracene	<0.001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(a)anthracene	<0.001		0.00013	<0.0001	0.00075	<0.0001	<0.0001
Benzo(a)pyrene	<0.001	0.0007	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(b)fluoranthene	<0.001		<0.0001	<0.0001	0.00055	<0.0001	<0.0001
Benzo(g,h,i)perylene	<0.001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Benzo(k)fluoranthene	<0.001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Chrysene	<0.001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenz(a,h)anthracene	<0.001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Dibenzofuran	---		---	---	---	---	---
Fluoranthene	0.00012		0.00024	<0.0001	0.0011	<0.0001	0.00026
Fluorine	<0.0001		<0.0001	<0.0001	0.00014	<0.0001	0.00051
Indeno(1,2,3-cd)pyrene	<0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Naphthalene	<0.0005	0.03	<0.0005	<0.0005	0.0037	<0.0005	0.0429
Phenanthrene	<0.0005		<0.0005	<0.0005	<0.0005	<0.0005	0.00064
Pyrene	<0.0001		0.00015	<0.0001	0.00055	<0.0001	0.00012
Inorganic Analysis							
Carbonate Alkalinity	<20		<20	<20	<20	<20	<20
Bicarbonate Alkalinity	108		144	122	340	314	635
Total Alkalinity	108		144	122	340	314	635
Bromide	38		4.1	32.6	2.4	1.1	1.4
Chloride	26,500	250	560	25,000	230	382	113
Nitrate as N	6.10	10	7.3	3.30	15.2	16.0	2.6
Sulfate	746	600	55.3	716	239	812.0	27.8
Total Dissolved Solids	59,600	1,000	1,780	57,200	1,240	2,430	585

Notes:

mg/L = milligrams per liter

< = Not detected at or above laboratory reporting limits.

Detected results are bolded.

NM WQ Std = New Mexico Water Quality Standard

* QA = Field duplicate sample analyses for evaluation of laboratory quality assurance/quality control (QA/QC) procedures.

---' indicates no data.

TABLE 4

**EW-1 EXTRACTION WELL RECOVERY VOLUMES
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO**

<i>Date</i>	<i>Time</i>	<i>Total Days</i>	<i>Flowmeter Reading</i>	<i>Gallons Per Reading</i>	<i>Cumulative Gallons</i>	<i>Gallons Per Pumping Cycle</i>	<i>Gallons Per Minute</i>	<i>Comments</i>
09/17/07	9:30	0	0.00					Start pumping EW-1
09/17/07	12:05	0	187.10	187.10	187.10		1.21	
10/16/07	8:42	29	3,793.00	3,605.90	3,793.00		0.09	
10/16/07	9:20	29	3,813.70	20.70	3,813.70	20.70	0.54	Check pump cycle volume
11/20/07	8:43	64	7,671.50	3,857.80	7,671.50		0.08	
12/21/07	8:20	95	9,925.80	2,254.30	9,925.80		0.05	
12/21/07	8:51	95	9,945.20	19.40	9,945.20	19.40	0.63	Check pump cycle volume
02/27/08	8:55	163	16,656.70	6,711.50	16,656.70		0.07	
02/27/08	10:55	163	16,674.40	17.70	16,674.40	17.70	0.57	Check pump cycle volume
03/12/08	9:20	177	18,031.50	1,357.10	18,031.50		0.07	
03/12/08	10:40	177	18,031.50	0.00	18,031.50		0.00	Pump off
03/25/08	9:38	190	19,339.20	1,307.70	19,339.20		0.07	
03/25/08	10:25	190	19,339.20	0.00	19,339.20		0.00	Pump off
04/29/08	8:55	225	22,760.20	3,421.00	22,760.20		0.07	
04/29/08	9:25	225	22,779.90	19.70	22,779.90	19.70	0.64	Check pump cycle volume
05/05/08	13:49	231	23,368.50	588.60	23,368.50		0.07	
06/10/08	8:50	267	26,631.70	3,263.20	26,631.70		0.06	
06/10/08	9:35	267	26,631.70	0.00	26,631.70		0.00	Pump off
07/15/08	9:13	302	29,908.90	3,277.20	29,908.90		0.07	
07/15/08	9:57	302	29,908.90	0.00	29,908.90		0.00	Pump off
08/19/08	9:06	337	33,081.00	3,172.10	33,081.00		0.06	
08/19/08	9:52	337	33,081.00	0.00	33,081.00		0.00	Pump off
09/16/08	9:25	365	35,767.90	2,686.90	35,767.90		0.07	
09/16/08	11:36	365	35,767.90	0.00	35,767.90		0.00	Pump off
10/15/08	9:25	394	38,521.00	2,753.10	38,521.00		0.07	
10/15/08	12:46	394	38,537.90	16.90	38,537.90	16.90	0.55	Check pump cycle volume
11/12/08	9:09	422	41,178.20	2,640.30	41,178.20		0.07	
11/12/08	10:15	422	41,178.20	0.00	41,178.20		0.00	Pump off
12/11/08	9:03	451	43,872.10	2,693.90	43,872.10		0.06	
12/11/08	9:32	451	43,872.10	0.00	43,872.10		0.00	Pump off
01/13/09	9:22	484	44,259.00	386.90	44,259.00		0.01	
02/11/09	9:23	513	46,847.80	2,588.80	46,847.80		0.06	
02/11/09	9:47	513	46,847.80	0.00	46,847.80		0.00	Pump off
03/10/09	9:23	540	49,402.60	2,554.80	49,402.60		0.07	
04/13/09	10:39	574	52,700.70	3,298.10	52,700.70		0.07	
05/01/09	10:45	592	54,729.60	2,028.90	54,729.60		0.08	
06/08/09	10:26	630	58,041.90	3,312.30	58,041.90		0.06	
07/13/09	10:25	665	61,432.10	3,390.20	61,432.10		0.07	
08/10/09	10:03	693	64,147.10	2,715.00	64,147.10		0.07	
09/15/09	10:46	729	67,601.50	3,454.40	67,601.50		0.07	Power off f/ electrical & piping repairs
10/07/09	10:00	751	67,601.50	0.00	67,601.50		0.00	Re-start pump after repairs
11/09/09	10:00	784	71,018.60	3,417.10	71,018.60		0.04	
11/09/09	10:37	784	71,031.90	13.30	71,031.90	13.30	0.36	Check pump cycle volume
12/23/09	11:06	828	75,256.10	4,224.20	75,256.10		0.07	
01/20/10	10:24	856	77,800.50	2,544.40	77,800.50		0.06	
02/09/10	10:52	876	79,708.50	1,908.00	79,708.50		0.07	
03/09/10	9:55	904	82,397.30	2,688.80	82,397.30		0.07	
04/12/10	10:11	938	85,673.80	3,276.50	85,673.80		0.07	
05/24/10	10:31	980	89,679.00	4,005.20	89,679.00		0.07	
06/14/10	10:30	1001	91,603.10	1,924.10	91,603.10		0.06	
07/20/10	10:18	1037	95,002.00	3,398.90	95,002.00		0.07	
08/11/10	9:52	1059	97,087.30	2,085.30	97,087.30		0.07	
09/21/10	11:16	1100	100,951.00	3,863.70	100,951.00		0.07	
10/20/10	10:20	1129	103,693.70	2,742.70	103,693.70		0.07	
11/08/10	10:12	1148	105,505.00	1,811.30	105,505.00		0.07	
12/07/10	10:46	1177	108,229.50	2,724.50	108,229.50		0.07	
01/18/11	10:01	1219	112,096.20	3,866.70	112,096.20		0.06	
02/08/11	9:06	1240	113,676.10	1,579.90	113,676.10		0.05	
03/08/11	9:15	1268	113,676.10	0.00	113,676.10		0.00	pump off f/ repairs to tank
04/13/11	10:20	1304	113,676.10	0.00	113,676.10		0.00	pump off f/ repairs to tank
05/24/11	9:00	1345	113,719.00	42.90	113,719.00		0.00	sample well
06/28/11	8:46	1380	117,263.60	3,544.60	117,263.60		0.07	
07/19/11	9:51	1401	119,333.50	2,069.90	119,333.50		0.07	

EW-1 EXTRACTION WELL RECOVERY VOLUMES
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

<i>Date</i>	<i>Time</i>	<i>Total Days</i>	<i>Flowmeter Reading</i>	<i>Gallons Per Reading</i>	<i>Cumulative Gallons</i>	<i>Gallons Per Pumping Cycle</i>	<i>Gallons Per Minute</i>	<i>Comments</i>
08/31/11	9:00	1444	123,519.00	4,185.50	123,519.00		0.07	
09/27/11	11:45	1471	126,139.80	2,620.80	126,139.80		0.07	
10/21/11	13:00	1495	128,444.70	2,304.90	128,444.70		0.07	
11/29/11	11:50	1534	131,888.40	3,443.70	131,888.40		0.06	
12/23/11	14:00	1558	133,994.00	2,105.60	133,994.00		0.06	
01/31/12	15:00	1597	137,655.30	3,661.30	137,655.30		0.07	
02/29/12	16:00	1626	140,439.30	2,784.00	140,439.30		0.07	
03/27/12	17:00	1653	143,029.10	2,589.80	143,029.10		0.07	
04/18/12	15:00	1675	145,136.10	2,107.00	145,136.10		0.07	
05/21/12	15:00	1708	148,287.10	3,151.00	148,287.10		0.07	
07/17/12	15:00	1765	150,570.62	2,283.52	150,570.62		0.03	
08/21/12	21:00	1800	154,050.70	3,480.08	154,050.70		0.07	
09/17/12	14:25	1827	156,665.00	2,614.30	156,665.00		0.07	
10/12/12	14:00	1852	159,060.20	2,395.20	159,060.20		0.07	
11/20/12	9:00	1891	162,794.90	3,734.70	162,794.90		0.07	
12/13/12	15:00	1914	164,964.70	2,169.80	164,964.70		0.07	

APPENDIX A

GROUNDWATER LABORATORY ANALYTICAL REPORTS – JULY 2012

August 09, 2012

Ken Horton
CRA
2135 South Loop, 250 West
Midland, TX 79703

RE: Project: MALJAMAR GAS PLANT 075018
Pace Project No.: 60125567

Dear Ken Horton:

Enclosed are the analytical results for sample(s) received by the laboratory on July 20, 2012. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Alice Flanagan

alice.flanagan@pacelabs.com
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

Page 1 of 73

Pace Package 1 of 76

CERTIFICATIONS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Kansas Certification IDs

9608 Loiret Boulevard, Lenexa, KS 66219

A2LA Certification #: 2456.01

Arkansas Certification #: 12-019-0

Illinois Certification #: 002885

Iowa Certification #: 118

Kansas/NELAP Certification #: E-10116

Louisiana Certification #: 03055

Nevada Certification #: KS000212008A

Oklahoma Certification #: 9205/9935

Texas Certification #: T104704407-12-3

Utah Certification #: KS000212012-2

REPORT OF LABORATORY ANALYSIS

Page 2 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE SUMMARY

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60125567001	MW-2-071812	Water	07/18/12 16:30	07/20/12 08:30
60125567002	MW-3-071812	Water	07/18/12 17:30	07/20/12 08:30
60125567003	MW-4-071812	Water	07/18/12 15:50	07/20/12 08:30
60125567004	MW-8-071812	Water	07/18/12 13:50	07/20/12 08:30
60125567005	MW-9-071812	Water	07/18/12 16:55	07/20/12 08:30
60125567006	MW-10-071812	Water	07/18/12 15:20	07/20/12 08:30
60125567007	MW-11-071812	Water	07/18/12 15:00	07/20/12 08:30
60125567008	MW-12-071812	Water	07/18/12 14:15	07/20/12 08:30
60125567009	MW-13-071812	Water	07/18/12 13:40	07/20/12 08:30
60125567010	MW-14-071812	Water	07/18/12 17:00	07/20/12 08:30
60125567011	MW-15-071812	Water	07/18/12 13:00	07/20/12 08:30
60125567012	MW-16-071812	Water	07/18/12 12:45	07/20/12 08:30
60125567013	MW-17-071812	Water	07/18/12 12:15	07/20/12 08:30
60125567014	MW-18-071812	Water	07/18/12 12:00	07/20/12 08:30
60125567015	MW-19-071812	Water	07/18/12 13:50	07/20/12 08:30
60125567016	MW-20-071812	Water	07/18/12 11:40	07/20/12 08:30
60125567017	EW-1-071812	Water	07/18/12 14:20	07/20/12 08:30
60125567018	WW-071812	Water	07/18/12 18:00	07/20/12 08:30
60125567019	TRIPS	Water	07/18/12 00:00	07/20/12 08:30

REPORT OF LABORATORY ANALYSIS

Page 3 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE ANALYTE COUNT

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60125567001	MW-2-071812	EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 300.0	OL	3
		EPA 353.2	KLB	1
60125567002	MW-3-071812	EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	HNS, JDM, RNS	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 300.0	OL	3
		EPA 353.2	KLB	1
60125567003	MW-4-071812	EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM, RNS	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 300.0	OL	3
		EPA 353.2	KLB	1
60125567004	MW-8-071812	EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	HNS, RNS	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 300.0	OL	3
		EPA 353.2	KLB	1
60125567005	MW-9-071812	EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	HNS, RNS	9

REPORT OF LABORATORY ANALYSIS

Page 4 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE ANALYTE COUNT

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60125567006	MW-10-071812	SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 300.0	OL	3
		EPA 353.2	KLB	1
		EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM, RNS	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
60125567007	MW-11-071812	EPA 300.0	OL	3
		EPA 353.2	KLB	1
		EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM, RNS	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 300.0	OL	3
		EPA 353.2	KLB	1
60125567008	MW-12-071812	EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM, RNS	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 300.0	OL	3
		EPA 353.2	KLB	1
		EPA 6010	SMW	4
		EPA 8270	JMT	5
60125567009	MW-13-071812	EPA 8270C by SIM	BRM	19
		EPA 8260	JDM	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 300.0	OL	3
		EPA 353.2	KLB	1
		EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM	9
60125567010	MW-14-071812	SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 300.0	OL	3
60125567010	MW-14-071812	EPA 353.2	KLB	1
		EPA 6010	SMW	4

REPORT OF LABORATORY ANALYSIS

Page 5 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE ANALYTE COUNT

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60125567011	MW-15-071812	EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 300.0	OL	3
		EPA 353.2	KLB	1
		EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 300.0	OL	3
60125567012	MW-16-071812	EPA 353.2	KLB	1
		EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 300.0	OL	3
		EPA 353.2	KLB	1
		EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM	9
		SM 2320B	PWH	3
60125567013	MW-17-071812	SM 2540C	NDL	1
		EPA 300.0	OL	3
		EPA 353.2	KLB	1
		EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 300.0	OL	3
		EPA 353.2	KLB	1
		EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
60125567014	MW-18-071812	EPA 8260	JDM	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19

REPORT OF LABORATORY ANALYSIS

Page 6 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

SAMPLE ANALYTE COUNT

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60125567015	MW-19-071812	EPA 300.0	OL	3
		EPA 353.2	KLB	1
		EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
60125567016	MW-20-071812	EPA 300.0	OL	3
		EPA 353.2	KLB	1
		EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
60125567017	EW-1-071812	EPA 300.0	OL	3
		EPA 353.2	KLB	1
		EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
60125567018	WW-071812	EPA 300.0	OL	3
		EPA 353.2	KLB	1
		EPA 6010	SMW	4
		EPA 8270	JMT	5
		EPA 8270C by SIM	BRM	19
		EPA 8260	JDM	9
		SM 2320B	PWH	3
		SM 2540C	NDL	1
60125567019	TRIPS	EPA 300.0	OL	3
		EPA 353.2	KLB	1
		EPA 8260	JDM	9

REPORT OF LABORATORY ANALYSIS

Page 7 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Method: EPA 6010

Description: 6010 MET ICP

Client: COP_CRA Midland, TX

Date: August 09, 2012

General Information:

18 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MPRP/18823

A matrix spike and matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60125567018

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1033787)
 - Calcium
- MSD (Lab ID: 1033788)
 - Calcium

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 8 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Method: EPA 8270

Description: 8270 MSSV DRO/ORO

Client: COP_CRA Midland, TX

Date: August 09, 2012

General Information:

18 samples were analyzed for EPA 8270. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSSV/10695

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 9 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Method: EPA 8270C by SIM

Description: 8270 MSSV PAH by SIM

Client: COP_CRA Midland, TX

Date: August 09, 2012

General Information:

18 samples were analyzed for EPA 8270C by SIM. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

QC Batch: OEXT/34122

IO: The internal standard response was outside the laboratory acceptance limits confirmed by reanalysis. The results reported are from the most QC compliant analysis.

- BLANK (Lab ID: 1033733)
 - Nitrobenzene-d5 (S)
- EW-1-071812 (Lab ID: 60125567017)
 - Nitrobenzene-d5 (S)
- MW-11-071812 (Lab ID: 60125567007)
 - Nitrobenzene-d5 (S)
- MW-12-071812 (Lab ID: 60125567008)
 - Nitrobenzene-d5 (S)
- MW-13-071812 (Lab ID: 60125567009)
 - Nitrobenzene-d5 (S)
- MW-14-071812 (Lab ID: 60125567010)
 - Nitrobenzene-d5 (S)
- MW-15-071812 (Lab ID: 60125567011)
 - Nitrobenzene-d5 (S)
- MW-19-071812 (Lab ID: 60125567015)
 - Nitrobenzene-d5 (S)
- WW-071812 (Lab ID: 60125567018)
 - Nitrobenzene-d5 (S)

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

REPORT OF LABORATORY ANALYSIS

Page 10 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Method: EPA 8270C by SIM

Description: 8270 MSSV PAH by SIM

Client: COP_CRA Midland, TX

Date: August 09, 2012

QC Batch: OEXT/34122

S0: Surrogate recovery outside laboratory control limits.

- LCS (Lab ID: 1033734)
- 2-Fluorobiphenyl (S)

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- EW-1-071812 (Lab ID: 60125567017)
- Terphenyl-d14 (S)
- MW-11-071812 (Lab ID: 60125567007)
- Terphenyl-d14 (S)

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 11 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Method: EPA 8260

Description: 8260 MSV UST, Water

Client: COP_CRA Midland, TX

Date: August 09, 2012

General Information:

19 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

pH: Post-analysis pH measurement indicates insufficient VOA sample preservation.

- MW-20-071812 (Lab ID: 60125567016)

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/47280

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/47316

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/47360

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

Batch Comments:

- QC Batch: MSV / 47317

REPORT OF LABORATORY ANALYSIS

Page 12 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Method: SM 2320B

Description: 2320B Alkalinity

Client: COP_CRA Midland, TX

Date: August 09, 2012

General Information:

18 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 13 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Method: SM 2540C

Description: 2540C Total Dissolved Solids

Client: COP_CRA Midland, TX

Date: August 09, 2012

General Information:

18 samples were analyzed for SM 2540C. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

Page 14 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Method: EPA 300.0

Description: 300.0 IC Anions 28 Days

Client: COP_CRA Midland, TX

Date: August 09, 2012

General Information:

18 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WETA/21081

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MW-12-071812 (Lab ID: 60125567008)
- Bromide

QC Batch: WETA/21082

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MW-18-071812 (Lab ID: 60125567014)
- Bromide

REPORT OF LABORATORY ANALYSIS

Page 15 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

PROJECT NARRATIVE

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Method: EPA 353.2

Description: 353.2 Nitrogen, NO₂/NO₃ unpres

Client: COP_CRA Midland, TX

Date: August 09, 2012

General Information:

18 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:

