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August 29, 2012

Mr. Ray Montes  
New Mexico Environment Department  
Ground Water Quality Bureau  
Remediation Oversight Section  
1170 N. Solano, Ste. M  
Las Cruces, NM 88001

Mr. Bart Faris  
New Mexico Environment Department  
Ground Water Quality Bureau  
Remediation Oversight Section  
5500 San Antonio Dr. NE  
Albuquerque, New Mexico 87109

Dear Mr. Montes and Faris:

On behalf of Doña Ana Dairies, Inc., EA Engineering, Science, and Technology, Inc. is submitting this Quarterly Groundwater Monitoring Report for Doña Ana Dairies located in Mesquite, Vado and Anthony, New Mexico. The report discusses the quarterly groundwater sampling event conducted to fulfill requirements of the Stage 1 Abatement Plan for Doña Ana Dairies.

Please let me know if you have any questions regarding the information provided in this report.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Teri McMillan', written in a cursive style.

Teri McMillan  
Project Manager

A handwritten signature in blue ink, appearing to read 'Jay Snyder', written in a cursive style.

Jay Snyder  
Senior Hydrogeologist

Enclosure