All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Page 16 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-2-071812		Lab ID: 60125567001	Collected: 07/18/12 16:30	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	344000	ug/L	100	1	07/24/12 11:30	07/30/12 14:21	7440-70-2	
Magnesium	58000	ug/L	50.0	1	07/24/12 11:30	07/30/12 14:21	7439-95-4	
Potassium	5020	ug/L	500	1	07/24/12 11:30	07/30/12 14:21	7440-09-7	
Sodium	69400	ug/L	5000	10	07/24/12 11:30	07/31/12 12:09	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 09:59		
TPH-DRO	20.5	mg/L	1.0	1	07/24/12 00:00	07/25/12 09:59		
Surrogates								
Nitrobenzene-d5 (S)	175	%	21-189	1	07/24/12 00:00	07/25/12 09:59	4165-60-0	
2-Fluorobiphenyl (S)	94	%	34-180	1	07/24/12 00:00	07/25/12 09:59	321-60-8	
Terphenyl-d14 (S)	105	%	24-168	1	07/24/12 00:00	07/25/12 09:59	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	120-12-7	
Benzo(a)anthracene	0.56	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	56-55-3	
Benzo(a)pyrene	0.64	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	50-32-8	
Benzo(b)fluoranthene	4.4	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	205-99-2	
Benzo(g,h,i)perylene	1.1	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	207-08-9	
Chrysene	1.1	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	218-01-9	
Dibenz(a,h)anthracene	0.28	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	53-70-3	
Fluoranthene	1.6	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	86-73-7	
Indeno(1,2,3-cd)pyrene	0.95	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	193-39-5	
Naphthalene	0.86	ug/L	0.50	1	07/24/12 00:00	08/04/12 07:51	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/24/12 00:00	08/04/12 07:51	85-01-8	
Pyrene	1.1	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:51	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	91	%	42-120	50	07/24/12 00:00	08/04/12 08:08	4165-60-0	
2-Fluorobiphenyl (S)	82	%	44-120	50	07/24/12 00:00	08/04/12 08:08	321-60-8	
Terphenyl-d14 (S)	122	%	46-131	50	07/24/12 00:00	08/04/12 08:08	1718-51-0	
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	48100	ug/L	500	500		07/26/12 03:43	71-43-2	
Ethylbenzene	741	ug/L	500	500		07/26/12 03:43	100-41-4	
Toluene	11900	ug/L	500	500		07/26/12 03:43	108-88-3	
Xylene (Total)	ND	ug/L	1500	500		07/26/12 03:43	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	98	%	80-120	500		07/26/12 03:43	1868-53-7	
Toluene-d8 (S)	98	%	80-120	500		07/26/12 03:43	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120	500		07/26/12 03:43	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120	500		07/26/12 03:43	17060-07-0	
Preservation pH	1.0		1.0	500		07/26/12 03:43		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 17 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-2-071812		Lab ID: 60125567001	Collected: 07/18/12 16:30	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO ₃)	606 mg/L		20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO ₃)	ND mg/L		20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO ₃	606 mg/L		20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1620 mg/L		5.0	1		07/23/12 11:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	7.8 mg/L		1.0	1		07/30/12 15:58	24959-67-9	
Chloride	461 mg/L		100	100		07/31/12 13:20	16887-00-6	
Sulfate	2.8 mg/L		1.0	1		07/30/12 15:58	14808-79-8	
353.2 Nitrogen, NO₂/NO₃ unpres	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND mg/L		0.10	1		07/20/12 12:42		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-3-071812		Lab ID: 60125567002	Collected: 07/18/12 17:30	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	324000	ug/L	100	1	07/24/12 11:30	07/30/12 14:27	7440-70-2	
Magnesium	72200	ug/L	50.0	1	07/24/12 11:30	07/30/12 14:27	7439-95-4	
Potassium	2820	ug/L	500	1	07/24/12 11:30	07/30/12 14:27	7440-09-7	
Sodium	115000	ug/L	5000	10	07/24/12 11:30	07/31/12 12:11	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 10:18		
TPH-DRO	16.2	mg/L	1.0	1	07/24/12 00:00	07/25/12 10:18		
Surrogates								
Nitrobenzene-d5 (S)	101	%	21-189	1	07/24/12 00:00	07/25/12 10:18	4165-60-0	
2-Fluorobiphenyl (S)	95	%	34-180	1	07/24/12 00:00	07/25/12 10:18	321-60-8	
Terphenyl-d14 (S)	101	%	24-168	1	07/24/12 00:00	07/25/12 10:18	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	0.12	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	120-12-7	
Benzo(a)anthracene	0.91	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	56-55-3	
Benzo(a)pyrene	0.79	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	50-32-8	
Benzo(b)fluoranthene	5.5	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	205-99-2	
Benzo(g,h,i)perylene	1.6	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	191-24-2	
Benzo(k)fluoranthene	0.37	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	207-08-9	
Chrysene	1.9	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	218-01-9	
Dibenz(a,h)anthracene	0.23	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	53-70-3	
Fluoranthene	3.4	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	86-73-7	
Indeno(1,2,3-cd)pyrene	1.2	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	193-39-5	
Naphthalene	2.8	ug/L	0.50	1	07/24/12 00:00	08/04/12 03:51	91-20-3	
Phenanthrene	0.72	ug/L	0.50	1	07/24/12 00:00	08/04/12 03:51	85-01-8	
Pyrene	2.0	ug/L	0.10	1	07/24/12 00:00	08/04/12 03:51	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	84	%	42-120	50	07/24/12 00:00	08/04/12 04:08	4165-60-0	
2-Fluorobiphenyl (S)	75	%	44-120	50	07/24/12 00:00	08/04/12 04:08	321-60-8	
Terphenyl-d14 (S)	105	%	46-131	50	07/24/12 00:00	08/04/12 04:08	1718-51-0	
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	17100	ug/L	100	100		07/27/12 14:25	71-43-2	
Ethylbenzene	338	ug/L	50.0	50		07/27/12 01:42	100-41-4	
Toluene	1930	ug/L	50.0	50		07/27/12 01:42	108-88-3	
Xylene (Total)	278	ug/L	3.0	1		07/26/12 03:58	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	99	%	80-120	1		07/26/12 03:58	1868-53-7	
Toluene-d8 (S)	102	%	80-120	1		07/26/12 03:58	2037-26-5	
4-Bromofluorobenzene (S)	96	%	80-120	1		07/26/12 03:58	460-00-4	
1,2-Dichloroethane-d4 (S)	93	%	80-120	1		07/26/12 03:58	17060-07-0	
Preservation pH	1.0		1.0	1		07/26/12 03:58		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 19 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-3-071812		Lab ID: 60125567002	Collected: 07/18/12 17:30	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO ₃)	357	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO ₃	357	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	2300	mg/L	5.0	1		07/23/12 11:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	7.5	mg/L	1.0	1		07/30/12 16:16	24959-67-9	
Chloride	672	mg/L	100	100		07/31/12 13:37	16887-00-6	
Sulfate	29.2	mg/L	2.0	2		07/31/12 14:47	14808-79-8	
353.2 Nitrogen, NO₂/NO₃ unpres	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND	mg/L	0.10	1		07/20/12 12:44		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-4-071812		Lab ID: 60125567003	Collected: 07/18/12 15:50	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	182000	ug/L	100	1	07/24/12 11:30	07/30/12 14:29	7440-70-2	
Magnesium	53700	ug/L	50.0	1	07/24/12 11:30	07/30/12 14:29	7439-95-4	
Potassium	7850	ug/L	500	1	07/24/12 11:30	07/30/12 14:29	7440-09-7	
Sodium	75100	ug/L	5000	10	07/24/12 11:30	07/31/12 12:13	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 10:37		
TPH-DRO	2.1	mg/L	1.0	1	07/24/12 00:00	07/25/12 10:37		
Surrogates								
Nitrobenzene-d5 (S)	104	%	21-189	1	07/24/12 00:00	07/25/12 10:37	4165-60-0	
2-Fluorobiphenyl (S)	86	%	34-180	1	07/24/12 00:00	07/25/12 10:37	321-60-8	
Terphenyl-d14 (S)	97	%	24-168	1	07/24/12 00:00	07/25/12 10:37	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	0.39	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	53-70-3	
Fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	206-44-0	
Fluorene	0.36	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	193-39-5	
Naphthalene	125	ug/L	0.50	1	07/24/12 00:00	08/04/12 08:25	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/24/12 00:00	08/04/12 08:25	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 08:25	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	82	%	42-120	50	07/24/12 00:00	08/04/12 08:42	4165-60-0	
2-Fluorobiphenyl (S)	73	%	44-120	50	07/24/12 00:00	08/04/12 08:42	321-60-8	
Terphenyl-d14 (S)	104	%	46-131	50	07/24/12 00:00	08/04/12 08:42	1718-51-0	
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	38.0	ug/L	1.0	1		07/27/12 01:57	71-43-2	
Ethylbenzene	59.6	ug/L	1.0	1		07/27/12 01:57	100-41-4	
Toluene	ND	ug/L	1.0	1		07/27/12 01:57	108-88-3	
Xylene (Total)	20.5	ug/L	3.0	1		07/27/12 01:57	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100	%	80-120	1		07/26/12 04:14	1868-53-7	
Toluene-d8 (S)	101	%	80-120	1		07/26/12 04:14	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-120	1		07/26/12 04:14	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120	1		07/26/12 04:14	17060-07-0	
Preservation pH	1.0		1.0	1		07/26/12 04:14		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 21 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-4-071812		Lab ID: 60125567003	Collected: 07/18/12 15:50	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO ₃)	173	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO ₃	173	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1510	mg/L	5.0	1		07/23/12 11:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	4.3	mg/L	1.0	1		07/30/12 16:51	24959-67-9	
Chloride	507	mg/L	100	100		07/31/12 15:22	16887-00-6	
Sulfate	ND	mg/L	1.0	1		07/30/12 16:51	14808-79-8	
353.2 Nitrogen, NO₂/NO₃ unpres	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND	mg/L	0.10	1		07/20/12 11:29		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-8-071812		Lab ID: 60125567004		Collected: 07/18/12 13:50		Received: 07/20/12 08:30		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Calcium	232000	ug/L		100	1	07/24/12 11:30	07/30/12 14:32	7440-70-2	
Magnesium	55200	ug/L		50.0	1	07/24/12 11:30	07/30/12 14:32	7439-95-4	
Potassium	2960	ug/L		500	1	07/24/12 11:30	07/30/12 14:32	7440-09-7	
Sodium	32400	ug/L		5000	10	07/24/12 11:30	07/31/12 12:15	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C							
TPH-ORO	ND	mg/L		1.0	1	07/24/12 00:00	07/25/12 10:55		
TPH-DRO	13.0	mg/L		1.0	1	07/24/12 00:00	07/25/12 10:55		
Surrogates									
Nitrobenzene-d5 (S)	94	%		21-189	1	07/24/12 00:00	07/25/12 10:55	4165-60-0	
2-Fluorobiphenyl (S)	92	%		34-180	1	07/24/12 00:00	07/25/12 10:55	321-60-8	
Terphenyl-d14 (S)	96	%		24-168	1	07/24/12 00:00	07/25/12 10:55	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	2.6	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	83-32-9	
Acenaphthylene	0.33	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	208-96-8	
Anthracene	ND	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	120-12-7	
Benzo(a)anthracene	ND	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	56-55-3	
Benzo(a)pyrene	ND	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	50-32-8	
Benzo(b)fluoranthene	ND	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	191-24-2	
Benzo(k)fluoranthene	ND	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	207-08-9	
Chrysene	ND	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	53-70-3	
Fluoranthene	0.18	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	206-44-0	
Fluorene	0.66	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	193-39-5	
Naphthalene	8.0	ug/L		0.50	1	07/24/12 00:00	08/04/12 04:25	91-20-3	
Phenanthrene	ND	ug/L		0.50	1	07/24/12 00:00	08/04/12 04:25	85-01-8	
Pyrene	ND	ug/L		0.10	1	07/24/12 00:00	08/04/12 04:25	129-00-0	
Surrogates									
Nitrobenzene-d5 (S)	79	%		42-120	50	07/24/12 00:00	08/04/12 04:42	4165-60-0	
2-Fluorobiphenyl (S)	73	%		44-120	50	07/24/12 00:00	08/04/12 04:42	321-60-8	
Terphenyl-d14 (S)	115	%		46-131	50	07/24/12 00:00	08/04/12 04:42	1718-51-0	
8260 MSV UST, Water		Analytical Method: EPA 8260							
Benzene	16200	ug/L		100	100		07/27/12 14:42	71-43-2	
Ethylbenzene	462	ug/L		50.0	50		07/27/12 02:12	100-41-4	
Toluene	1960	ug/L		50.0	50		07/27/12 02:12	108-88-3	
Xylene (Total)	431	ug/L		150	50		07/27/12 02:12	1330-20-7	
Surrogates									
Dibromofluoromethane (S)	102	%		80-120	50		07/27/12 02:12	1868-53-7	
Toluene-d8 (S)	104	%		80-120	50		07/27/12 02:12	2037-26-5	
4-Bromofluorobenzene (S)	106	%		80-120	50		07/27/12 02:12	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%		80-120	50		07/27/12 02:12	17060-07-0	
Preservation pH	1.0			1.0	50		07/27/12 02:12		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 23 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-8-071812		Lab ID: 60125567004	Collected: 07/18/12 13:50	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO ₃)	188	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO ₃	188	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1590	mg/L	5.0	1		07/23/12 11:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	5.3	mg/L	1.0	1		07/30/12 17:08	24959-67-9	
Chloride	522	mg/L	100	100		07/31/12 15:39	16887-00-6	
Sulfate	2.8	mg/L	1.0	1		07/30/12 17:08	14808-79-8	
353.2 Nitrogen, NO₂/NO₃ unpres	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND	mg/L	0.10	1		07/20/12 11:23		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-9-071812		Lab ID: 60125567005		Collected: 07/18/12 16:55		Received: 07/20/12 08:30		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Calcium	10000	ug/L	100	1	07/24/12 11:30	07/30/12 14:34	7440-70-2		
Magnesium	2680	ug/L	50.0	1	07/24/12 11:30	07/30/12 14:34	7439-95-4		
Potassium	757	ug/L	500	1	07/24/12 11:30	07/30/12 14:34	7440-09-7		
Sodium	176000	ug/L	5000	10	07/24/12 11:30	07/31/12 12:17	7440-23-5		
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C							
TPH-ORO	8.7	mg/L	1.0	1	07/24/12 00:00	07/25/12 11:14			
TPH-DRO	58.7	mg/L	1.0	1	07/24/12 00:00	07/25/12 11:14			
Surrogates									
Nitrobenzene-d5 (S)	112	%	21-189	1	07/24/12 00:00	07/25/12 11:14	4165-60-0		
2-Fluorobiphenyl (S)	120	%	34-180	1	07/24/12 00:00	07/25/12 11:14	321-60-8		
Terphenyl-d14 (S)	103	%	24-168	1	07/24/12 00:00	07/25/12 11:14	1718-51-0		
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	0.31	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	83-32-9		
Acenaphthylene	0.15	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	208-96-8		
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	120-12-7		
Benzo(a)anthracene	0.16	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	56-55-3		
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	50-32-8		
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	205-99-2		
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	191-24-2		
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	207-08-9		
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	218-01-9		
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	53-70-3		
Fluoranthene	0.18	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	206-44-0		
Fluorene	0.28	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	86-73-7		
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	193-39-5		
Naphthalene	675	ug/L	25.0	50	07/24/12 00:00	08/07/12 20:57	91-20-3		
Phenanthrene	0.51	ug/L	0.50	1	07/24/12 00:00	08/05/12 12:57	85-01-8		
Pyrene	0.14	ug/L	0.10	1	07/24/12 00:00	08/05/12 12:57	129-00-0		
Surrogates									
Nitrobenzene-d5 (S)	82	%	42-120	50	07/24/12 00:00	08/07/12 20:57	4165-60-0		
2-Fluorobiphenyl (S)	83	%	44-120	50	07/24/12 00:00	08/07/12 20:57	321-60-8		
Terphenyl-d14 (S)	122	%	46-131	50	07/24/12 00:00	08/07/12 20:57	1718-51-0		
8260 MSV UST, Water		Analytical Method: EPA 8260							
Benzene	15600	ug/L	100	100		07/27/12 14:58	71-43-2		
Ethylbenzene	957	ug/L	50.0	50		07/27/12 02:27	100-41-4		
Toluene	ND	ug/L	50.0	50		07/27/12 02:27	108-88-3		
Xylene (Total)	1190	ug/L	150	50		07/27/12 02:27	1330-20-7		
Surrogates									
Dibromofluoromethane (S)	101	%	80-120	50		07/27/12 02:27	1868-53-7		
Toluene-d8 (S)	102	%	80-120	50		07/27/12 02:27	2037-26-5		
4-Bromofluorobenzene (S)	105	%	80-120	50		07/27/12 02:27	460-00-4		
1,2-Dichloroethane-d4 (S)	101	%	80-120	50		07/27/12 02:27	17060-07-0		
Preservation pH	1.0		1.0	50		07/27/12 02:27			

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 25 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-9-071812		Lab ID: 60125567005	Collected: 07/18/12 16:55	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO ₃)	431	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO ₃	431	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	617	mg/L	5.0	1		07/23/12 11:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	2.4	mg/L	1.0	1		07/30/12 17:25	24959-67-9	
Chloride	64.9	mg/L	10.0	10		07/31/12 15:57	16887-00-6	
Sulfate	12.1	mg/L	1.0	1		07/30/12 17:25	14808-79-8	
353.2 Nitrogen, NO₂/NO₃ unpres	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND	mg/L	0.10	1		07/20/12 12:43		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-10-071812		Lab ID: 60125567006	Collected: 07/18/12 15:20	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	790000	ug/L	1000	10	07/24/12 11:30	07/31/12 12:20	7440-70-2	
Magnesium	170000	ug/L	50.0	1	07/24/12 11:30	07/30/12 14:36	7439-95-4	
Potassium	10900	ug/L	500	1	07/24/12 11:30	07/30/12 14:36	7440-09-7	
Sodium	749000	ug/L	5000	10	07/24/12 11:30	07/31/12 12:20	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 11:33		
TPH-DRO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 11:33		
Surrogates								
Nitrobenzene-d5 (S)	96 %		21-189	1	07/24/12 00:00	07/25/12 11:33	4165-60-0	
2-Fluorobiphenyl (S)	82 %		34-180	1	07/24/12 00:00	07/25/12 11:33	321-60-8	
Terphenyl-d14 (S)	96 %		24-168	1	07/24/12 00:00	07/25/12 11:33	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	0.54	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	83-32-9	
Acenaphthylene	0.11	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	208-96-8	
Anthracene	0.35	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	120-12-7	
Benzo(a)anthracene	0.44	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	50-32-8	
Benzo(b)fluoranthene	0.18	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	53-70-3	
Fluoranthene	1.3	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	206-44-0	
Fluorene	0.81	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	193-39-5	
Naphthalene	144	ug/L	0.50	1	07/24/12 00:00	08/05/12 13:33	91-20-3	
Phenanthrene	1.9	ug/L	0.50	1	07/24/12 00:00	08/05/12 13:33	85-01-8	
Pyrene	0.81	ug/L	0.10	1	07/24/12 00:00	08/05/12 13:33	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	79 %		42-120	50	07/24/12 00:00	08/07/12 21:14	4165-60-0	
2-Fluorobiphenyl (S)	80 %		44-120	50	07/24/12 00:00	08/07/12 21:14	321-60-8	
Terphenyl-d14 (S)	108 %		46-131	50	07/24/12 00:00	08/07/12 21:14	1718-51-0	
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	ND	ug/L	1.0	1		07/27/12 02:41	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		07/27/12 02:41	100-41-4	
Toluene	ND	ug/L	1.0	1		07/26/12 05:01	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		07/27/12 02:41	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101 %		80-120	1		07/26/12 05:01	1868-53-7	
Toluene-d8 (S)	99 %		80-120	1		07/26/12 05:01	2037-26-5	
4-Bromofluorobenzene (S)	100 %		80-120	1		07/26/12 05:01	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		80-120	1		07/26/12 05:01	17060-07-0	
Preservation pH	1.0		1.0	1		07/26/12 05:01		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 27 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-10-071812		Lab ID: 60125567006		Collected: 07/18/12 15:20		Received: 07/20/12 08:30		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity		Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)		239	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO3)		ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO3		239	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids		6960	mg/L	5.0	1		07/23/12 11:16		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Bromide		11.5	mg/L	1.0	1		07/30/12 17:43	24959-67-9	
Chloride		2750	mg/L	500	500		07/31/12 16:14	16887-00-6	
Sulfate		335	mg/L	50.0	50		07/31/12 16:31	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres		Analytical Method: EPA 353.2							
Nitrogen, Nitrate		2.9	mg/L	0.10	1		07/20/12 11:28		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-11-071812		Lab ID: 60125567007	Collected: 07/18/12 15:00	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	215000	ug/L	100	1	07/24/12 11:30	07/30/12 14:42	7440-70-2	
Magnesium	64200	ug/L	50.0	1	07/24/12 11:30	07/30/12 14:42	7439-95-4	
Potassium	3600	ug/L	500	1	07/24/12 11:30	07/30/12 14:42	7440-09-7	
Sodium	80600	ug/L	5000	10	07/24/12 11:30	07/31/12 12:26	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 11:51		
TPH-DRO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 11:51		
Surrogates								
Nitrobenzene-d5 (S)	106	%	21-189	1	07/24/12 00:00	07/25/12 11:51	4165-60-0	
2-Fluorobiphenyl (S)	90	%	34-180	1	07/24/12 00:00	07/25/12 11:51	321-60-8	
Terphenyl-d14 (S)	104	%	24-168	1	07/24/12 00:00	07/25/12 11:51	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	0.10	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	120-12-7	
Benzo(a)anthracene	0.13	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	53-70-3	
Fluoranthene	0.24	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/24/12 00:00	08/05/12 14:08	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/24/12 00:00	08/05/12 14:08	85-01-8	
Pyrene	0.15	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:08	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	80	%	42-120	50	07/24/12 00:00	08/07/12 21:31	4165-60-0	IO
2-Fluorobiphenyl (S)	84	%	44-120	50	07/24/12 00:00	08/07/12 21:31	321-60-8	
Terphenyl-d14 (S)	134	%	46-131	50	07/24/12 00:00	08/07/12 21:31	1718-51-0	S4
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	ND	ug/L	1.0	1		07/27/12 02:56	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		07/26/12 05:17	100-41-4	
Toluene	ND	ug/L	1.0	1		07/26/12 05:17	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		07/26/12 05:17	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	97	%	80-120	1		07/26/12 05:17	1868-53-7	
Toluene-d8 (S)	99	%	80-120	1		07/26/12 05:17	2037-26-5	
4-Bromofluorobenzene (S)	105	%	80-120	1		07/26/12 05:17	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120	1		07/26/12 05:17	17060-07-0	
Preservation pH	1.0		1.0	1		07/26/12 05:17		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 29 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-11-071812		Lab ID: 60125567007	Collected: 07/18/12 15:00	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO ₃)	144	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO ₃	144	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1780	mg/L	5.0	1		07/23/12 11:16		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	4.1	mg/L	1.0	1		07/30/12 18:35	24959-67-9	
Chloride	560	mg/L	100	100		07/31/12 16:49	16887-00-6	
Sulfate	55.3	mg/L	5.0	5		07/31/12 17:06	14808-79-8	
353.2 Nitrogen, NO₂/NO₃ unpres	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	7.3	mg/L	0.50	5		07/20/12 12:51		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-12-071812		Lab ID: 60125567008	Collected: 07/18/12 14:15	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	3420000	ug/L	2000	20	07/24/12 11:30	07/31/12 12:28	7440-70-2	
Magnesium	812000	ug/L	1000	20	07/24/12 11:30	07/31/12 12:28	7439-95-4	
Potassium	56500	ug/L	500	1	07/24/12 11:30	07/30/12 14:44	7440-09-7	
Sodium	11400000	ug/L	25000	50	07/24/12 11:30	07/31/12 18:08	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 12:10		
TPH-DRO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 12:10		
Surrogates								
Nitrobenzene-d5 (S)	93 %		21-189	1	07/24/12 00:00	07/25/12 12:10	4165-60-0	
2-Fluorobiphenyl (S)	81 %		34-180	1	07/24/12 00:00	07/25/12 12:10	321-60-8	
Terphenyl-d14 (S)	96 %		24-168	1	07/24/12 00:00	07/25/12 12:10	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	53-70-3	
Fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/24/12 00:00	08/04/12 04:59	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/24/12 00:00	08/04/12 04:59	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 04:59	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	80 %		42-120	50	07/24/12 00:00	08/04/12 05:17	4165-60-0	IO
2-Fluorobiphenyl (S)	73 %		44-120	50	07/24/12 00:00	08/04/12 05:17	321-60-8	
Terphenyl-d14 (S)	122 %		46-131	50	07/24/12 00:00	08/04/12 05:17	1718-51-0	
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	ND	ug/L	1.0	1		07/27/12 03:56	71-43-2	HS
Ethylbenzene	ND	ug/L	1.0	1		07/26/12 05:32	100-41-4	
Toluene	ND	ug/L	1.0	1		07/26/12 05:32	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		07/26/12 05:32	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	106 %		80-120	1		07/26/12 05:32	1868-53-7	HS
Toluene-d8 (S)	103 %		80-120	1		07/26/12 05:32	2037-26-5	
4-Bromofluorobenzene (S)	100 %		80-120	1		07/26/12 05:32	460-00-4	
1,2-Dichloroethane-d4 (S)	113 %		80-120	1		07/26/12 05:32	17060-07-0	
Preservation pH	1.0		1.0	1		07/26/12 05:32		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 31 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-12-071812		Lab ID: 60125567008		Collected: 07/18/12 14:15		Received: 07/20/12 08:30		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity		Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)		122	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO3)		ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO3		122	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids		57200	mg/L	5.0	1		07/23/12 11:16		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Bromide		32.6	mg/L	20.0	20		07/31/12 17:24	24959-67-9	D3
Chloride		25000	mg/L	5000	5000		08/01/12 10:44	16887-00-6	
Sulfate		716	mg/L	50.0	50		07/31/12 18:16	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres		Analytical Method: EPA 353.2							
Nitrogen, Nitrate		3.3	mg/L	0.10	1		07/20/12 11:25		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-13-071812		Lab ID: 60125567009		Collected: 07/18/12 13:40		Received: 07/20/12 08:30		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Calcium	252000	ug/L	100	1	07/24/12 11:30	07/30/12 14:47	7440-70-2		
Magnesium	53400	ug/L	50.0	1	07/24/12 11:30	07/30/12 14:47	7439-95-4		
Potassium	6240	ug/L	500	1	07/24/12 11:30	07/30/12 14:47	7440-09-7		
Sodium	71500	ug/L	5000	10	07/24/12 11:30	07/31/12 12:30	7440-23-5		
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C							
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 12:29			
TPH-DRO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 12:29			
Surrogates									
Nitrobenzene-d5 (S)	100	%	21-189	1	07/24/12 00:00	07/25/12 12:29	4165-60-0		
2-Fluorobiphenyl (S)	88	%	34-180	1	07/24/12 00:00	07/25/12 12:29	321-60-8		
Terphenyl-d14 (S)	98	%	24-168	1	07/24/12 00:00	07/25/12 12:29	1718-51-0		
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	0.12	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	83-32-9		
Acenaphthylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	208-96-8		
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	120-12-7		
Benzo(a)anthracene	0.75	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	56-55-3		
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	50-32-8		
Benzo(b)fluoranthene	0.55	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	205-99-2		
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	191-24-2		
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	207-08-9		
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	218-01-9		
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	53-70-3		
Fluoranthene	1.1	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	206-44-0		
Fluorene	0.14	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	86-73-7		
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	193-39-5		
Naphthalene	3.7	ug/L	0.50	1	07/24/12 00:00	08/05/12 14:42	91-20-3		
Phenanthrene	ND	ug/L	0.50	1	07/24/12 00:00	08/05/12 14:42	85-01-8		
Pyrene	0.55	ug/L	0.10	1	07/24/12 00:00	08/05/12 14:42	129-00-0		
Surrogates									
Nitrobenzene-d5 (S)	77	%	42-120	50	07/24/12 00:00	08/07/12 21:48	4165-60-0		IO
2-Fluorobiphenyl (S)	81	%	44-120	50	07/24/12 00:00	08/07/12 21:48	321-60-8		
Terphenyl-d14 (S)	119	%	46-131	50	07/24/12 00:00	08/07/12 21:48	1718-51-0		
8260 MSV UST, Water		Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		07/26/12 05:48	71-43-2		
Ethylbenzene	ND	ug/L	1.0	1		07/26/12 05:48	100-41-4		
Toluene	ND	ug/L	1.0	1		07/26/12 05:48	108-88-3		
Xylene (Total)	ND	ug/L	3.0	1		07/26/12 05:48	1330-20-7		
Surrogates									
Dibromofluoromethane (S)	104	%	80-120	1		07/26/12 05:48	1868-53-7		
Toluene-d8 (S)	106	%	80-120	1		07/26/12 05:48	2037-26-5		
4-Bromofluorobenzene (S)	96	%	80-120	1		07/26/12 05:48	460-00-4		
1,2-Dichloroethane-d4 (S)	106	%	80-120	1		07/26/12 05:48	17060-07-0		
Preservation pH	1.0		1.0	1		07/26/12 05:48			

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 33 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-13-071812		Lab ID: 60125567009	Collected: 07/18/12 13:40	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO ₃)	340	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO ₃	340	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1240	mg/L	5.0	1		07/23/12 11:16		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	2.4	mg/L	1.0	1		07/30/12 19:10	24959-67-9	
Chloride	230	mg/L	50.0	50		07/31/12 18:51	16887-00-6	
Sulfate	239	mg/L	50.0	50		07/31/12 18:51	14808-79-8	
353.2 Nitrogen, NO₂/NO₃ unpres	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	15.2	mg/L	0.50	5		07/20/12 12:49		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-14-071812		Lab ID: 60125567010		Collected: 07/18/12 17:00		Received: 07/20/12 08:30		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Calcium	455000	ug/L	100	1	07/24/12 11:30	07/30/12 14:49	7440-70-2		
Magnesium	137000	ug/L	50.0	1	07/24/12 11:30	07/30/12 14:49	7439-95-4		
Potassium	8790	ug/L	500	1	07/24/12 11:30	07/30/12 14:49	7440-09-7		
Sodium	49800	ug/L	5000	10	07/24/12 11:30	07/31/12 12:32	7440-23-5		
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C							
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 12:48			
TPH-DRO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 12:48			
Surrogates									
Nitrobenzene-d5 (S)	99	%	21-189	1	07/24/12 00:00	07/25/12 12:48	4165-60-0		
2-Fluorobiphenyl (S)	86	%	34-180	1	07/24/12 00:00	07/25/12 12:48	321-60-8		
Terphenyl-d14 (S)	100	%	24-168	1	07/24/12 00:00	07/25/12 12:48	1718-51-0		
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C							
Acenaphthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	83-32-9		
Acenaphthylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	208-96-8		
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	120-12-7		
Benzo(a)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	56-55-3		
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	50-32-8		
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	205-99-2		
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	191-24-2		
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	207-08-9		
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	218-01-9		
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	53-70-3		
Fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	206-44-0		
Fluorene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	86-73-7		
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	193-39-5		
Naphthalene	ND	ug/L	0.50	1	07/24/12 00:00	08/05/12 15:16	91-20-3		
Phenanthrene	ND	ug/L	0.50	1	07/24/12 00:00	08/05/12 15:16	85-01-8		
Pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:16	129-00-0		
Surrogates									
Nitrobenzene-d5 (S)	59	%	42-120	50	07/24/12 00:00	08/06/12 16:30	4165-60-0		IO
2-Fluorobiphenyl (S)	72	%	44-120	50	07/24/12 00:00	08/06/12 16:30	321-60-8		
Terphenyl-d14 (S)	111	%	46-131	50	07/24/12 00:00	08/06/12 16:30	1718-51-0		
8260 MSV UST, Water		Analytical Method: EPA 8260							
Benzene	ND	ug/L	1.0	1		07/26/12 06:04	71-43-2		
Ethylbenzene	ND	ug/L	1.0	1		07/26/12 06:04	100-41-4		
Toluene	ND	ug/L	1.0	1		07/26/12 06:04	108-88-3		
Xylene (Total)	ND	ug/L	3.0	1		07/26/12 06:04	1330-20-7		
Surrogates									
Dibromofluoromethane (S)	103	%	80-120	1		07/26/12 06:04	1868-53-7		
Toluene-d8 (S)	102	%	80-120	1		07/26/12 06:04	2037-26-5		
4-Bromofluorobenzene (S)	98	%	80-120	1		07/26/12 06:04	460-00-4		
1,2-Dichloroethane-d4 (S)	112	%	80-120	1		07/26/12 06:04	17060-07-0		
Preservation pH	1.0		1.0	1		07/26/12 06:04			

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 35 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-14-071812		Lab ID: 60125567010	Collected: 07/18/12 17:00	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO ₃)	314	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO ₃	314	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	2430	mg/L	5.0	1		07/23/12 11:16		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	1.1	mg/L	1.0	1		07/30/12 19:27	24959-67-9	
Chloride	382	mg/L	50.0	50		07/31/12 19:08	16887-00-6	
Sulfate	812	mg/L	50.0	50		07/31/12 19:08	14808-79-8	
353.2 Nitrogen, NO₂/NO₃ unpres	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	16.0	mg/L	0.50	5		07/20/12 12:52		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-15-071812		Lab ID: 60125567011	Collected: 07/18/12 13:00	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	91000	ug/L	100	1	07/24/12 11:30	07/30/12 14:51	7440-70-2	
Magnesium	34800	ug/L	50.0	1	07/24/12 11:30	07/30/12 14:51	7439-95-4	
Potassium	3140	ug/L	500	1	07/24/12 11:30	07/30/12 14:51	7440-09-7	
Sodium	55600	ug/L	5000	10	07/24/12 11:30	07/31/12 12:35	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 13:07		
TPH-DRO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 13:07		
Surrogates								
Nitrobenzene-d5 (S)	102	%	21-189	1	07/24/12 00:00	07/25/12 13:07	4165-60-0	
2-Fluorobiphenyl (S)	88	%	34-180	1	07/24/12 00:00	07/25/12 13:07	321-60-8	
Terphenyl-d14 (S)	108	%	24-168	1	07/24/12 00:00	07/25/12 13:07	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	1.5	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	83-32-9	
Acenaphthylene	0.21	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	208-96-8	
Anthracene	0.35	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	120-12-7	
Benzo(a)anthracene	0.19	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	53-70-3	
Fluoranthene	0.65	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	206-44-0	
Fluorene	1.5	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	193-39-5	
Naphthalene	21.3	ug/L	0.50	1	07/24/12 00:00	08/04/12 05:34	91-20-3	
Phenanthrene	2.2	ug/L	0.50	1	07/24/12 00:00	08/04/12 05:34	85-01-8	
Pyrene	0.35	ug/L	0.10	1	07/24/12 00:00	08/04/12 05:34	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	87	%	42-120	50	07/24/12 00:00	08/04/12 05:51	4165-60-0	IO
2-Fluorobiphenyl (S)	80	%	44-120	50	07/24/12 00:00	08/04/12 05:51	321-60-8	
Terphenyl-d14 (S)	127	%	46-131	50	07/24/12 00:00	08/04/12 05:51	1718-51-0	
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	ND	ug/L	1.0	1		07/26/12 06:19	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		07/26/12 06:19	100-41-4	
Toluene	ND	ug/L	1.0	1		07/26/12 06:19	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		07/26/12 06:19	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	108	%	80-120	1		07/26/12 06:19	1868-53-7	HS
Toluene-d8 (S)	98	%	80-120	1		07/26/12 06:19	2037-26-5	
4-Bromofluorobenzene (S)	103	%	80-120	1		07/26/12 06:19	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	80-120	1		07/26/12 06:19	17060-07-0	
Preservation pH	1.0		1.0	1		07/26/12 06:19		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 37 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-15-071812		Lab ID: 60125567011	Collected: 07/18/12 13:00	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO ₃)	258	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO ₃	258	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	601	mg/L	5.0	1		07/23/12 11:17		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	2.4	mg/L	1.0	1		07/30/12 19:45	24959-67-9	
Chloride	110	mg/L	10.0	10		07/31/12 19:43	16887-00-6	
Sulfate	52.7	mg/L	5.0	5		07/31/12 20:00	14808-79-8	
353.2 Nitrogen, NO₂/NO₃ unpres	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND	mg/L	0.10	1		07/20/12 11:22		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-16-071812		Lab ID: 60125567012	Collected: 07/18/12 12:45	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	160000	ug/L	100	1	07/24/12 11:30	07/30/12 14:53	7440-70-2	
Magnesium	45800	ug/L	50.0	1	07/24/12 11:30	07/30/12 14:53	7439-95-4	
Potassium	2780	ug/L	500	1	07/24/12 11:30	07/30/12 14:53	7440-09-7	
Sodium	51700	ug/L	5000	10	07/24/12 11:30	07/31/12 12:37	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 13:26		
TPH-DRO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 13:26		
Surrogates								
Nitrobenzene-d5 (S)	99 %		21-189	1	07/24/12 00:00	07/25/12 13:26	4165-60-0	
2-Fluorobiphenyl (S)	83 %		34-180	1	07/24/12 00:00	07/25/12 13:26	321-60-8	
Terphenyl-d14 (S)	99 %		24-168	1	07/24/12 00:00	07/25/12 13:26	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	0.25	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	53-70-3	
Fluoranthene	0.10	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	206-44-0	
Fluorene	0.21	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	193-39-5	
Naphthalene	98.8	ug/L	0.50	1	07/24/12 00:00	08/04/12 06:08	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/24/12 00:00	08/04/12 06:08	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:08	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	87 %		42-120	50	07/24/12 00:00	08/04/12 06:25	4165-60-0	
2-Fluorobiphenyl (S)	77 %		44-120	50	07/24/12 00:00	08/04/12 06:25	321-60-8	
Terphenyl-d14 (S)	118 %		46-131	50	07/24/12 00:00	08/04/12 06:25	1718-51-0	
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	ND	ug/L	1.0	1		07/26/12 06:35	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		07/26/12 06:35	100-41-4	
Toluene	ND	ug/L	1.0	1		07/26/12 06:35	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		07/26/12 06:35	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	96 %		80-120	1		07/26/12 06:35	1868-53-7	
Toluene-d8 (S)	99 %		80-120	1		07/26/12 06:35	2037-26-5	
4-Bromofluorobenzene (S)	97 %		80-120	1		07/26/12 06:35	460-00-4	
1,2-Dichloroethane-d4 (S)	94 %		80-120	1		07/26/12 06:35	17060-07-0	
Preservation pH	1.0		1.0	1		07/26/12 06:35		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 39 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-16-071812		Lab ID: 60125567012		Collected: 07/18/12 12:45		Received: 07/20/12 08:30		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity		Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)		336	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO3)		ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO3		336	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids		801	mg/L	5.0	1		07/23/12 11:17		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Bromide		3.3	mg/L	1.0	1		07/30/12 20:02	24959-67-9	
Chloride		199	mg/L	20.0	20		07/31/12 20:18	16887-00-6	
Sulfate		54.4	mg/L	5.0	5		07/31/12 20:35	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres		Analytical Method: EPA 353.2							
Nitrogen, Nitrate		ND	mg/L	0.10	1		07/20/12 11:19		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-17-071812		Lab ID: 60125567013	Collected: 07/18/12 12:15	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	344000	ug/L	100	1	07/24/12 11:30	07/30/12 14:55	7440-70-2	
Magnesium	68000	ug/L	50.0	1	07/24/12 11:30	07/30/12 14:55	7439-95-4	
Potassium	10300	ug/L	500	1	07/24/12 11:30	07/30/12 14:55	7440-09-7	
Sodium	238000	ug/L	5000	10	07/24/12 11:30	07/31/12 12:39	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 13:45		
TPH-DRO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 13:45		
Surrogates								
Nitrobenzene-d5 (S)	98 %		21-189	1	07/24/12 00:00	07/25/12 13:45	4165-60-0	
2-Fluorobiphenyl (S)	83 %		34-180	1	07/24/12 00:00	07/25/12 13:45	321-60-8	
Terphenyl-d14 (S)	99 %		24-168	1	07/24/12 00:00	07/25/12 13:45	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	0.26	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	83-32-9	
Acenaphthylene	0.16	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	208-96-8	
Anthracene	0.45	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	120-12-7	
Benzo(a)anthracene	1.4	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	56-55-3	
Benzo(a)pyrene	1.5	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	50-32-8	
Benzo(b)fluoranthene	11.5	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	205-99-2	
Benzo(g,h,i)perylene	4.2	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	207-08-9	
Chrysene	3.4	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	218-01-9	
Dibenz(a,h)anthracene	0.95	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	53-70-3	
Fluoranthene	7.6	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	206-44-0	
Fluorene	0.68	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	86-73-7	
Indeno(1,2,3-cd)pyrene	3.5	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	193-39-5	
Naphthalene	210	ug/L	25.0	50	07/24/12 00:00	08/04/12 06:59	91-20-3	
Phenanthrene	2.0	ug/L	0.50	1	07/24/12 00:00	08/04/12 06:42	85-01-8	
Pyrene	4.0	ug/L	0.10	1	07/24/12 00:00	08/04/12 06:42	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	84 %		42-120	50	07/24/12 00:00	08/04/12 06:59	4165-60-0	
2-Fluorobiphenyl (S)	74 %		44-120	50	07/24/12 00:00	08/04/12 06:59	321-60-8	
Terphenyl-d14 (S)	92 %		46-131	50	07/24/12 00:00	08/04/12 06:59	1718-51-0	
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	ND	ug/L	1.0	1		07/26/12 06:51	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		07/26/12 06:51	100-41-4	
Toluene	ND	ug/L	1.0	1		07/26/12 06:51	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		07/26/12 06:51	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	96 %		80-120	1		07/26/12 06:51	1868-53-7	
Toluene-d8 (S)	99 %		80-120	1		07/26/12 06:51	2037-26-5	
4-Bromofluorobenzene (S)	98 %		80-120	1		07/26/12 06:51	460-00-4	
1,2-Dichloroethane-d4 (S)	98 %		80-120	1		07/26/12 06:51	17060-07-0	
Preservation pH	1.0		1.0	1		07/26/12 06:51		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 41 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-17-071812		Lab ID: 60125567013		Collected: 07/18/12 12:15		Received: 07/20/12 08:30		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity		Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)		289	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO3)		ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO3		289	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids		1960	mg/L	5.0	1		07/23/12 11:17		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Bromide		2.8	mg/L	1.0	1		07/30/12 15:58	24959-67-9	
Chloride		637	mg/L	50.0	50		07/31/12 20:52	16887-00-6	
Sulfate		262	mg/L	50.0	50		07/31/12 20:52	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres		Analytical Method: EPA 353.2							
Nitrogen, Nitrate		ND	mg/L	0.10	1		07/20/12 11:17		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-18-071812		Lab ID: 60125567014	Collected: 07/18/12 12:00	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	2300000	ug/L	5000	50	07/24/12 11:30	07/31/12 12:41	7440-70-2	
Magnesium	714000	ug/L	2500	50	07/24/12 11:30	07/31/12 12:41	7439-95-4	
Potassium	39100	ug/L	500	1	07/24/12 11:30	07/30/12 14:57	7440-09-7	
Sodium	3320000	ug/L	25000	50	07/24/12 11:30	07/31/12 12:41	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 14:04		
TPH-DRO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 14:04		
Surrogates								
Nitrobenzene-d5 (S)	98 %		21-189	1	07/24/12 00:00	07/25/12 14:04	4165-60-0	
2-Fluorobiphenyl (S)	85 %		34-180	1	07/24/12 00:00	07/25/12 14:04	321-60-8	
Terphenyl-d14 (S)	97 %		24-168	1	07/24/12 00:00	07/25/12 14:04	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	0.36	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	120-12-7	
Benzo(a)anthracene	0.12	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	53-70-3	
Fluoranthene	0.13	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	206-44-0	
Fluorene	0.33	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	193-39-5	
Naphthalene	6.5	ug/L	0.50	1	07/24/12 00:00	08/04/12 07:17	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/24/12 00:00	08/04/12 07:17	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/04/12 07:17	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	94 %		42-120	50	07/24/12 00:00	08/04/12 07:34	4165-60-0	
2-Fluorobiphenyl (S)	83 %		44-120	50	07/24/12 00:00	08/04/12 07:34	321-60-8	
Terphenyl-d14 (S)	116 %		46-131	50	07/24/12 00:00	08/04/12 07:34	1718-51-0	
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	ND	ug/L	1.0	1		07/26/12 07:07	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		07/26/12 07:07	100-41-4	
Toluene	ND	ug/L	1.0	1		07/26/12 07:07	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		07/26/12 07:07	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	101 %		80-120	1		07/26/12 07:07	1868-53-7	HS
Toluene-d8 (S)	102 %		80-120	1		07/26/12 07:07	2037-26-5	
4-Bromofluorobenzene (S)	98 %		80-120	1		07/26/12 07:07	460-00-4	
1,2-Dichloroethane-d4 (S)	102 %		80-120	1		07/26/12 07:07	17060-07-0	
Preservation pH	1.0		1.0	1		07/26/12 07:07		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 43 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-18-071812		Lab ID: 60125567014		Collected: 07/18/12 12:00		Received: 07/20/12 08:30		Matrix: Water	
Parameters		Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity		Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)		393	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO3)		ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO3		393	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids		27300	mg/L	5.0	1		07/23/12 11:17		
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Bromide		ND	mg/L	100	100		08/01/12 14:30	24959-67-9	D3
Chloride		10100	mg/L	2000	2000		08/01/12 14:13	16887-00-6	
Sulfate		672	mg/L	100	100		08/01/12 14:30	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres		Analytical Method: EPA 353.2							
Nitrogen, Nitrate		3.8	mg/L	0.10	1		07/20/12 11:16		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-19-071812		Lab ID: 60125567015	Collected: 07/18/12 13:50	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	422000	ug/L	100	1	07/24/12 11:30	07/30/12 15:00	7440-70-2	
Magnesium	50300	ug/L	50.0	1	07/24/12 11:30	07/30/12 15:00	7439-95-4	
Potassium	8670	ug/L	500	1	07/24/12 11:30	07/30/12 15:00	7440-09-7	
Sodium	49400	ug/L	5000	10	07/24/12 11:30	07/31/12 12:43	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 14:23		
TPH-DRO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 14:23		
Surrogates								
Nitrobenzene-d5 (S)	100	%	21-189	1	07/24/12 00:00	07/25/12 14:23	4165-60-0	
2-Fluorobiphenyl (S)	84	%	34-180	1	07/24/12 00:00	07/25/12 14:23	321-60-8	
Terphenyl-d14 (S)	96	%	24-168	1	07/24/12 00:00	07/25/12 14:23	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	0.66	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	53-70-3	
Fluoranthene	0.26	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	206-44-0	
Fluorene	0.51	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	193-39-5	
Naphthalene	42.9	ug/L	0.50	1	07/24/12 00:00	08/05/12 15:50	91-20-3	
Phenanthrene	0.64	ug/L	0.50	1	07/24/12 00:00	08/05/12 15:50	85-01-8	
Pyrene	0.12	ug/L	0.10	1	07/24/12 00:00	08/05/12 15:50	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	73	%	42-120	50	07/24/12 00:00	08/06/12 16:47	4165-60-0	IO
2-Fluorobiphenyl (S)	86	%	44-120	50	07/24/12 00:00	08/06/12 16:47	321-60-8	
Terphenyl-d14 (S)	118	%	46-131	50	07/24/12 00:00	08/06/12 16:47	1718-51-0	
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	ND	ug/L	1.0	1		07/26/12 07:22	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		07/26/12 07:22	100-41-4	
Toluene	ND	ug/L	1.0	1		07/26/12 07:22	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		07/26/12 07:22	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	92	%	80-120	1		07/26/12 07:22	1868-53-7	HS
Toluene-d8 (S)	100	%	80-120	1		07/26/12 07:22	2037-26-5	
4-Bromofluorobenzene (S)	101	%	80-120	1		07/26/12 07:22	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120	1		07/26/12 07:22	17060-07-0	
Preservation pH	1.0		1.0	1		07/26/12 07:22		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 45 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-19-071812		Lab ID: 60125567015	Collected: 07/18/12 13:50	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO ₃)	635 mg/L		20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO ₃)	ND mg/L		20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO ₃	635 mg/L		20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	585 mg/L		5.0	1		07/23/12 11:18		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	1.4 mg/L		1.0	1		07/30/12 17:43	24959-67-9	
Chloride	113 mg/L		10.0	10		07/31/12 22:54	16887-00-6	
Sulfate	27.8 mg/L		2.0	2		07/31/12 23:12	14808-79-8	
353.2 Nitrogen, NO₂/NO₃ unpres	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	2.6 mg/L		0.10	1		07/20/12 11:24		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-20-071812		Lab ID: 60125567016	Collected: 07/18/12 11:40	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	2240000	ug/L	5000	50	07/24/12 11:30	07/31/12 12:45	7440-70-2	
Magnesium	654000	ug/L	2500	50	07/24/12 11:30	07/31/12 12:45	7439-95-4	
Potassium	39600	ug/L	500	1	07/24/12 11:30	07/30/12 15:02	7440-09-7	
Sodium	1070000	ug/L	25000	50	07/24/12 11:30	07/31/12 12:45	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 14:42		
TPH-DRO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 14:42		
Surrogates								
Nitrobenzene-d5 (S)	104	%	21-189	1	07/24/12 00:00	07/25/12 14:42	4165-60-0	
2-Fluorobiphenyl (S)	88	%	34-180	1	07/24/12 00:00	07/25/12 14:42	321-60-8	
Terphenyl-d14 (S)	98	%	24-168	1	07/24/12 00:00	07/25/12 14:42	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	0.46	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	83-32-9	
Acenaphthylene	0.11	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	53-70-3	
Fluoranthene	0.15	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	206-44-0	
Fluorene	0.43	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	193-39-5	
Naphthalene	6.7	ug/L	0.50	1	07/24/12 00:00	08/05/12 16:24	91-20-3	
Phenanthrene	0.56	ug/L	0.50	1	07/24/12 00:00	08/05/12 16:24	85-01-8	
Pyrene	0.14	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:24	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	78	%	42-120	50	07/24/12 00:00	08/05/12 16:41	4165-60-0	
2-Fluorobiphenyl (S)	75	%	44-120	50	07/24/12 00:00	08/05/12 16:41	321-60-8	
Terphenyl-d14 (S)	98	%	46-131	50	07/24/12 00:00	08/05/12 16:41	1718-51-0	
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	ND	ug/L	1.0	1		07/26/12 07:38	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		07/26/12 07:38	100-41-4	
Toluene	ND	ug/L	1.0	1		07/26/12 07:38	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		07/26/12 07:38	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	102	%	80-120	1		07/26/12 07:38	1868-53-7	HS
Toluene-d8 (S)	100	%	80-120	1		07/26/12 07:38	2037-26-5	
4-Bromofluorobenzene (S)	102	%	80-120	1		07/26/12 07:38	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120	1		07/26/12 07:38	17060-07-0	
Preservation pH	7.0		1.0	1		07/26/12 07:38		pH

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 47 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: MW-20-071812		Lab ID: 60125567016	Collected: 07/18/12 11:40	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO ₃)	1820	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO ₃)	ND	mg/L	20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO ₃	1820	mg/L	20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	14000	mg/L	5.0	1		07/23/12 11:18		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	13.6	mg/L	1.0	1		07/30/12 18:00	24959-67-9	
Chloride	ND	mg/L	1.0	1		07/30/12 18:00	16887-00-6	
Sulfate	508	mg/L	100	100		08/01/12 15:05	14808-79-8	
353.2 Nitrogen, NO₂/NO₃ unpres	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	4.3	mg/L	0.20	2		07/20/12 11:38		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: EW-1-071812		Lab ID: 60125567017	Collected: 07/18/12 14:20	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	2450000	ug/L	5000	50	07/24/12 11:30	07/31/12 12:52	7440-70-2	
Magnesium	748000	ug/L	2500	50	07/24/12 11:30	07/31/12 12:52	7439-95-4	
Potassium	67600	ug/L	500	1	07/24/12 11:30	07/30/12 15:09	7440-09-7	
Sodium	13000000	ug/L	25000	50	07/24/12 11:30	07/31/12 12:52	7440-23-5	
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 15:01		
TPH-DRO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 15:01		
Surrogates								
Nitrobenzene-d5 (S)	102	%	21-189	1	07/24/12 00:00	07/25/12 15:01	4165-60-0	
2-Fluorobiphenyl (S)	87	%	34-180	1	07/24/12 00:00	07/25/12 15:01	321-60-8	
Terphenyl-d14 (S)	104	%	24-168	1	07/24/12 00:00	07/25/12 15:01	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	53-70-3	
Fluoranthene	0.12	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/24/12 00:00	08/05/12 16:58	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/24/12 00:00	08/05/12 16:58	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 16:58	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	70	%	42-120	50	07/24/12 00:00	08/06/12 17:04	4165-60-0	IO
2-Fluorobiphenyl (S)	86	%	44-120	50	07/24/12 00:00	08/06/12 17:04	321-60-8	
Terphenyl-d14 (S)	135	%	46-131	50	07/24/12 00:00	08/06/12 17:04	1718-51-0	S4
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	ND	ug/L	1.0	1		07/26/12 07:54	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		07/26/12 07:54	100-41-4	
Toluene	ND	ug/L	1.0	1		07/26/12 07:54	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		07/26/12 07:54	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	105	%	80-120	1		07/26/12 07:54	1868-53-7	
Toluene-d8 (S)	98	%	80-120	1		07/26/12 07:54	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		07/26/12 07:54	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120	1		07/26/12 07:54	17060-07-0	
Preservation pH	1.0		1.0	1		07/26/12 07:54		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 49 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: EW-1-071812		Lab ID: 60125567017		Collected: 07/18/12 14:20		Received: 07/20/12 08:30		Matrix: Water	
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual	
2320B Alkalinity		Analytical Method: SM 2320B							
Alkalinity,Bicarbonate (CaCO3)	108	mg/L	20.0	1		08/01/12 11:30			
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1		08/01/12 11:30			
Alkalinity, Total as CaCO3	108	mg/L	20.0	1		08/01/12 11:30			
2540C Total Dissolved Solids		Analytical Method: SM 2540C							
Total Dissolved Solids	59600	mg/L	5.0	1		07/23/12 11:18			
300.0 IC Anions 28 Days		Analytical Method: EPA 300.0							
Bromide	38.0	mg/L	20.0	20		08/01/12 00:04	24959-67-9		
Chloride	26500	mg/L	2000	2000		08/01/12 01:14	16887-00-6		
Sulfate	746	mg/L	50.0	50		08/01/12 00:21	14808-79-8		
353.2 Nitrogen, NO2/NO3 unpres		Analytical Method: EPA 353.2							
Nitrogen, Nitrate	6.1	mg/L	0.20	2		07/20/12 12:50			

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: WW-071812		Lab ID: 60125567018	Collected: 07/18/12 18:00	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP		Analytical Method: EPA 6010 Preparation Method: EPA 3010						
Calcium	112000	ug/L	100	1	07/24/12 11:30	07/30/12 15:11	7440-70-2	M1
Magnesium	60700	ug/L	50.0	1	07/24/12 11:30	07/30/12 15:11	7439-95-4	
Potassium	5740	ug/L	500	1	07/24/12 11:30	07/30/12 15:11	7440-09-7	
Sodium	171000	ug/L	5000	10	07/24/12 11:30	07/31/12 12:54	7440-23-5	M6
8270 MSSV DRO/ORO		Analytical Method: EPA 8270 Preparation Method: EPA 3510C						
TPH-ORO	ND	mg/L	1.0	1	07/24/12 00:00	07/25/12 15:20		
TPH-DRO	1.7	mg/L	1.0	1	07/24/12 00:00	07/25/12 15:20		
Surrogates								
Nitrobenzene-d5 (S)	100	%	21-189	1	07/24/12 00:00	07/25/12 15:20	4165-60-0	
2-Fluorobiphenyl (S)	84	%	34-180	1	07/24/12 00:00	07/25/12 15:20	321-60-8	
Terphenyl-d14 (S)	104	%	24-168	1	07/24/12 00:00	07/25/12 15:20	1718-51-0	
8270 MSSV PAH by SIM		Analytical Method: EPA 8270C by SIM Preparation Method: EPA 3510C						
Acenaphthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	83-32-9	
Acenaphthylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	208-96-8	
Anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	120-12-7	
Benzo(a)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	56-55-3	
Benzo(a)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	50-32-8	
Benzo(b)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	205-99-2	
Benzo(g,h,i)perylene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	191-24-2	
Benzo(k)fluoranthene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	207-08-9	
Chrysene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	218-01-9	
Dibenz(a,h)anthracene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	53-70-3	
Fluoranthene	0.17	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	206-44-0	
Fluorene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	86-73-7	
Indeno(1,2,3-cd)pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	193-39-5	
Naphthalene	ND	ug/L	0.50	1	07/24/12 00:00	08/05/12 17:33	91-20-3	
Phenanthrene	ND	ug/L	0.50	1	07/24/12 00:00	08/05/12 17:33	85-01-8	
Pyrene	ND	ug/L	0.10	1	07/24/12 00:00	08/05/12 17:33	129-00-0	
Surrogates								
Nitrobenzene-d5 (S)	69	%	42-120	50	07/24/12 00:00	08/06/12 17:21	4165-60-0	IO
2-Fluorobiphenyl (S)	86	%	44-120	50	07/24/12 00:00	08/06/12 17:21	321-60-8	
Terphenyl-d14 (S)	122	%	46-131	50	07/24/12 00:00	08/06/12 17:21	1718-51-0	
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	ND	ug/L	1.0	1		07/26/12 08:09	71-43-2	
Ethylbenzene	ND	ug/L	1.0	1		07/26/12 08:09	100-41-4	
Toluene	ND	ug/L	1.0	1		07/26/12 08:09	108-88-3	
Xylene (Total)	ND	ug/L	3.0	1		07/26/12 08:09	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100	%	80-120	1		07/26/12 08:09	1868-53-7	HS
Toluene-d8 (S)	106	%	80-120	1		07/26/12 08:09	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-120	1		07/26/12 08:09	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120	1		07/26/12 08:09	17060-07-0	
Preservation pH	1.0		1.0	1		07/26/12 08:09		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 51 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: WW-071812		Lab ID: 60125567018	Collected: 07/18/12 18:00	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B							
Alkalinity, Bicarbonate (CaCO ₃)	141 mg/L		20.0	1		08/01/12 11:30		
Alkalinity, Carbonate (CaCO ₃)	ND mg/L		20.0	1		08/01/12 11:30		
Alkalinity, Total as CaCO ₃	141 mg/L		20.0	1		08/01/12 11:30		
2540C Total Dissolved Solids	Analytical Method: SM 2540C							
Total Dissolved Solids	1250 mg/L		5.0	1		07/23/12 11:18		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0							
Bromide	3.0 mg/L		1.0	1		07/30/12 18:35	24959-67-9	
Chloride	451 mg/L		50.0	50		08/01/12 01:31	16887-00-6	
Sulfate	139 mg/L		20.0	20		08/01/12 01:48	14808-79-8	
353.2 Nitrogen, NO₂/NO₃ unpres	Analytical Method: EPA 353.2							
Nitrogen, Nitrate	ND mg/L		0.10	1		07/20/12 12:45		

ANALYTICAL RESULTS

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Sample: TRIPS		Lab ID: 60125567019	Collected: 07/18/12 00:00	Received: 07/20/12 08:30	Matrix: Water			
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST, Water		Analytical Method: EPA 8260						
Benzene	ND ug/L		1.0	1		07/26/12 08:25	71-43-2	
Ethylbenzene	ND ug/L		1.0	1		07/26/12 08:25	100-41-4	
Toluene	ND ug/L		1.0	1		07/26/12 08:25	108-88-3	
Xylene (Total)	ND ug/L		3.0	1		07/26/12 08:25	1330-20-7	
Surrogates								
Dibromofluoromethane (S)	100 %		80-120	1		07/26/12 08:25	1868-53-7	
Toluene-d8 (S)	104 %		80-120	1		07/26/12 08:25	2037-26-5	
4-Bromofluorobenzene (S)	91 %		80-120	1		07/26/12 08:25	460-00-4	
1,2-Dichloroethane-d4 (S)	98 %		80-120	1		07/26/12 08:25	17060-07-0	
Preservation pH	1.0		1.0	1		07/26/12 08:25		

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

QC Batch:	MPRP/18823	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3010	Analysis Description:	6010 MET
Associated Lab Samples:	60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018		

METHOD BLANK: 1033785 Matrix: Water

Associated Lab Samples: 60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Calcium	ug/L	ND	100	07/30/12 14:17	
Magnesium	ug/L	ND	50.0	07/30/12 14:17	
Potassium	ug/L	ND	500	07/30/12 14:17	
Sodium	ug/L	ND	500	07/31/12 12:00	

LABORATORY CONTROL SAMPLE: 1033786

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Calcium	ug/L	10000	9380	94	80-120	
Magnesium	ug/L	10000	9520	95	80-120	
Potassium	ug/L	10000	9420	94	80-120	
Sodium	ug/L	10000	9420	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1033787 1033788

Parameter	Units	60125567018 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Calcium	ug/L	112000	10000	10000	117000	119000	45	66	75-125	2	20	M1
Magnesium	ug/L	60700	10000	10000	68700	69800	80	92	75-125	2	20	
Potassium	ug/L	5740	10000	10000	15800	15900	100	102	75-125	1	20	
Sodium	ug/L	171000	10000	10000	178000	182000	73	106	75-125	2	20	M6

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Project No.: 60125567

QC Batch:	MSV/47280	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples:	60125567001, 60125567002, 60125567003, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018, 60125567019		

METHOD BLANK: 1034721 Matrix: Water

Associated Lab Samples: 60125567001, 60125567002, 60125567003, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018, 60125567019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	07/26/12 03:27	
Ethylbenzene	ug/L	ND	1.0	07/26/12 03:27	
Toluene	ug/L	ND	1.0	07/26/12 03:27	
Xylene (Total)	ug/L	ND	3.0	07/26/12 03:27	
1,2-Dichloroethane-d4 (S)	%	105	80-120	07/26/12 03:27	
4-Bromofluorobenzene (S)	%	95	80-120	07/26/12 03:27	
Dibromofluoromethane (S)	%	99	80-120	07/26/12 03:27	
Toluene-d8 (S)	%	101	80-120	07/26/12 03:27	

LABORATORY CONTROL SAMPLE: 1034722

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	19.1	95	74-123	
Ethylbenzene	ug/L	20	20.0	100	76-123	
Toluene	ug/L	20	19.2	96	75-123	
Xylene (Total)	ug/L	60	59.8	100	76-123	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Dibromofluoromethane (S)	%			101	80-120	
Toluene-d8 (S)	%			105	80-120	

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

QC Batch:	MSV/47316	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples:	60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007		

METHOD BLANK:	1035320	Matrix:	Water
Associated Lab Samples:	60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	07/26/12 21:59	
Ethylbenzene	ug/L	ND	1.0	07/26/12 21:59	
Toluene	ug/L	ND	1.0	07/26/12 21:59	
Xylene (Total)	ug/L	ND	3.0	07/26/12 21:59	
1,2-Dichloroethane-d4 (S)	%	96	80-120	07/26/12 21:59	
4-Bromofluorobenzene (S)	%	101	80-120	07/26/12 21:59	
Dibromofluoromethane (S)	%	104	80-120	07/26/12 21:59	
Toluene-d8 (S)	%	105	80-120	07/26/12 21:59	

LABORATORY CONTROL SAMPLE: 1035321

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	18.8	94	74-123	
Ethylbenzene	ug/L	20	19.0	95	76-123	
Toluene	ug/L	20	18.4	92	75-123	
Xylene (Total)	ug/L	60	56.2	94	76-123	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Dibromofluoromethane (S)	%			98	80-120	
Toluene-d8 (S)	%			102	80-120	

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

QC Batch: MSV/47317

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV UST-WATER

Associated Lab Samples: 60125567008

METHOD BLANK: 1035322

Matrix: Water

Associated Lab Samples: 60125567008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	07/27/12 03:41	
1,2-Dichloroethane-d4 (S)	%	98	80-120	07/27/12 03:41	
4-Bromofluorobenzene (S)	%	105	80-120	07/27/12 03:41	
Dibromofluoromethane (S)	%	103	80-120	07/27/12 03:41	
Toluene-d8 (S)	%	104	80-120	07/27/12 03:41	

LABORATORY CONTROL SAMPLE: 1035323

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.2	101	74-123	
1,2-Dichloroethane-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			105	80-120	
Dibromofluoromethane (S)	%			103	80-120	
Toluene-d8 (S)	%			104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1035324

1035325

Parameter	Units	60125625003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Qual
Benzene	ug/L	2350	2000	2000	3240	3270	45	46	40-155	1	45
1,2-Dichloroethane-d4 (S)	%						95	98	80-120		
4-Bromofluorobenzene (S)	%						103	105	80-120		
Dibromofluoromethane (S)	%						102	104	80-120		
Toluene-d8 (S)	%						99	102	80-120		

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

QC Batch:	MSV/47360	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
Associated Lab Samples:	60125567002, 60125567004, 60125567005		

METHOD BLANK: 1036003 Matrix: Water

Associated Lab Samples: 60125567002, 60125567004, 60125567005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	ND	1.0	07/27/12 14:09	
1,2-Dichloroethane-d4 (S)	%	102	80-120	07/27/12 14:09	
4-Bromofluorobenzene (S)	%	103	80-120	07/27/12 14:09	
Dibromofluoromethane (S)	%	102	80-120	07/27/12 14:09	
Toluene-d8 (S)	%	102	80-120	07/27/12 14:09	

LABORATORY CONTROL SAMPLE: 1036004

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	20	20.4	102	74-123	
1,2-Dichloroethane-d4 (S)	%			109	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Dibromofluoromethane (S)	%			102	80-120	
Toluene-d8 (S)	%			99	80-120	

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

QC Batch:	OEXT/34121	Analysis Method:	EPA 8270
QC Batch Method:	EPA 3510C	Analysis Description:	8270 MSSV TPH ORO
Associated Lab Samples:	60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018		

METHOD BLANK: 1033731 Matrix: Water

Associated Lab Samples: 60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
TPH-DRO	mg/L	ND	1.0	07/25/12 09:22	
TPH-ORO	mg/L	ND	1.0	07/25/12 09:22	
2-Fluorobiphenyl (S)	%	78	34-180	07/25/12 09:22	
Nitrobenzene-d5 (S)	%	91	21-189	07/25/12 09:22	
Terphenyl-d14 (S)	%	88	24-168	07/25/12 09:22	

LABORATORY CONTROL SAMPLE: 1033732

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
TPH-DRO	mg/L	100	99.7	100	38-163	
2-Fluorobiphenyl (S)	%			168	34-180	
Nitrobenzene-d5 (S)	%			135	21-189	
Terphenyl-d14 (S)	%			122	24-168	

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

QC Batch:	OEXT/34122	Analysis Method:	EPA 8270C by SIM
QC Batch Method:	EPA 3510C	Analysis Description:	8270 Water PAH by SIM MSSV
Associated Lab Samples:	60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018		

METHOD BLANK: 1033733 Matrix: Water

Associated Lab Samples: 60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	ND	0.10	08/04/12 02:59	
Acenaphthylene	ug/L	ND	0.10	08/04/12 02:59	
Anthracene	ug/L	ND	0.10	08/04/12 02:59	
Benzo(a)anthracene	ug/L	ND	0.10	08/04/12 02:59	
Benzo(a)pyrene	ug/L	ND	0.10	08/04/12 02:59	
Benzo(b)fluoranthene	ug/L	ND	0.10	08/04/12 02:59	
Benzo(g,h,i)perylene	ug/L	ND	0.10	08/04/12 02:59	
Benzo(k)fluoranthene	ug/L	ND	0.10	08/04/12 02:59	
Chrysene	ug/L	ND	0.10	08/04/12 02:59	
Dibenz(a,h)anthracene	ug/L	ND	0.10	08/04/12 02:59	
Fluoranthene	ug/L	ND	0.10	08/04/12 02:59	
Fluorene	ug/L	ND	0.10	08/04/12 02:59	
Indeno(1,2,3-cd)pyrene	ug/L	ND	0.10	08/04/12 02:59	
Naphthalene	ug/L	ND	0.50	08/04/12 02:59	
Phenanthrene	ug/L	ND	0.50	08/04/12 02:59	
Pyrene	ug/L	ND	0.10	08/04/12 02:59	
2-Fluorobiphenyl (S)	%	90	44-120	08/07/12 20:22	
Nitrobenzene-d5 (S)	%	89	42-120	08/07/12 20:22	IO
Terphenyl-d14 (S)	%	126	46-131	08/07/12 20:22	

LABORATORY CONTROL SAMPLE: 1033734

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acenaphthene	ug/L	10	8.6	86	48-120	
Acenaphthylene	ug/L	10	9.1	91	42-120	
Anthracene	ug/L	10	9.1	91	48-120	
Benzo(a)anthracene	ug/L	10	9.0	90	53-118	
Benzo(a)pyrene	ug/L	10	8.5	85	48-115	
Benzo(b)fluoranthene	ug/L	10	7.4	74	42-132	
Benzo(g,h,i)perylene	ug/L	10	9.2	92	38-116	
Benzo(k)fluoranthene	ug/L	10	10.3	103	48-117	
Chrysene	ug/L	10	9.7	97	51-115	
Dibenz(a,h)anthracene	ug/L	10	8.6	86	40-116	
Fluoranthene	ug/L	10	10.3	103	37-134	
Fluorene	ug/L	10	9.5	95	49-116	
Indeno(1,2,3-cd)pyrene	ug/L	10	8.6	86	37-118	
Naphthalene	ug/L	10	8.5	85	41-112	
Phenanthrene	ug/L	10	9.3	93	52-116	

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 60 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

LABORATORY CONTROL SAMPLE: 1033734

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Pyrene	ug/L	10	9.3	93	44-134	
2-Fluorobiphenyl (S)	%			121	44-120	S0
Nitrobenzene-d5 (S)	%			96	42-120	
Terphenyl-d14 (S)	%			92	46-131	

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

QC Batch:	WET/36334	Analysis Method:	SM 2320B
QC Batch Method:	SM 2320B	Analysis Description:	2320B Alkalinity
Associated Lab Samples:	60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018		

METHOD BLANK: 1037831 Matrix: Water

Associated Lab Samples: 60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	20.0	08/01/12 11:30	
Alkalinity, Total as CaCO ₃	mg/L	ND	20.0	08/01/12 11:30	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	20.0	08/01/12 11:30	

LABORATORY CONTROL SAMPLE: 1037832

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO ₃	mg/L	500	477	95	90-110	

SAMPLE DUPLICATE: 1037833

Parameter	Units	60125567002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		24	
Alkalinity, Total as CaCO ₃	mg/L	357	359	1	9	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	357	359	1	9	

SAMPLE DUPLICATE: 1037834

Parameter	Units	60125567009 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		24	
Alkalinity, Total as CaCO ₃	mg/L	340	336	1	9	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	340	336	1	9	

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

QC Batch:	WET/36181	Analysis Method:	SM 2540C
QC Batch Method:	SM 2540C	Analysis Description:	2540C Total Dissolved Solids
Associated Lab Samples:	60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018		

METHOD BLANK:	1033429	Matrix:	Water
Associated Lab Samples:	60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Dissolved Solids	mg/L	ND	5.0	07/23/12 11:14	

SAMPLE DUPLICATE: 1033430						
Parameter	Units	60125567001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1620	1670	3	17	

SAMPLE DUPLICATE: 1033431						
Parameter	Units	60125567013 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Dissolved Solids	mg/L	1960	1970	0	17	

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

QC Batch:	WETA/21081	Analysis Method:	EPA 300.0
QC Batch Method:	EPA 300.0	Analysis Description:	300.0 IC Anions
Associated Lab Samples:	60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012		

METHOD BLANK: 1036969 Matrix: Water

Associated Lab Samples: 60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	ND	1.0	07/30/12 08:51	
Sulfate	mg/L	ND	1.0	07/30/12 08:51	

METHOD BLANK: 1037348 Matrix: Water

Associated Lab Samples: 60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	ND	1.0	07/31/12 11:20	
Chloride	mg/L	ND	1.0	07/31/12 11:20	
Sulfate	mg/L	ND	1.0	07/31/12 11:20	

METHOD BLANK: 1038367 Matrix: Water

Associated Lab Samples: 60125567008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	08/01/12 10:09	

LABORATORY CONTROL SAMPLE: 1036970

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	5	5.4	108	90-110	
Sulfate	mg/L	5	5.3	106	90-110	

LABORATORY CONTROL SAMPLE: 1037349

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	5	5.2	104	90-110	
Chloride	mg/L	5	5.1	101	90-110	
Sulfate	mg/L	5	5.0	100	90-110	

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

LABORATORY CONTROL SAMPLE: 1038368

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1036971 1036972

Parameter	Units	1207455001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Bromide	mg/L	ND	50	50	55.9	55.5	112	111	75-119	1	10	
Chloride	mg/L	72.0	50	50	123	122	102	100	64-118	1	12	
Sulfate	mg/L	288	250	250	557	545	108	103	61-119	2	10	

MATRIX SPIKE SAMPLE: 1036973

Parameter	Units	60125567002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	7.5	5	12.6	102	75-119	
Chloride	mg/L	672	500	1110	88	64-118	
Sulfate	mg/L	29.2	500	509	96	61-119	

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

QC Batch: WETA/21082 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018

METHOD BLANK: 1037019 Matrix: Water
Associated Lab Samples: 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	ND	1.0	07/30/12 15:23	
Chloride	mg/L	ND	1.0	07/30/12 15:23	

METHOD BLANK: 1037355 Matrix: Water
Associated Lab Samples: 60125567013, 60125567015, 60125567017, 60125567018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	07/31/12 09:53	
Sulfate	mg/L	ND	1.0	07/31/12 09:53	

METHOD BLANK: 1038369 Matrix: Water
Associated Lab Samples: 60125567014, 60125567016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	ND	1.0	08/01/12 10:09	
Sulfate	mg/L	ND	1.0	08/01/12 10:09	

LABORATORY CONTROL SAMPLE: 1037020

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	5	5.0	99	90-110	
Chloride	mg/L	5	4.9	97	90-110	

LABORATORY CONTROL SAMPLE: 1037356

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.1	102	90-110	
Sulfate	mg/L	5	4.9	98	90-110	

LABORATORY CONTROL SAMPLE: 1038370

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	5	4.9	99	90-110	
Sulfate	mg/L	5	4.7	94	90-110	

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1037021 1037022												
Parameter	Units	60125567013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	RPD	Qual
Bromide	mg/L	2.8	5	5	7.7	7.8	98	101	75-119	2	10	
Chloride	mg/L	637	250	250	844	842	83	82	64-118	0	12	
Sulfate	mg/L	262	250	250	497	501	94	95	61-119	1	10	

MATRIX SPIKE SAMPLE: 1037023								
Parameter	Units	120758001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers	
Bromide	mg/L	ND	5	5.2	104	75-119		
Chloride	mg/L	4.0	5	8.5	89	64-118		
Sulfate	mg/L	13.0	5	18.8	116	61-119		

QUALITY CONTROL DATA

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

QC Batch:	WETA/20970	Analysis Method:	EPA 353.2
QC Batch Method:	EPA 353.2	Analysis Description:	353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples:	60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018		

METHOD BLANK:	1032434	Matrix:	Water
Associated Lab Samples:	60125567001, 60125567002, 60125567003, 60125567004, 60125567005, 60125567006, 60125567007, 60125567008, 60125567009, 60125567010, 60125567011, 60125567012, 60125567013, 60125567014, 60125567015, 60125567016, 60125567017, 60125567018		

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	07/20/12 11:13	

LABORATORY CONTROL SAMPLE: 1032435						
Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	103	90-110	

MATRIX SPIKE SAMPLE:	1032436						
		60125567016	Spike	MS	MS	% Rec	
Parameter	Units	Result	Conc.	Result	% Rec	Limits	Qualifiers
Nitrogen, Nitrate	ma/L	4.3	3.2	7.5	99	90-110	

MATRIX SPIKE SAMPLE:		1032438					
Parameter	Units	60125567007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	7.3	8	15.4	102	90-110	

SAMPLE DUPLICATE: 1032437						
Parameter	Units	60125567013 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	ND	ND		15	

QUALIFIERS

Project: MALJAMAR GAS PLANT 075018
Pace Project No.: 60125567

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.
ND - Not Detected at or above adjusted reporting limit.
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
MDL - Adjusted Method Detection Limit.
PRL - Pace Reporting Limit.
RL - Reporting Limit.
S - Surrogate
1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.
Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.
LCS(D) - Laboratory Control Sample (Duplicate)
MS(D) - Matrix Spike (Duplicate)
DUP - Sample Duplicate
RPD - Relative Percent Difference
NC - Not Calculable.
SG - Silica Gel - Clean-Up
U - Indicates the compound was analyzed for, but not detected.
N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.
Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.
TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: OEXT/34121
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/47280
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/47316
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/47317
[1]
Batch: MSV/47360
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
HS Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
IO The internal standard response was outside the laboratory acceptance limits confirmed by reanalysis. The results reported are from the most QC compliant analysis.
M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6 Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
S0 Surrogate recovery outside laboratory control limits.
S4 Surrogate recovery not evaluated against control limits due to sample dilution.
pH Post-analysis pH measurement indicates insufficient VOA sample preservation.

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60125567001	MW-2-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567002	MW-3-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567003	MW-4-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567004	MW-8-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567005	MW-9-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567006	MW-10-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567007	MW-11-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567008	MW-12-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567009	MW-13-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567010	MW-14-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567011	MW-15-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567012	MW-16-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567013	MW-17-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567014	MW-18-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567015	MW-19-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567016	MW-20-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567017	EW-1-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567018	WW-071812	EPA 3010	MPRP/18823	EPA 6010	ICP/15680
60125567001	MW-2-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567002	MW-3-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567003	MW-4-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567004	MW-8-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567005	MW-9-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567006	MW-10-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567007	MW-11-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567008	MW-12-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567009	MW-13-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567010	MW-14-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567011	MW-15-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567012	MW-16-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567013	MW-17-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567014	MW-18-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567015	MW-19-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567016	MW-20-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567017	EW-1-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567018	WW-071812	EPA 3510C	OEXT/34121	EPA 8270	MSSV/10695
60125567001	MW-2-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567002	MW-3-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567003	MW-4-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567004	MW-8-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567005	MW-9-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567006	MW-10-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567007	MW-11-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567008	MW-12-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567009	MW-13-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567010	MW-14-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567011	MW-15-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567012	MW-16-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 70 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60125567013	MW-17-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567014	MW-18-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567015	MW-19-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567016	MW-20-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567017	EW-1-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567018	WW-071812	EPA 3510C	OEXT/34122	EPA 8270C by SIM	MSSV/10744
60125567001	MW-2-071812	EPA 8260	MSV/47280		
60125567002	MW-3-071812	EPA 8260	MSV/47280		
60125567002	MW-3-071812	EPA 8260	MSV/47316		
60125567002	MW-3-071812	EPA 8260	MSV/47360		
60125567003	MW-4-071812	EPA 8260	MSV/47280		
60125567003	MW-4-071812	EPA 8260	MSV/47316		
60125567004	MW-8-071812	EPA 8260	MSV/47316		
60125567004	MW-8-071812	EPA 8260	MSV/47360		
60125567005	MW-9-071812	EPA 8260	MSV/47316		
60125567005	MW-9-071812	EPA 8260	MSV/47360		
60125567006	MW-10-071812	EPA 8260	MSV/47280		
60125567006	MW-10-071812	EPA 8260	MSV/47316		
60125567007	MW-11-071812	EPA 8260	MSV/47280		
60125567007	MW-11-071812	EPA 8260	MSV/47316		
60125567008	MW-12-071812	EPA 8260	MSV/47280		
60125567008	MW-12-071812	EPA 8260	MSV/47317		
60125567009	MW-13-071812	EPA 8260	MSV/47280		
60125567010	MW-14-071812	EPA 8260	MSV/47280		
60125567011	MW-15-071812	EPA 8260	MSV/47280		
60125567012	MW-16-071812	EPA 8260	MSV/47280		
60125567013	MW-17-071812	EPA 8260	MSV/47280		
60125567014	MW-18-071812	EPA 8260	MSV/47280		
60125567015	MW-19-071812	EPA 8260	MSV/47280		
60125567016	MW-20-071812	EPA 8260	MSV/47280		
60125567017	EW-1-071812	EPA 8260	MSV/47280		
60125567018	WW-071812	EPA 8260	MSV/47280		
60125567019	TRIPS	EPA 8260	MSV/47280		
60125567001	MW-2-071812	SM 2320B	WET/36334		
60125567002	MW-3-071812	SM 2320B	WET/36334		
60125567003	MW-4-071812	SM 2320B	WET/36334		
60125567004	MW-8-071812	SM 2320B	WET/36334		
60125567005	MW-9-071812	SM 2320B	WET/36334		
60125567006	MW-10-071812	SM 2320B	WET/36334		
60125567007	MW-11-071812	SM 2320B	WET/36334		
60125567008	MW-12-071812	SM 2320B	WET/36334		

Date: 08/09/2012 05:34 PM

REPORT OF LABORATORY ANALYSIS

Page 71 of 73

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, Inc..

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60125567009	MW-13-071812	SM 2320B	WET/36334		
60125567010	MW-14-071812	SM 2320B	WET/36334		
60125567011	MW-15-071812	SM 2320B	WET/36334		
60125567012	MW-16-071812	SM 2320B	WET/36334		
60125567013	MW-17-071812	SM 2320B	WET/36334		
60125567014	MW-18-071812	SM 2320B	WET/36334		
60125567015	MW-19-071812	SM 2320B	WET/36334		
60125567016	MW-20-071812	SM 2320B	WET/36334		
60125567017	EW-1-071812	SM 2320B	WET/36334		
60125567018	WW-071812	SM 2320B	WET/36334		
60125567001	MW-2-071812	SM 2540C	WET/36181		
60125567002	MW-3-071812	SM 2540C	WET/36181		
60125567003	MW-4-071812	SM 2540C	WET/36181		
60125567004	MW-8-071812	SM 2540C	WET/36181		
60125567005	MW-9-071812	SM 2540C	WET/36181		
60125567006	MW-10-071812	SM 2540C	WET/36181		
60125567007	MW-11-071812	SM 2540C	WET/36181		
60125567008	MW-12-071812	SM 2540C	WET/36181		
60125567009	MW-13-071812	SM 2540C	WET/36181		
60125567010	MW-14-071812	SM 2540C	WET/36181		
60125567011	MW-15-071812	SM 2540C	WET/36181		
60125567012	MW-16-071812	SM 2540C	WET/36181		
60125567013	MW-17-071812	SM 2540C	WET/36181		
60125567014	MW-18-071812	SM 2540C	WET/36181		
60125567015	MW-19-071812	SM 2540C	WET/36181		
60125567016	MW-20-071812	SM 2540C	WET/36181		
60125567017	EW-1-071812	SM 2540C	WET/36181		
60125567018	WW-071812	SM 2540C	WET/36181		
60125567001	MW-2-071812	EPA 300.0	WETA/21081		
60125567002	MW-3-071812	EPA 300.0	WETA/21081		
60125567003	MW-4-071812	EPA 300.0	WETA/21081		
60125567004	MW-8-071812	EPA 300.0	WETA/21081		
60125567005	MW-9-071812	EPA 300.0	WETA/21081		
60125567006	MW-10-071812	EPA 300.0	WETA/21081		
60125567007	MW-11-071812	EPA 300.0	WETA/21081		
60125567008	MW-12-071812	EPA 300.0	WETA/21081		
60125567009	MW-13-071812	EPA 300.0	WETA/21081		
60125567010	MW-14-071812	EPA 300.0	WETA/21081		
60125567011	MW-15-071812	EPA 300.0	WETA/21081		
60125567012	MW-16-071812	EPA 300.0	WETA/21081		
60125567013	MW-17-071812	EPA 300.0	WETA/21082		
60125567014	MW-18-071812	EPA 300.0	WETA/21082		
60125567015	MW-19-071812	EPA 300.0	WETA/21082		
60125567016	MW-20-071812	EPA 300.0	WETA/21082		
60125567017	EW-1-071812	EPA 300.0	WETA/21082		
60125567018	WW-071812	EPA 300.0	WETA/21082		
60125567001	MW-2-071812	EPA 353.2	WETA/20970		

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: MALJAMAR GAS PLANT 075018

Pace Project No.: 60125567

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60125567002	MW-3-071812	EPA 353.2	WETA/20970		
60125567003	MW-4-071812	EPA 353.2	WETA/20970		
60125567004	MW-8-071812	EPA 353.2	WETA/20970		
60125567005	MW-9-071812	EPA 353.2	WETA/20970		
60125567006	MW-10-071812	EPA 353.2	WETA/20970		
60125567007	MW-11-071812	EPA 353.2	WETA/20970		
60125567008	MW-12-071812	EPA 353.2	WETA/20970		
60125567009	MW-13-071812	EPA 353.2	WETA/20970		
60125567010	MW-14-071812	EPA 353.2	WETA/20970		
60125567011	MW-15-071812	EPA 353.2	WETA/20970		
60125567012	MW-16-071812	EPA 353.2	WETA/20970		
60125567013	MW-17-071812	EPA 353.2	WETA/20970		
60125567014	MW-18-071812	EPA 353.2	WETA/20970		
60125567015	MW-19-071812	EPA 353.2	WETA/20970		
60125567016	MW-20-071812	EPA 353.2	WETA/20970		
60125567017	EW-1-071812	EPA 353.2	WETA/20970		
60125567018	WW-071812	EPA 353.2	WETA/20970		

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information	
Company	COP GRA Midland TX	Report To:		Attention:	
Address	2135 South Loop, 250 West Midland, TX 79703	Copy To:		Company Name	
Email To:	K.Horton@COPGRA.COM	Purchase Order No.:		Address	
Phone:	(432) 686-0086	Project Name:	Maljamar Gas Plant	Pace Quote Reference	
Requested Due Date/TAT:	STD.	Project Number:	075018	Pace Project Manager	Alice Tracy
				Pace Profile #:	

REGULATORY AGENCY	
☐ NPDES	☐ GROUND WATER
☐ UST	☐ RCRA
☐ OTHER	

ITEM #	Section D Required Client Information	Valid Matrix Codes	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test	Y/N	Requested Analysis Filtered (Y/N)										Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
					COMPOSITE START	COMPOSITE END/GRAB																	
1	MW-2-071812	DRINKING WATER	DW	WTG	7-18 1630	7-18 1630	7	7	Unpreserved	Analysis Test													2101255527
2	MW-3-071812	WASTE WATER	WW	WTG	7-18 1730	7-18 1730	7	7	NaOH	Other TCG													2101255527
3	MW-4-071812	WASTE WATER PRODUCT	WP	WTG	7-18 1550	7-18 1550	7	7	HCl														2101255527
4	MW-8-071812	SOLIDS	SL	WTG	7-18 1850	7-18 1850	7	7	HNO3														2101255527
5	MW-9-071812	WASTE WATER	WW	WTG	7-18 1655	7-18 1655	7	7	H2SO4														2101255527
6	MW-10-071812	WASTE WATER	WW	WTG	7-18 1520	7-18 1520	7	7	Unpreserved														2101255527
7	MW-11-071812	WASTE WATER	WW	WTG	7-18 1500	7-18 1500	7	7	NaOH														2101255527
8	MW-12-071812	WASTE WATER	WW	WTG	7-18 1415	7-18 1415	7	7	HCl														2101255527
9	MW-13-071812	WASTE WATER	WW	WTG	7-18 1340	7-18 1340	7	7	HNO3														2101255527
10	MW-14-071812	WASTE WATER	WW	WTG	7-18 1700	7-18 1700	7	7	H2SO4														2101255527
11	MW-15-071812	WASTE WATER	WW	WTG	7-18 1300	7-18 1300	7	7	Unpreserved														2101255527
12	MW-16-071812	WASTE WATER	WW	WTG	7-18 1245	7-18 1245	7	7	NaOH														2101255527

RELIQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	
						Received on	Cooler (Y/N)
Joe Mirelos / CAA	7-19-12	0930	Joe Mirelos / CAA	7-19-12	0930	Y	Y
						Y	Y
						Y	Y
						Y	Y
						Y	Y

SAMPLER NAME AND SIGNATURE	
PRINT Name of SAMPLER:	DATE Signed (MM/DD/YY)
SIGNATURE of SAMPLER:	07-19-12



Sample Condition Upon Receipt – ESI Tech Specs

Client Name: COP CRA TX

Project #: 60125567

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 7938 0741 3520

Pace Shipping Label Used? Yes ☐ No ☒

Optional

Proj Due Date: 8/1
Proj Name:

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☒ Bubble Bags ☐ Foam ☐ None ☐ Other ☐

Thermometer Used: T-19 / T-194

Type of Ice: Wed Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 2.6, 3.7, 2.4, 3.3

Date and initials of person examining contents: 7/20/12 to 18

Temperature should be above freezing to 6°C

Chain of Custody present:	☒ Yes ☐ No ☐ N/A	1.
Chain of Custody filled out:	☒ Yes ☐ No ☐ N/A	2.
Chain of Custody relinquished:	☒ Yes ☐ No ☐ N/A	3.
Sampler name & signature on COC:	☒ Yes ☐ No ☐ N/A	4.
Samples arrived within holding time:	☒ Yes ☐ No ☐ N/A	5.
Short Hold Time analyses (<72hr):	☒ Yes ☐ No ☐ N/A	6. <u>N02 N03</u>
Rush Turn Around Time requested:	☐ Yes ☒ No ☐ N/A	7.
Sufficient volume:	☒ Yes ☐ No ☐ N/A	8.
Correct containers used:	☒ Yes ☐ No ☐ N/A	
-Pace containers used:	☒ Yes ☐ No ☐ N/A	9.
Containers intact:	☒ Yes ☐ No ☐ N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐ Yes ☐ No ☒ N/A	11.
Filtered volume received for dissolved tests?	☐ Yes ☐ No ☒ N/A	12.
Sample labels match COC:	☒ Yes ☐ No ☐ N/A	
-Includes date/time/ID/analyses Matrix: <u>water</u>		13.
All containers needing preservation have been checked.	☒ Yes ☐ No ☐ N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☒ Yes ☐ No ☐ N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☒ Yes ☐ No	Initial when completed
		Lot # of added preservative
Trip Blank present:	☒ Yes ☐ No ☐ N/A	<u>MW-12, MW-15, MW-18, MW-19, MW-20, and WW</u>
Pace Trip Blank lot # (if purchased):		15. <u>all have 3053 vials with headspace.</u>
Headspace in VOA vials (>6mm):	☒ Yes ☐ No ☐ N/A	
		16.
Project sampled in USDA Regulated Area:	☐ Yes ☐ No ☒ N/A	17. List State: <u>h</u>

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____

Temp Log: Record start and finish times when unpacking cooler, if >20 min, recheck sample temps.

Start: _____ Start: _____

End: _____ End: _____

Temp: _____ Temp: _____

Project Manager Review: APF

Date: 7/20/12

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the NCDENR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).

APPENDIX B

HISTORICAL WATER LEVEL MEASUREMENTS

APPENDIX B
HISTORICAL WATER LEVEL MEASUREMENTS
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-11 **	12/13/01	4015.54	81.38		0.00	0.00	81.38	3934.16
	03/22/02	4015.54	83.60		0.00	0.00	83.60	3931.94
	09/16/02	4015.54	83.82		0.00	0.00	83.82	3931.72
	09/20/02	4015.54	83.70		0.00	0.00	83.70	3931.84
	09/04/03	4015.54	84.50		0.00	0.00	84.50	3931.04
	04/05/04	4015.54	84.54		0.00	0.00	84.54	3931.00
	05/17/04	4015.54	84.64		0.00	0.00	84.64	3930.90
	05/24/04	4015.54	84.55		0.00	0.00	84.55	3930.99
	06/01/04	4015.54	84.61		0.00	0.00	84.61	3930.93
	06/07/04	4015.54	84.58		0.00	0.00	84.58	3930.96
	06/15/04	4015.54	84.69		0.00	0.00	84.69	3930.85
	06/21/04	4015.54	84.72		0.00	0.00	84.72	3930.82
	06/28/04	4015.54	84.99		0.00	0.00	84.99	3930.55
	07/06/04	4015.54	84.83		0.00	0.00	84.83	3930.71
	07/12/04	4015.54	84.96		0.00	0.00	84.96	3930.58
	07/19/04	4015.54	84.90		0.00	0.00	84.90	3930.64
	07/26/04	4015.54	85.11		0.00	0.00	85.11	3930.43
	08/02/04	4015.54	84.96		0.00	0.00	84.96	3930.58
	08/10/04	4015.54	85.09		0.00	0.00	85.09	3930.45
	08/16/04	4015.54	85.06		0.00	0.00	85.06	3930.48
	08/23/04	4015.54	84.83		0.00	0.00	84.83	3930.71
	08/30/04	4015.54	85.06		0.00	0.00	85.06	3930.48
	09/08/04	4015.54	85.14		0.00	0.00	85.14	3930.40
	10/08/04	4015.54	85.12		0.00	0.00	85.12	3930.42
	12/30/04	4015.54	85.12		0.00	0.00	85.12	3930.42
	01/17/05	4015.54	85.52		0.00	0.00	85.52	3930.02
	02/09/05	4015.54	85.33		0.00	0.00	85.33	3930.21
	03/09/05	4015.54	85.45		0.00	0.00	85.45	3930.09
	04/05/05	4015.54	85.15		0.00	0.00	85.15	3930.39
	05/10/05	4015.54	85.21		0.00	0.00	85.21	3930.33
	06/08/05	4015.54	85.31		0.00	0.00	85.31	3930.23
	07/05/05	4015.54	85.59		0.00	0.00	85.59	3929.95
	08/08/05	4015.54	85.50		0.00	0.00	85.50	3930.04
	09/14/05	4015.54	85.42		0.00	0.00	85.42	3930.12
	10/12/05	4015.54	85.54		0.00	0.00	85.54	3930.00
	11/09/05	4015.54	85.62		0.00	0.00	85.62	3929.92
	12/14/05	4015.54	85.41		0.00	0.00	85.41	3930.13
	01/12/06	4015.54	85.26		0.00	0.00	85.26	3930.28
	02/02/06	4015.54	85.23		0.00	0.00	85.23	3930.31
	03/07/06	4015.54	85.44		0.00	0.00	85.44	3930.10
	04/05/06	4015.54	85.38		0.00	0.00	85.38	3930.16
	05/08/06	4015.54	85.33		0.00	0.00	85.33	3930.21
	06/05/06	4015.54	85.47		0.00	0.00	85.47	3930.07
	07/11/06	4015.54	85.48		0.00	0.00	85.48	3930.06
	08/16/06	4015.54	85.52		0.00	0.00	85.52	3930.02
	09/07/06	4015.54	85.43		0.00	0.00	85.43	3930.11
	10/11/06	4015.54	85.41		0.00	0.00	85.41	3930.13
	11/08/06	4015.54	85.31		0.00	0.00	85.31	3930.23
	12/04/06	4015.54	85.88		0.00	0.00	85.88	3929.66
	01/04/07	4015.54	85.20		0.00	0.00	85.20	3930.34
	02/27/07	4015.54	85.16		0.00	0.00	85.16	3930.38
	03/20/07	4015.54	85.33		0.00	0.00	85.33	3930.21

APPENDIX B
HISTORICAL WATER LEVEL MEASUREMENTS
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
	04/17/07	4015.54	85.17		0.00	0.00	85.17	3930.37
	05/07/07	4015.54	85.40		0.00	0.00	85.40	3930.14
	06/27/07	4015.54	85.27		0.00	0.00	85.27	3930.27
	07/19/07	4015.54	85.13		0.00	0.00	85.13	3930.41
	08/21/07	4015.54	85.08		0.00	0.00	85.08	3930.46
	09/17/07	4015.54	85.05		0.00	0.00	85.05	3930.49
	10/16/07	4015.54	84.97		0.00	0.00	84.97	3930.57
	11/20/07	4015.54	85.02		0.00	0.00	85.02	3930.52
	12/21/07	4015.54	84.81		0.00	0.00	84.81	3930.73
	01/22/08	4015.54	85.27		0.00	0.00	85.27	3930.27
	02/27/08	4015.54	85.20		0.00	0.00	85.20	3930.34
	03/25/08	4015.54	84.99		0.00	0.00	84.99	3930.55
	04/29/08	4015.54	84.98		0.00	0.00	84.98	3930.56
	05/05/08	4015.54	84.93		0.00	0.00	84.93	3930.61
	06/10/08	4015.54	84.94		0.00	0.00	84.94	3930.60
	07/15/08	4015.54	84.90		0.00	0.00	84.90	3930.64
	08/19/08	4015.54	84.88		0.00	0.00	84.88	3930.66
	09/16/08	4015.54	85.13		0.00	0.00	85.13	3930.41
	10/15/08	4015.54	85.03		0.00	0.00	85.03	3930.51
	11/12/08	4015.54	84.72		0.00	0.00	84.72	3930.82
	12/11/08	4015.54	84.92		0.00	0.00	84.92	3930.62
	01/13/09	4015.54	85.15		0.00	0.00	85.15	3930.39
	02/11/09	4015.54	84.85		0.00	0.00	84.85	3930.69
	03/10/09	4015.54	84.63		0.00	0.00	84.63	3930.91
	04/13/09	4015.54	84.79		0.00	0.00	84.79	3930.75
	05/01/09	4015.54	84.64		0.00	0.00	84.64	3930.90
	06/08/09	4015.54	84.51		0.00	0.00	84.51	3931.03
	07/13/09	4015.54	84.61		0.00	0.00	84.61	3930.93
	08/10/09	4015.54	84.60		0.00	0.00	84.60	3930.94
	09/15/09	4015.54	84.44		0.00	0.00	84.44	3931.10
	10/06/09	4015.54	84.34		0.00	0.00	84.34	3931.20
	11/09/09	4015.54	84.58		0.00	0.00	84.58	3930.96
	12/23/09	4015.54	84.06		0.00	0.00	84.06	3931.48
	01/20/10	4015.54	83.99		0.00	0.00	83.99	3931.55
	02/09/10	4015.54	84.64		0.00	0.00	84.64	3930.90
	03/09/10	4015.54	84.23		0.00	0.00	84.23	3931.31
	04/12/10	4015.54	84.54		0.00	0.00	84.54	3931.00
	05/24/10	4015.54	84.34		0.00	0.00	84.34	3931.20
	06/14/10	4015.54	84.48		0.00	0.00	84.48	3931.06
	07/20/10	4015.54	84.54		0.00	0.00	84.54	3931.00
	08/11/10	4015.54	84.57		0.00	0.00	84.57	3930.97
	09/21/10	4015.54	84.56		0.00	0.00	84.56	3930.98
	10/20/10	4015.54	84.62		0.00	0.00	84.62	3930.92
	11/08/10	4015.54	84.48		0.00	0.00	84.48	3931.06
	12/07/10	4015.54	84.58		0.00	0.00	84.58	3930.96
	01/18/11	4015.54	84.61		0.00	0.00	84.61	3930.93
	02/08/11	4015.54	84.38		0.00	0.00	84.38	3931.16
	03/08/11	4015.54	84.40		0.00	0.00	84.40	3931.14
	04/13/11	4015.54	84.61		0.00	0.00	84.61	3930.93
	05/23/11	4015.54	84.54		0.00	0.00	84.54	3931.00
	06/28/11	4015.54	84.85		0.00	0.00	84.85	3930.69
	07/19/11	4015.54	84.73		0.00	0.00	84.73	3930.81

APPENDIX B
HISTORICAL WATER LEVEL MEASUREMENTS
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
	08/31/11	4015.54	84.61		0.00	0.00	84.61	3930.93
	09/27/11	4015.54	84.66		0.00	0.00	84.66	3930.88
	10/24/11	4015.54	84.79		0.00	0.00	84.79	3930.75
	11/29/11	4015.54	84.99		0.00	0.00	84.99	3930.55
	12/23/11	4015.54	84.83		0.00	0.00	84.83	3930.71
	01/31/12	4015.54	84.77		0.00	0.00	84.77	3930.77
	02/29/12	4015.54	84.81		0.00	0.00	84.81	3930.73
	03/27/12	4015.54	84.85		0.00	0.00	84.85	3930.69
	04/18/12	4015.54	84.91		0.00	0.00	84.91	3930.63
	05/21/12	4015.54	85.15		0.00	0.00	85.15	3930.39
	07/17/12	4015.54	84.97		0.00	0.00	84.97	3930.57
	08/21/12	4015.54	84.97		0.00	0.00	84.97	3930.57
	09/17/12	4015.54	84.83		0.00	0.00	84.83	3930.71
	12/13/12	4015.54	85.15		0.00	0.00	85.15	3930.39
MW-12 **	12/13/01	4022.71	91.43		0.00	0.00	91.43	3931.28
	03/22/02	4022.71	94.38		0.00	0.00	94.38	3928.33
	09/16/02	4022.71	94.51		0.00	0.00	94.51	3928.20
	09/20/02	4022.71	94.31		0.00	0.00	94.31	3928.40
	04/05/04	4022.71	94.59		0.00	0.00	94.59	3928.12
	05/17/04	4022.71	94.60		0.00	0.00	94.60	3928.11
	05/24/04	4022.71	94.51		0.00	0.00	94.51	3928.20
	06/01/04	4022.71	94.53		0.00	0.00	94.53	3928.18
	06/07/04	4022.71	94.45		0.00	0.00	94.45	3928.26
	06/15/04	4022.71	94.56		0.00	0.00	94.56	3928.15
	06/21/04	4022.71	94.57		0.00	0.00	94.57	3928.14
	06/28/04	4022.71	94.84		0.00	0.00	94.84	3927.87
	07/06/04	4022.71	94.70		0.00	0.00	94.70	3928.01
	07/12/04	4022.71	94.80		0.00	0.00	94.80	3927.91
	07/19/04	4022.71	94.74		0.00	0.00	94.74	3927.97
	07/26/04	4022.71	94.92		0.00	0.00	94.92	3927.79
	08/02/04	4022.71	94.77		0.00	0.00	94.77	3927.94
	08/10/04	4022.71	94.88		0.00	0.00	94.88	3927.83
	08/16/04	4022.71	94.86		0.00	0.00	94.86	3927.85
	08/23/04	4022.71	94.60		0.00	0.00	94.60	3928.11
	08/30/04	4022.71	94.82		0.00	0.00	94.82	3927.89
	09/08/04	4022.71	94.89		0.00	0.00	94.89	3927.82
	10/08/04	4022.71	94.83		0.00	0.00	94.83	3927.88
	12/30/04	4022.71	94.72		0.00	0.00	94.72	3927.99
	01/17/05	4022.71	95.06		0.00	0.00	95.06	3927.65
	02/09/05	4022.71	94.94		0.00	0.00	94.94	3927.77
	03/09/05	4022.71	94.92		0.00	0.00	94.92	3927.79
	04/05/05	4022.71	94.58		0.00	0.00	94.58	3928.13
	05/10/05	4022.71	94.61		0.00	0.00	94.61	3928.10
	06/08/05	4022.71	94.58		0.00	0.00	94.58	3928.13
	07/05/05	4022.71	94.84		0.00	0.00	94.84	3927.87
	08/08/05	4022.71	94.78		0.00	0.00	94.78	3927.93
	09/14/05	4022.71	94.71		0.00	0.00	94.71	3928.00
	10/12/05	4022.71	94.82		0.00	0.00	94.82	3927.89
	11/09/05	4022.71	94.92		0.00	0.00	94.92	3927.79
	12/14/05	4022.71	94.70		0.00	0.00	94.70	3928.01
	01/12/06	4022.71	94.50		0.00	0.00	94.50	3928.21
	02/02/06	4022.71	94.58		0.00	0.00	94.58	3928.13

APPENDIX B
HISTORICAL WATER LEVEL MEASUREMENTS
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
	03/07/06	4022.71	94.76		0.00	0.00	94.76	3927.95
	04/05/06	4022.71	94.67		0.00	0.00	94.67	3928.04
	05/08/06	4022.71	94.61		0.00	0.00	94.61	3928.10
	06/05/06	4022.71	94.77		0.00	0.00	94.77	3927.94
	07/11/06	4022.71	94.84		0.00	0.00	94.84	3927.87
	08/16/06	4022.71	94.93		0.00	0.00	94.93	3927.78
	09/07/06	4022.71	94.86		0.00	0.00	94.86	3927.85
	10/11/06	4022.71	94.86		0.00	0.00	94.86	3927.85
	11/08/06	4022.71	94.72		0.00	0.00	94.72	3927.99
	12/04/06	4022.71	95.35		0.00	0.00	95.35	3927.36
	01/04/07	4022.71	94.68		0.00	0.00	94.68	3928.03
	02/27/07	4022.71	94.73		0.00	0.00	94.73	3927.98
	03/20/07	4022.71	94.93		0.00	0.00	94.93	3927.78
	04/17/07	4022.71	94.73		0.00	0.00	94.73	3927.98
	05/07/07	4022.71	94.95		0.00	0.00	94.95	3927.76
	06/27/07	4022.71	94.42		0.00	0.00	94.42	3928.29
	07/19/07	4022.71	94.71		0.00	0.00	94.71	3928.00
	08/21/07	4022.71	94.77		0.00	0.00	94.77	3927.94
	09/17/07	4022.71	94.90		0.00	0.00	94.90	3927.81
	10/16/07	4022.71	98.83		0.00	0.00	98.83	3923.88
	11/20/07	4022.71	99.07		0.00	0.00	99.07	3923.64
	12/21/07	4022.53	98.82		0.00	0.00	98.82	3923.71
	01/22/08	4022.53	97.14		0.00	0.00	97.14	3925.39
	02/27/08	4022.53	97.32		0.00	0.00	97.32	3925.21
	03/25/08	4022.53	98.91		0.00	0.00	98.91	3923.62
	04/29/08	4022.53	98.87		0.00	0.00	98.87	3923.66
	05/05/08	4022.53	98.82		0.00	0.00	98.82	3923.71
	06/10/08	4022.53	98.63		0.00	0.00	98.63	3923.90
	07/15/08	4022.53	98.65		0.00	0.00	98.65	3923.88
	08/19/08	4022.53	98.43		0.00	0.00	98.43	3924.10
	09/16/08	4022.53	98.92		0.00	0.00	98.92	3923.61
	10/15/08	4022.53	98.84		0.00	0.00	98.84	3923.69
	11/12/08	4022.53	98.52		0.00	0.00	98.52	3924.01
	12/11/08	4022.53	98.48		0.00	0.00	98.48	3924.05
	01/13/09	4022.53	98.86		0.00	0.00	98.86	3923.67
	02/11/09	4022.53	98.52		0.00	0.00	98.52	3924.01
	03/10/09	4022.53	98.29		0.00	0.00	98.29	3924.24
	04/13/09	4022.53	98.44		0.00	0.00	98.44	3924.09
	05/01/09	4022.53	98.27		0.00	0.00	98.27	3924.26
	06/08/09	4022.53	98.25		0.00	0.00	98.25	3924.28
	07/13/09	4022.53	98.28		0.00	0.00	98.28	3924.25
	08/10/09	4022.53	98.27		0.00	0.00	98.27	3924.26
	09/15/09	4022.53	98.04		0.00	0.00	98.04	3924.49
	10/06/09	4022.53	94.93		0.00	0.00	94.93	3927.60
	11/09/09	4022.53	97.97		0.00	0.00	97.97	3924.56
	12/23/09	4022.53	97.47		0.00	0.00	97.47	3925.06
	01/20/10	4022.53	97.36		0.00	0.00	97.36	3925.17
	02/09/10	4022.53	97.98		0.00	0.00	97.98	3924.55
	03/09/10	4022.53	97.58		0.00	0.00	97.58	3924.95
	04/12/10	4022.53	97.85		0.00	0.00	97.85	3924.68
	05/24/10	4022.53	97.57		0.00	0.00	97.57	3924.96
	06/14/10	4022.53	98.32		0.00	0.00	98.32	3924.21

APPENDIX B
HISTORICAL WATER LEVEL MEASUREMENTS
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
	07/20/10		98.23		0.00	0.00	98.23	-98.23
	08/11/10	4022.53	98.22		0.00	0.00	98.22	3924.31
	09/21/10	4022.53	98.01		0.00	0.00	98.01	3924.52
	10/20/10	4022.53	98.13		0.00	0.00	98.13	3924.40
	11/08/10	4022.53	97.97		0.00	0.00	97.97	3924.56
	12/07/10	4022.53	97.93		0.00	0.00	97.93	3924.60
	01/18/11	4022.53	97.81		0.00	0.00	97.81	3924.72
	02/08/11	4022.53	96.88		0.00	0.00	96.88	3925.65
	03/08/11	4022.53	94.42		0.00	0.00	94.42	3928.11
	04/13/11	4022.53	94.36		0.00	0.00	94.36	3928.17
	05/23/11	4022.53	94.20		0.00	0.00	94.20	3928.33
	06/28/11	4022.53	97.80		0.00	0.00	97.80	3924.73
	07/19/11	4022.53	97.74		0.00	0.00	97.74	3924.79
	08/31/11	4022.53	97.65		0.00	0.00	97.65	3924.88
	09/27/11	4022.53	97.67		0.00	0.00	97.67	3924.86
	10/24/11	4022.53	96.44		0.00	0.00	96.44	3926.09
	11/29/11	4022.53	98.06		0.00	0.00	98.06	3924.47
	12/23/11	4022.53	97.87		0.00	0.00	97.87	3924.66
	01/31/12	4022.53	97.73		0.00	0.00	97.73	3924.80
	02/29/12	4022.53	97.83		0.00	0.00	97.83	3924.70
	03/27/12	4022.53	97.78		0.00	0.00	97.78	3924.75
	04/18/12	4022.53	97.80		0.00	0.00	97.80	3924.73
	05/21/12	4022.53	98.02		0.00	0.00	98.02	3924.51
	07/17/12	4022.53	94.66		0.00	0.00	94.66	3927.87
	08/21/12	4022.53	97.65		0.00	0.00	97.65	3924.88
	09/17/12	4022.53	97.62		0.00	0.00	97.62	3924.91
	12/13/12	4022.53	97.87		0.00	0.00	97.87	3924.66
MW-13 **	12/13/01	4031.96	103.76		0.00	0.00	103.76	3928.20
	03/22/02	4031.96	107.18		0.00	0.00	107.18	3924.78
	09/16/02	4031.96	107.58		0.00	0.00	107.58	3924.38
	09/20/02	4031.96	107.48		0.00	0.00	107.48	3924.48
	04/05/04	4031.96	108.04		0.00	0.00	108.04	3923.92
	05/17/04	4031.96	108.06		0.00	0.00	108.06	3923.90
	05/24/04	4031.96	107.97		0.00	0.00	107.97	3923.99
	06/01/04	4031.96	107.97		0.00	0.00	107.97	3923.99
	06/07/04	4031.96	107.89		0.00	0.00	107.89	3924.07
	06/15/04	4031.96	107.99		0.00	0.00	107.99	3923.97
	06/21/04	4031.96	107.98		0.00	0.00	107.98	3923.98
	06/28/04	4031.96	108.29		0.00	0.00	108.29	3923.67
	07/06/04	4031.96	108.12		0.00	0.00	108.12	3923.84
	07/12/04	4031.96	108.22		0.00	0.00	108.22	3923.74
	07/19/04	4031.96	108.16		0.00	0.00	108.16	3923.80
	07/26/04	4031.96	108.34		0.00	0.00	108.34	3923.62
	08/02/04	4031.96	108.17		0.00	0.00	108.17	3923.79
	08/10/04	4031.96	108.29		0.00	0.00	108.29	3923.67
	08/16/04	4031.96	108.27		0.00	0.00	108.27	3923.69
	08/23/04	4031.96	108.01		0.00	0.00	108.01	3923.95
	08/30/04	4031.96	108.24		0.00	0.00	108.24	3923.72
	09/08/04	4031.96	108.31		0.00	0.00	108.31	3923.65
	10/08/04	4031.96	108.23		0.00	0.00	108.23	3923.73
	12/30/04	4031.96	108.12		0.00	0.00	108.12	3923.84
	01/17/05	4031.96	108.49		0.00	0.00	108.49	3923.47

APPENDIX B
HISTORICAL WATER LEVEL MEASUREMENTS
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
	02/09/05	4031.96	108.38		0.00	0.00	108.38	3923.58
	03/09/05	4031.96	108.44		0.00	0.00	108.44	3923.52
	04/05/05	4031.96	108.04		0.00	0.00	108.04	3923.92
	05/10/05	4031.96	108.09		0.00	0.00	108.09	3923.87
	06/08/05	4031.96	108.18		0.00	0.00	108.18	3923.78
	07/05/05	4031.96	108.47		0.00	0.00	108.47	3923.49
	08/08/05	4031.96	108.37		0.00	0.00	108.37	3923.59
	09/14/05	4031.96	108.28		0.00	0.00	108.28	3923.68
	10/12/05	4031.96	108.42		0.00	0.00	108.42	3923.54
	11/09/05	4031.96	108.51		0.00	0.00	108.51	3923.45
	12/14/05	4031.96	108.31		0.00	0.00	108.31	3923.65
	01/12/06	4031.96	108.16		0.00	0.00	108.16	3923.80
	02/02/06	4031.96	108.17		0.00	0.00	108.17	3923.79
	03/07/06	4031.96	108.33		0.00	0.00	108.33	3923.63
	04/05/06	4031.96	108.22		0.00	0.00	108.22	3923.74
	05/08/06	4031.96	108.18		0.00	0.00	108.18	3923.78
	06/05/06	4031.96	108.30		0.00	0.00	108.30	3923.66
	07/11/06	4031.96	108.34		0.00	0.00	108.34	3923.62
	08/16/06	4031.96	108.43		0.00	0.00	108.43	3923.53
	09/07/06	4031.96	108.32		0.00	0.00	108.32	3923.64
	10/11/06	4031.96	108.31		0.00	0.00	108.31	3923.65
	11/08/06	4031.96	108.18		0.00	0.00	108.18	3923.78
	12/04/06	4031.96	108.79		0.00	0.00	108.79	3923.17
	01/04/07	4031.96	108.11		0.00	0.00	108.11	3923.85
	02/27/07	4031.96	108.16		0.00	0.00	108.16	3923.80
	03/20/07	4031.96	108.37		0.00	0.00	108.37	3923.59
	04/17/07	4031.96	108.13		0.00	0.00	108.13	3923.83
	05/07/07	4031.96	108.37		0.00	0.00	108.37	3923.59
	06/27/07	4031.96	108.23		0.00	0.00	108.23	3923.73
	07/19/07	4031.96	108.13		0.00	0.00	108.13	3923.83
	08/21/07	4031.96	108.10		0.00	0.00	108.10	3923.86
	09/17/07	4031.96	108.08		0.00	0.00	108.08	3923.88
	10/16/07	4031.96	108.03		0.00	0.00	108.03	3923.93
	11/20/07	4031.96	108.11		0.00	0.00	108.11	3923.85
	12/21/07	4031.96	107.92		0.00	0.00	107.92	3924.04
	01/22/08	4031.96	108.42		0.00	0.00	108.42	3923.54
	02/27/08	4031.96	108.40		0.00	0.00	108.40	3923.56
	03/25/08	4031.96	108.22		0.00	0.00	108.22	3923.74
	04/29/08	4031.96	108.22		0.00	0.00	108.22	3923.74
	05/05/08	4031.96	108.22		0.00	0.00	108.22	3923.74
	06/10/08	4031.96	108.23		0.00	0.00	108.23	3923.73
	07/15/08	4031.96	108.23		0.00	0.00	108.23	3923.73
	08/19/08	4031.96	108.24		0.00	0.00	108.24	3923.72
	09/16/08	4031.96	108.52		0.00	0.00	108.52	3923.44
	10/15/08	4031.96	108.44		0.00	0.00	108.44	3923.52
	11/12/08	4031.96	108.15		0.00	0.00	108.15	3923.81
	12/11/08	4031.96	108.34		0.00	0.00	108.34	3923.62
	01/13/09	4031.96	108.55		0.00	0.00	108.55	3923.41
	02/11/09	4031.96	108.27		0.00	0.00	108.27	3923.69
	03/10/09	4031.96	108.05		0.00	0.00	108.05	3923.91
	04/13/09	4031.96	108.20		0.00	0.00	108.20	3923.76
	05/01/09	4031.96	108.02		0.00	0.00	108.02	3923.94

APPENDIX B
HISTORICAL WATER LEVEL MEASUREMENTS
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
	06/08/09	4031.96	107.90		0.00	0.00	107.90	3924.06
	07/13/09	4031.96	107.97		0.00	0.00	107.97	3923.99
	08/10/09	4031.96	107.98		0.00	0.00	107.98	3923.98
	09/15/09	4031.96	107.83		0.00	0.00	107.83	3924.13
	10/06/09	4031.96	107.73		0.00	0.00	107.73	3924.23
	11/09/09	4031.96	107.95		0.00	0.00	107.95	3924.01
	12/23/09	4031.96	107.45		0.00	0.00	107.45	3924.51
	01/20/10	4031.96	107.40		0.00	0.00	107.40	3924.56
	02/09/10	4031.96	108.03		0.00	0.00	108.03	3923.93
	03/09/10	4031.96	107.65		0.00	0.00	107.65	3924.31
	04/12/10	4031.96	107.94		0.00	0.00	107.94	3924.02
	05/24/10	4031.96	107.76		0.00	0.00	107.76	3924.20
	06/14/10	4031.96	107.90		0.00	0.00	107.90	3924.06
	07/20/10	4031.96	107.98		0.00	0.00	107.98	3923.98
	08/11/10	4031.96	108.00		0.00	0.00	108.00	3923.96
	09/21/10	4031.96	107.90		0.00	0.00	107.90	3924.06
	10/20/10	4031.96	108.08		0.00	0.00	108.08	3923.88
	11/08/10	4031.96	107.93		0.00	0.00	107.93	3924.03
	12/07/10	4031.96	107.99		0.00	0.00	107.99	3923.97
	01/18/11	4031.96	108.03		0.00	0.00	108.03	3923.93
	02/08/11	4031.96	108.77		0.00	0.00	108.77	3923.19
	03/08/11	4031.96	107.82		0.00	0.00	107.82	3924.14
	04/13/11	4031.96	108.03		0.00	0.00	108.03	3923.93
	05/23/11	4031.96	108.01		0.00	0.00	108.01	3923.95
	06/28/11	4031.96	108.28		0.00	0.00	108.28	3923.68
	07/19/11	4031.96	108.19		0.00	0.00	108.19	3923.77
	08/31/11	4031.96	108.05		0.00	0.00	108.05	3923.91
	09/27/11	4031.96	108.09		0.00	0.00	108.09	3923.87
	10/24/11	4031.96	108.19		0.00	0.00	108.19	3923.77
	11/29/11	4031.96	108.31		0.00	0.00	108.31	3923.65
	12/23/11	4031.96	108.13		0.00	0.00	108.13	3923.83
	01/31/12	4031.96	108.14		0.00	0.00	108.14	3923.82
	02/29/12	4031.96	108.06		0.00	0.00	108.06	3923.90
	03/27/12	4031.96	108.05		0.00	0.00	108.05	3923.91
	04/18/12	4031.96	108.12		0.00	0.00	108.12	3923.84
	05/21/12	4031.96	108.36		0.00	0.00	108.36	3923.60
	07/17/12	4031.96	108.18		0.00	0.00	108.18	3923.78
	08/21/12	4031.96	108.21		0.00	0.00	108.21	3923.75
	09/17/12	4031.96	108.08		0.00	0.00	108.08	3923.88
	12/13/12	4031.96	108.40		0.00	0.00	108.40	3923.56
MW-14 **	12/13/01	4006.98	74.67		0.00	0.00	74.67	3932.31
	03/22/02	4006.98	74.67		0.00	0.00	74.67	3932.31
	09/16/02	4006.98	74.56		0.00	0.00	74.56	3932.42
	09/20/02	4006.98	74.40		0.00	0.00	74.40	3932.58
	04/05/04	4006.98	75.20		0.00	0.00	75.20	3931.78
	05/17/04	4006.98	75.25		0.00	0.00	75.25	3931.73
	05/24/04	4006.98	75.17		0.00	0.00	75.17	3931.81
	06/01/04	4006.98	75.18		0.00	0.00	75.18	3931.80
	06/07/04	4006.98	75.12		0.00	0.00	75.12	3931.86
	06/15/04	4006.98	75.23		0.00	0.00	75.23	3931.75
	06/21/04	4006.98	75.24		0.00	0.00	75.24	3931.74
	06/28/04	4006.98	75.55		0.00	0.00	75.55	3931.43

APPENDIX B
HISTORICAL WATER LEVEL MEASUREMENTS
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
	07/06/04	4006.98	75.37		0.00	0.00	75.37	3931.61
	07/12/04	4006.98	75.49		0.00	0.00	75.49	3931.49
	07/19/04	4006.98	75.43		0.00	0.00	75.43	3931.55
	07/26/04	4006.98	75.64		0.00	0.00	75.64	3931.34
	08/02/04	4006.98	75.49		0.00	0.00	75.49	3931.49
	08/10/04	4006.98	75.62		0.00	0.00	75.62	3931.36
	08/16/04	4006.98	75.59		0.00	0.00	75.59	3931.39
	08/23/04	4006.98	75.32		0.00	0.00	75.32	3931.66
	08/30/04	4006.98	75.57		0.00	0.00	75.57	3931.41
	09/08/04	4006.98	75.65		0.00	0.00	75.65	3931.33
	10/08/04	4006.98	75.61		0.00	0.00	75.61	3931.37
	12/30/04	4006.98	75.45		0.00	0.00	75.45	3931.53
	01/17/05	4006.98	75.74		0.00	0.00	75.74	3931.24
	02/09/05	4006.98	75.46		0.00	0.00	75.46	3931.52
	03/09/05	4006.98	75.37		0.00	0.00	75.37	3931.61
	04/05/05	4006.98	74.84		0.00	0.00	74.84	3932.14
	05/10/05	4006.98	74.72		0.00	0.00	74.72	3932.26
	06/08/05	4006.98	74.71		0.00	0.00	74.71	3932.27
	07/05/05	4006.98	74.93		0.00	0.00	74.93	3932.05
	08/08/05	4006.98	74.78		0.00	0.00	74.78	3932.20
	09/14/05	4006.98	74.62		0.00	0.00	74.62	3932.36
	10/12/05	4006.98	74.69		0.00	0.00	74.69	3932.29
	11/09/05	4006.98	74.69		0.00	0.00	74.69	3932.29
	12/14/05	4006.98	74.29		0.00	0.00	74.29	3932.69
	01/12/06	4006.98	74.01		0.00	0.00	74.01	3932.97
	02/02/06	4006.98	73.91		0.00	0.00	73.91	3933.07
	03/07/06	4006.98	73.97		0.00	0.00	73.97	3933.01
	04/05/06	4006.98	73.80		0.00	0.00	73.80	3933.18
	05/08/06	4006.98	73.69		0.00	0.00	73.69	3933.29
	06/05/06	4006.98	73.78		0.00	0.00	73.78	3933.20
	07/11/06	4006.98	73.83		0.00	0.00	73.83	3933.15
	08/16/06	4006.98	73.94		0.00	0.00	73.94	3933.04
	09/07/06	4006.98	72.93		0.00	0.00	72.93	3934.05
	10/11/06	4006.98	73.95		0.00	0.00	73.95	3933.03
	11/08/06	4006.98	73.88		0.00	0.00	73.88	3933.10
	12/04/06	4006.98	74.53		0.00	0.00	74.53	3932.45
	01/04/07	4006.98	73.79		0.00	0.00	73.79	3933.19
	02/27/07	4006.98	73.73		0.00	0.00	73.73	3933.25
	03/20/07	4006.98	73.90		0.00	0.00	73.90	3933.08
	04/17/07	4006.98	73.68		0.00	0.00	73.68	3933.30
	05/07/07	4006.98	73.88		0.00	0.00	73.88	3933.10
	06/27/07	4006.98	73.80		0.00	0.00	73.80	3933.18
	07/19/07	4006.98	73.69		0.00	0.00	73.69	3933.29
	08/21/07	4006.98	73.61		0.00	0.00	73.61	3933.37
	09/17/07	4006.98	73.54		0.00	0.00	73.54	3933.44
	10/16/07	4006.98	73.39		0.00	0.00	73.39	3933.59
	11/20/07	4006.98	73.34		0.00	0.00	73.34	3933.64
	12/21/07	4006.98	73.05		0.00	0.00	73.05	3933.93
	01/22/08	4006.98	73.44		0.00	0.00	73.44	3933.54
	02/27/08	4006.98	73.37		0.00	0.00	73.37	3933.61
	03/25/08	4006.98	73.17		0.00	0.00	73.17	3933.81
	04/29/08	4006.98	73.16		0.00	0.00	73.16	3933.82

APPENDIX B
HISTORICAL WATER LEVEL MEASUREMENTS
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
	05/05/08	4006.98	73.14		0.00	0.00	73.14	3933.84
	06/10/08	4006.98	73.16		0.00	0.00	73.16	3933.82
	07/15/08	4006.98	73.25		0.00	0.00	73.25	3933.73
	08/19/08	4006.98	73.32		0.00	0.00	73.32	3933.66
	09/16/08	4006.98	73.68		0.00	0.00	73.68	3933.30
	10/15/08	4006.98	73.67		0.00	0.00	73.67	3933.31
	11/12/08	4006.98	73.44		0.00	0.00	73.44	3933.54
	12/11/08	4006.98	73.69		0.00	0.00	73.69	3933.29
	01/13/09	4006.98	73.89		0.00	0.00	73.89	3933.09
	02/11/09	4006.98	73.57		0.00	0.00	73.57	3933.41
	03/10/09	4006.98	73.34		0.00	0.00	73.34	3933.64
	04/13/09	4006.98	73.43		0.00	0.00	73.43	3933.55
	05/01/09	4006.98	73.30		0.00	0.00	73.30	3933.68
	06/08/09	4006.98	73.15		0.00	0.00	73.15	3933.83
	07/13/09	4006.98	73.29		0.00	0.00	73.29	3933.69
	08/10/09	4006.98	73.32		0.00	0.00	73.32	3933.66
	09/15/09	4006.98	73.22		0.00	0.00	73.22	3933.76
	10/06/09	4006.98	73.15		0.00	0.00	73.15	3933.83
	11/09/09	4006.98	73.43		0.00	0.00	73.43	3933.55
	12/23/09	4006.98	72.93		0.00	0.00	72.93	3934.05
	01/20/10	4006.98	72.88		0.00	0.00	72.88	3934.10
	02/09/10	4006.98	73.48		0.00	0.00	73.48	3933.50
	03/09/10	4006.98	73.09		0.00	0.00	73.09	3933.89
	04/12/10	4006.98	73.40		0.00	0.00	73.40	3933.58
	05/24/10	4006.98	73.24		0.00	0.00	73.24	3933.74
	06/14/10	4006.98	73.40		0.00	0.00	73.40	3933.58
	07/20/10	4006.98	73.53		0.00	0.00	73.53	3933.45
	08/11/10	4006.98	73.59		0.00	0.00	73.59	3933.39
	09/21/10	4006.98	73.55		0.00	0.00	73.55	3933.43
	10/20/10	4006.98	73.74		0.00	0.00	73.74	3933.24
	11/08/10	4006.98	73.62		0.00	0.00	73.62	3933.36
	12/07/10	4006.98	73.73		0.00	0.00	73.73	3933.25
	01/18/11	4006.98	73.73		0.00	0.00	73.73	3933.25
	02/08/11	4006.98	73.53		0.00	0.00	73.53	3933.45
	03/08/11	4006.98	73.54		0.00	0.00	73.54	3933.44
	04/13/11	4006.98	73.78		0.00	0.00	73.78	3933.20
	05/23/11	4006.98	73.75		0.00	0.00	73.75	3933.23
	06/28/11	4006.98	74.04		0.00	0.00	74.04	3932.94
	07/19/11	4006.98	73.93		0.00	0.00	73.93	3933.05
	08/31/11	4006.98	73.82		0.00	0.00	73.82	3933.16
	09/27/11	4006.98	73.92		0.00	0.00	73.92	3933.06
	10/24/11	4006.98	74.05		0.00	0.00	74.05	3932.93
	11/29/11	4006.98	74.22		0.00	0.00	74.22	3932.76
	12/23/11	4006.98	74.09		0.00	0.00	74.09	3932.89
	01/31/12	4006.98	74.05		0.00	0.00	74.05	3932.93
	02/29/12	4006.98	74.12		0.00	0.00	74.12	3932.86
	03/27/12	4006.98	74.05		0.00	0.00	74.05	3932.93
	04/18/12	4006.98	74.23		0.00	0.00	74.23	3932.75
	05/21/12	4006.98	74.49		0.00	0.00	74.49	3932.49
	07/17/12	4006.98	74.41		0.00	0.00	74.41	3932.57
	08/21/12	4006.98	74.46		0.00	0.00	74.46	3932.52
	09/17/12	4006.98	74.36		0.00	0.00	74.36	3932.62

APPENDIX B
HISTORICAL WATER LEVEL MEASUREMENTS
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
MW-19 **	12/13/12	4006.98	74.26		0.00	0.00	74.26	3932.72
	09/20/02	4037.34	117.23		0.00	0.00	116.67	3920.67
	04/05/04	4037.34	116.67		0.00	0.00	116.67	3920.67
	05/17/04	4037.34	116.62		0.00	0.00	116.62	3920.72
	05/24/04	4037.34	116.59		0.00	0.00	116.59	3920.75
	06/01/04	4037.34	116.57		0.00	0.00	116.57	3920.77
	06/07/04	4037.34	116.59		0.00	0.00	116.59	3920.75
	06/15/04	4037.34	116.53		0.00	0.00	116.53	3920.81
	06/21/04	4037.34	116.63		0.00	0.00	116.63	3920.71
	06/28/04	4037.34	116.68		0.00	0.00	116.68	3920.66
	07/06/04	4037.34	116.65		0.00	0.00	116.65	3920.69
	07/12/04	4037.34	116.66		0.00	0.00	116.66	3920.68
	07/19/04	4037.34	116.68		0.00	0.00	116.68	3920.66
	07/26/04	4037.34	116.73		0.00	0.00	116.73	3920.61
	08/02/04	4037.34	116.71		0.00	0.00	116.71	3920.63
	08/10/04	4037.34	116.71		0.00	0.00	116.71	3920.63
	08/16/04	4037.34	116.74		0.00	0.00	116.74	3920.60
	08/23/04	4037.34	116.69		0.00	0.00	116.69	3920.65
	08/30/04	4037.34	116.69		0.00	0.00	116.69	3920.65
	09/08/04	4037.34	116.73		0.00	0.00	116.73	3920.61
	10/08/04	4037.34	116.78		0.00	0.00	116.78	3920.56
	12/30/04	4037.34	116.76		0.00	0.00	116.76	3920.58
	01/17/05	4037.34	116.78		0.00	0.00	116.78	3920.56
	02/09/05	4037.34	116.76		0.00	0.00	116.76	3920.58
	03/09/05	4037.34	116.70		0.00	0.00	116.70	3920.64
	04/05/05	4037.34	116.64		0.00	0.00	116.64	3920.70
	05/10/05	4037.34	116.63		0.00	0.00	116.63	3920.71
	06/08/05	4037.34	116.57		0.00	0.00	116.57	3920.77
	07/05/05	4037.34	116.64		0.00	0.00	116.64	3920.70
	08/08/05	4037.34	116.77		0.00	0.00	116.77	3920.57
	09/15/05	4037.34	116.71		0.00	0.00	116.71	3920.63
	10/12/05	4037.34	116.70		0.00	0.00	116.70	3920.64
	11/09/05	4037.34	116.74		0.00	0.00	116.74	3920.60
	12/14/05	4037.34	116.74		0.00	0.00	116.74	3920.60
	01/12/06	4037.34	116.73		0.00	0.00	116.73	3920.61
	02/02/06	4037.34	116.70		0.00	0.00	116.70	3920.64
	03/07/06	4037.34	116.72		0.00	0.00	116.72	3920.62
	04/05/06	4037.34	116.68		0.00	0.00	116.68	3920.66
	05/08/06	4037.34	116.61		0.00	0.00	116.61	3920.73
	06/05/06	4037.34	116.66		0.00	0.00	116.66	3920.68
	07/11/06	4037.34	116.73		0.00	0.00	116.73	3920.61
	08/16/06	4037.34	116.74		0.00	0.00	116.74	3920.60
	09/07/06	4037.34	116.74		0.00	0.00	116.74	3920.60
	10/11/06	4037.34	116.80		0.00	0.00	116.80	3920.54
	11/08/06	4037.34	116.79		0.00	0.00	116.79	3920.55
	12/04/06	4037.34	116.90		0.00	0.00	116.90	3920.44
	01/04/07	4037.34	116.65		0.00	0.00	116.65	3920.69
	02/27/07	4037.34	116.71		0.00	0.00	116.71	3920.63
	03/20/07	4037.34	116.76		0.00	0.00	116.76	3920.58
	04/17/07	4037.34	116.61		0.00	0.00	116.61	3920.73
	05/07/07	4037.34	116.66		0.00	0.00	116.66	3920.68
	06/27/07	4037.34	116.59		0.00	0.00	116.59	3920.75

APPENDIX B
HISTORICAL WATER LEVEL MEASUREMENTS
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
	07/19/07	4037.34	116.65		0.00	0.00	116.65	3920.69
	08/21/07	4037.34	116.63		0.00	0.00	116.63	3920.71
	09/17/07	4037.34	116.70		0.00	0.00	116.70	3920.64
	10/16/07	4037.34	116.66		0.00	0.00	116.66	3920.68
	11/20/07	4037.34	116.78		0.00	0.00	116.78	3920.56
	12/21/07	4037.34	116.64		0.00	0.00	116.64	3920.70
	01/22/08	4037.34	116.88		0.00	0.00	116.88	3920.46
	02/27/08	4037.34	117.04		0.00	0.00	117.04	3920.30
	03/25/08	4037.34	116.88		0.00	0.00	116.88	3920.46
	04/29/08	4037.34	116.89		0.00	0.00	116.89	3920.45
	05/05/08	4037.34	116.82		0.00	0.00	116.82	3920.52
	06/10/08	4037.34	116.79		0.00	0.00	116.79	3920.55
	07/15/08	4037.34	116.88		0.00	0.00	116.88	3920.46
	08/19/08	4037.34	116.89		0.00	0.00	116.89	3920.45
	09/16/08	4037.34	117.17		0.00	0.00	117.17	3920.17
	10/15/08	4037.34	117.09		0.00	0.00	117.09	3920.25
	11/12/08	4037.34	116.82		0.00	0.00	116.82	3920.52
	12/11/08	4037.34	117.09		0.00	0.00	117.09	3920.25
	01/13/09	4037.34	117.28		0.00	0.00	117.28	3920.06
	02/11/09	4037.34	116.83		0.00	0.00	116.83	3920.51
	03/10/09	4037.34	116.78		0.00	0.00	116.78	3920.56
	04/13/09	4037.34	116.80		0.00	0.00	116.80	3920.54
	05/01/09	4037.34	116.77		0.00	0.00	116.77	3920.57
	06/08/09	4037.34	116.61		0.00	0.00	116.61	3920.73
	07/13/09	4037.34	116.78		0.00	0.00	116.78	3920.56
	08/10/09	4037.34	116.74		0.00	0.00	116.74	3920.60
	09/15/09	4037.34	116.62		0.00	0.00	116.62	3920.72
	10/06/09	4037.34	116.47		0.00	0.00	116.47	3920.87
	11/09/09	4037.34	116.64		0.00	0.00	116.64	3920.70
	12/23/09	4037.34	116.29		0.00	0.00	116.29	3921.05
	01/20/10	4037.34	116.27		0.00	0.00	116.27	3921.07
	02/09/10	4037.34	116.61		0.00	0.00	116.61	3920.73
	03/09/10	4037.34	116.32		0.00	0.00	116.32	3921.02
	04/12/10	4037.34	116.62		0.00	0.00	116.62	3920.72
	05/24/10	4037.34	116.37		0.00	0.00	116.37	3920.97
	06/14/10	4037.34	116.51		0.00	0.00	116.51	3920.83
	07/20/10	4037.34	116.59		0.00	0.00	116.59	3920.75
	08/11/10	4037.34	116.58		0.00	0.00	116.58	3920.76
	09/21/10	4037.34	116.49		0.00	0.00	116.49	3920.85
	10/20/10	4037.34	116.60		0.00	0.00	116.60	3920.74
	11/08/10	4037.34	116.52		0.00	0.00	116.52	3920.82
	12/07/10	4037.34	116.57		0.00	0.00	116.57	3920.77
	01/18/11	4037.34	116.38		0.00	0.00	116.38	3920.96
	02/08/11	4037.34	116.37		0.00	0.00	116.37	3920.97
	03/08/11	4037.34	116.21		0.00	0.00	116.21	3921.13
	04/13/11	4037.34	116.12		0.00	0.00	116.12	3921.22
	05/23/11	4037.34	116.35		0.00	0.00	116.35	3920.99
	06/28/11	4037.34	116.57		0.00	0.00	116.57	3920.77
	07/19/11	4037.34	116.49		0.00	0.00	116.49	3920.85
	08/31/11	4037.34	116.37		0.00	0.00	116.37	3920.97
	09/27/11	4037.34	116.38		0.00	0.00	116.38	3920.96
	10/24/11	4037.34	116.55		0.00	0.00	116.55	3920.79

APPENDIX B
HISTORICAL WATER LEVEL MEASUREMENTS
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Well Number	Sample Date	Casing Elevation	Depth to Water	Depth to L.P.H.	L.P.H. Thickness	L.P.H. Thickness X 0.8	Adjusted Depth to Water	Groundwater Elevation
	11/29/11	4037.34	116.63		0.00	0.00	116.63	3920.71
	12/23/11	4037.34	116.35		0.00	0.00	116.35	3920.99
	01/31/12	4037.34	116.35		0.00	0.00	116.35	3920.99
	02/29/12	4037.34	116.39		0.00	0.00	116.39	3920.95
	03/27/12	4037.34	116.30		0.00	0.00	116.30	3921.04
	04/18/12	4037.34	116.39		0.00	0.00	116.39	3920.95
	05/21/12	4037.34	116.54		0.00	0.00	116.54	3920.80
	07/17/12	4037.34	116.36		0.00	0.00	116.36	3920.98
	08/21/12	4037.34	116.33		0.00	0.00	116.33	3921.01
	09/17/12	4037.34	116.25		0.00	0.00	116.25	3921.09
	12/13/12	4037.34	116.42		0.00	0.00	116.42	3920.92
EW-1	06/27/07	4022.04	92.58		0.00	0.00	92.58	3929.46
	07/19/07	4022.04	93.27		0.00	0.00	93.27	3928.77
	08/31/11	4022.04						
	09/27/11	4022.04						
	10/24/11	4022.04	96.44		0.00	0.00	96.44	3925.60
	11/29/11	4022.04						
	12/23/11	4022.04						

Notes:

L.P.H. = Liquid Phase Hydrocarbon

Blank Fields Indicate No Data

* Wells re-surveyed for location and elevation of top of casing on 12/21/07.

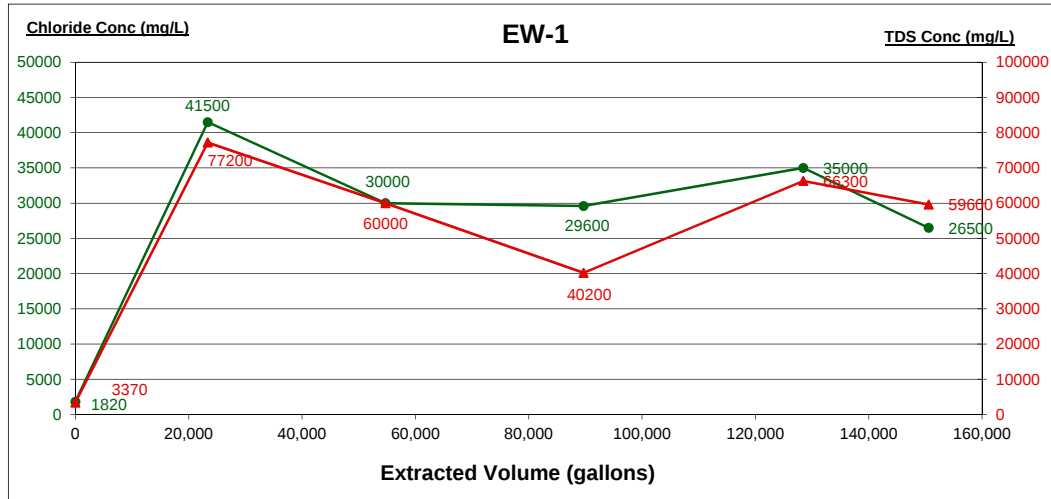
** Off-Site wells

APPENDIX C

CONCENTRATION VS. VOLUME GRAPH

CONCENTRATION VS. EXTRACTION VOLUME GRAPH
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Page 1 of 1



Notes:

TDS = Total Dissolved Solids

mg/L = Milligrams per liter

APPENDIX D

GROUNDWATER ANALYTICAL RESULTS SUMMARY-BTEX- 2007 THROUGH 2012

GROUNDWATER ANALYTICAL RESULTS SUMMARY - BTEX
2007 THROUGH 2012
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

<i>Well Number</i>	<i>Sample Date</i>	<i>Benzene (mg/L)</i>	<i>Toluene (mg/L)</i>	<i>Ethylbenz ene (mg/L)</i>	<i>Xylenes (mg/L)</i>
NW WQ Std		0.01	0.75	0.75	0.62
EW-1	07/19/07	ND	ND	ND	ND
	05/06/08	ND	ND	ND	ND
	05/05/09	ND	ND	ND	ND
	05/25/10	ND	ND	ND	ND
	05/24/11	<0.002	<0.002	<0.002	<0.006
	10/25/11	<0.001	0.003	<0.001	<0.003
	07/17/12	<0.001	<0.001	<0.001	<0.003
MW-11	05/08/07	ND	ND	ND	ND
	05/06/08	0.009	ND	ND	ND
	05/05/09	0.02	ND	ND	ND
	05/25/10	0.039	ND	ND	ND
	05/24/11	0.0912	<0.002	<0.002	<0.006
	10/25/11	<0.001	<0.001	<0.001	<0.003
	07/17/12	<0.001	<0.001	<0.001	<0.003
MW-11 QA*	10/25/11	<0.001	<0.001	<0.001	<0.003
MW-12	05/08/07	ND	ND	ND	ND
	05/06/08	ND	ND	ND	ND
	05/05/09	ND	ND	ND	ND
	05/25/10	ND	ND	ND	ND
	05/24/11	<0.002	<0.002	<0.002	<0.006
	10/25/11	<0.001	<0.001	<0.001	<0.003
	07/17/12	<0.001	<0.001	<0.001	<0.003
MW-12 QA*	05/08/07	ND	ND	ND	ND
	05/06/08	ND	ND	ND	ND
	05/05/09	ND	ND	ND	ND
	05/25/10	ND	ND	ND	ND
	05/24/11	<0.002	<0.002	<0.002	<0.006
MW-13	05/08/07	ND	ND	ND	ND
	05/06/08	ND	ND	ND	ND
	05/05/09	ND	ND	ND	ND
	05/25/10	ND	ND	ND	ND
	05/24/11	<0.002	<0.002	<0.002	<0.006
	10/25/11	<0.001	<0.001	<0.001	<0.003
	07/17/12	<0.001	<0.001	<0.001	<0.003
MW-14	05/08/07	ND	ND	ND	ND
	05/06/08	ND	ND	ND	ND
	05/05/09	ND	ND	ND	ND
	05/25/10	ND	ND	ND	ND
	05/24/11	<0.002	<0.002	<0.002	<0.006
	10/25/11	<0.001	<0.001	<0.001	<0.003
	07/17/12	<0.001	<0.001	<0.001	<0.003

**GROUNDWATER ANALYTICAL RESULTS SUMMARY - BTEX
2007 THROUGH 2012
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO**

Page 2 of 2

<i>Well Number</i>	<i>Sample Date</i>	<i>Benzene (mg/L)</i>	<i>Toluene (mg/L)</i>	<i>Ethylbenz ene (mg/L)</i>	<i>Xylenes (mg/L)</i>
NW WQ Std		0.01	0.75	0.75	0.62
MW-19	05/08/07	ND	ND	ND	ND
	05/06/08	ND	ND	ND	ND
	05/05/09	ND	ND	ND	ND
	05/25/10	ND	ND	ND	ND
	05/24/11	<0.002	<0.002	<0.002	<0.006
	10/25/11	<0.001	<0.001	<0.001	<0.003
	07/17/12	<0.001	<0.001	<0.001	<0.003

Notes:

mg/L = milligrams per liter

ND = Not detected at or above laboratory reporting limits.

NM WQ Std = New Mexico Water Quality Standard

* QA = Field duplicate sample analyses for evaluation of laboratory quality assurance/quality control (QA/QC) procedures.

Trip blanks used for sample shipping QA/QC reported non-detect for BTEX concentrations.

Blank fields indicate no data.

APPENDIX E

GROUNDWATER ANALYTICAL RESULTS SUMMARY-INORGANICS-
2007 THROUGH 2012

GROUNDWATER ANALYTICAL RESULTS SUMMARY - INORGANICS
2007 THROUGH 2012
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Page 1 of 2

<i>Well Number</i>	<i>Sample Date</i>	<i>Carbonate Alkalinity (mg/L)</i>	<i>Bicarbonate Alkalinity (mg/L)</i>	<i>Total Alkalinity (mg/L)</i>	<i>Bromide (mg/L)</i>	<i>Chloride (mg/L)</i>	<i>Nitrate as N (mg/L)</i>	<i>Sulfate (mg/L)</i>	<i>Total Dissolved Solids (mg/L)</i>
NW WQ Std						250	10	600	1,000
EW-1	07/19/07					1,820			3,370
	05/06/08	ND	105	105	ND	41,500	ND	1,150	77,200
	05/05/09	ND	99	99	ND	30,000	ND	1,110	60,000
	05/25/10	ND	113	113	ND	29,600	ND	852	40,200
	05/24/11	<5.0	110	110	8.8	32,300	0.57	865	2,510
	10/25/11	<20	116	116	25.6	35,000	3.9	923	66,300
	07/17/12	<20	108	108	38.0	26,500	6.1	746	59,600
MW-11	05/08/07	ND	197	197	4.6	3,570	ND	440	7,400
	05/06/08	ND	168	168	8.18	1,560	ND	163	4,140
	05/05/09	ND	162	162	6.82	1,140	ND	149	3,430
	05/25/10	ND	139	139	ND	1,010	ND	142	3,630
	05/24/11	<5.0	149	149	2.6	811	3.6	99.9	2,510
	10/25/11	<20	220	220	2.7	715	4.9	90.9	1,790
	07/17/12	<20	144	144	4.1	560	7.3	55.3	1,780
MW-11QA*	10/25/11	<5.0	208	208	2.5	659	6.1	84.6	1,910
MW-12	05/08/07	ND	79.8	79.8	19.2	61,700	ND G	1,690	107,000
	05/06/08	ND	97	97	ND	48,600	ND, H	1,600	88,500
	05/05/09	ND	101	101	ND	35,300	1.79	1,140	71,200
	05/25/10	ND	106	106	ND	59,300	ND	1,210	7,200
	05/24/11	<20	114	114	9.7	45,500	2.2	1,170	66,400
	10/25/11	<20	138	138	<1	32,200	3.0	1,020	55,900
	07/17/12	<20	122	122	32.6	25,000	3.3	716	57,200
MW-12 QA*	05/08/07	ND	79.9	79.9	19.2	50,200	ND G	1,630	104,000
	05/06/08	ND	97	97	ND	45,100	ND, H	1,610	84,300
	05/05/09	ND	116	116	ND	31,400	1.94	1,180	69,800
	05/25/10	ND	108	108	ND	47,700	ND	1,450	79,000
	05/24/11	<5.0	105	105	10.2	46,600	2	1,350	75,500
MW-13	05/08/07	ND	209	209	0.9	217	16	249	1,160
	05/06/08	ND	201	201	ND	192	11.9	234	1,270
	05/05/09	ND	204	204	1.32	212	15.9	236	1,400
	05/25/10	ND	196	196	1.42	214	17.8	276	1,500
	05/24/11	<5.0	217	218	1.4	235	15	267	1,120
	10/25/11	<20	765	765	1.3	233	18	253	1,090
	07/17/12	<20	340	340	2.4	230	15.2	239	1,240
MW-14	05/08/07	ND	203	203	7.1	1,000	10.7	1,010	4,990
	05/06/08	ND	208	208	8.04	658	10.1	904	3,760
	05/05/09	ND	230	230	6.05	576	11.8	774	3,740
	05/25/10	ND	263	263	4.96	566	13.7	1,030	2,430
	05/24/11	<5.0	276	276	4.2	527	16	1,110	2,980
	10/25/11	<20	390	390	3.4	408	20	848	2,350
	07/17/12	<20	314	314	1.1	382	16.0	812	2,430

GROUNDWATER ANALYTICAL RESULTS SUMMARY - INORGANICS
2007 THROUGH 2012
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Page 2 of 2

<i>Well Number</i>	<i>Sample Date</i>	<i>Carbonate Alkalinity (mg/L)</i>	<i>Bicarbonate Alkalinity (mg/L)</i>	<i>Total Alkalinity (mg/L)</i>	<i>Bromide (mg/L)</i>	<i>Chloride (mg/L)</i>	<i>Nitrate as N (mg/L)</i>	<i>Sulfate (mg/L)</i>	<i>Total Dissolved Solids (mg/L)</i>
NW WQ Std						250	10	600	1,000
MW-19	05/08/07	ND	272	272	1.1	101	0.75	20.8	837
	05/06/08	ND	229	229	ND	114	1.06	29.3	1,190
	05/05/09	ND	241	241	0.836	105	0.944	26.7	597
	05/25/10	ND	245	245	0.97	108	0.867	33.2	1,080
	05/24/11	<5.0	255	256	1.1	140	1.4	27.4	589
	10/25/11	<20	436	436	<1	122	2.2	32.9	523
	07/17/12	<20	635	635	1.4	113	2.6	27.8	585

Notes:

mg/L = milligrams per liter

ND = Not detected at or above laboratory reporting limits.

NM WQ Std = New Mexico Water Quality Standard

* QA = Field duplicate sample analyses for evaluation of laboratory quality assurance/quality control (QA/QC) procedures.

Trip blanks used for sample shipping QA/QC reported non-detect for BTEX concentrations.

Blank fields indicate no data.

APPENDIX F

GROUNDWATER ANALYTICAL RESULTS SUMMARY-METALS-
2007 THROUGH 2012

GROUNDWATER ANALYTICAL RESULTS SUMMARY - METALS
2007 THROUGH 2012
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Page 1 of 2

<i>Well Number</i>	<i>Sample Date</i>	<i>Calcium (mg/L)</i>	<i>Magnesium (mg/L)</i>	<i>Potassium (mg/L)</i>	<i>Sodium (mg/L)</i>
EW-1	05/06/08	3,340	1,040	74.1	19,000
	05/05/09	3,680	1,110	58	21,700
	05/25/10	2,830	1,050	74.7	16,300
	05/24/11	2,450	694	69.6	14,400
	10/25/11	2,400	624	42.7	11,300
	07/17/12	2,450	748.0	67.6	13,000
MW-11	05/08/07	1,060	258	7.8	496
	05/06/08	615	166	8.62	204
	05/05/09	528	150	6	172
	05/25/10	332	105	4.44	118
	05/24/11	298	83.7	6.61	103
	10/25/11	325	86	6	101
	07/17/12	215	64.2	3.6	80.6
MW-11 QA*	10/25/11	352	93	6	108
MW-12	05/08/07	4,760	1,330	143	15,800
	05/06/08	3,880	1,030	84.3	24,000
	05/05/09	3,720	844	59.3	21,200
	05/25/10	2,490	700	42.4	14,300
	05/24/11	3,260	794	79.1	15,100
	10/25/11	3,370	743	54	14,800
	07/17/12	3,420	812	56.5	11,400
MW-12 QA*	05/08/07	5,040	1,430	146	32,800
	05/06/08	3,840	1,030	85.4	23,100
	05/05/09	3,760	872	54.8	22,200
	05/25/10	2,760	788	47.2	14,900
	05/24/11	3,230	808	83.7	15,700
MW-13	05/08/07	198	43.1	ND	72.4
	05/06/08	193	43.9	3.09	66.8
	05/05/09	226	46.8	3.1	74.4
	05/25/10	203	42.4	2.81	71.9
	05/24/11	204	41.4	<5.0	73.5
	10/25/11	541	99.6	16.9	81.3
	07/17/12	252	53.4	6.24	71.5
MW-14	05/08/07	656	197	5.7	65.3
	05/06/08	613	165	6.09	57.1
	05/05/09	648	176	5.74	51.3
	05/25/10	544	150	6.04	79.3
	05/24/11	525	133	<5.0	57.7
	10/25/11	532	159	14.4	58.1
	07/17/12	455	137	9	49.8

GROUNDWATER ANALYTICAL RESULTS SUMMARY - METALS
2007 THROUGH 2012
CONOCOPHILLIPS
MALJAMAR GAS PLANT
MALJAMAR, LEA COUNTY, NEW MEXICO

Page 2 of 2

<i>Well Number</i>	<i>Sample Date</i>	<i>Calcium (mg/L)</i>	<i>Magnesium (mg/L)</i>	<i>Potassium (mg/L)</i>	<i>Sodium (mg/L)</i>
MW-20	05/06/08	1,690	571	24.7	983
	05/05/09	3,220	617	27.8	1,260
	05/25/10	1,850	664	21.5	1,020
	05/24/11	2,050	632	53.8	1,000
	10/25/11	3,080	640	41.9	1,050
	07/17/12	2,240	654	39.6	1,070

Notes:

mg/L = milligrams per liter

ND = Not detected at or above laboratory reporting limits.

NM WQ Std = New Mexico Water Quality Standard

* QA = Field duplicate sample analyses for evaluation of laboratory quality assurance/quality control (QA/QC) procedures.

Trip blanks used for sample shipping QA/QC reported non-detect for BTEX concentrations.

Blank fields indicate no data.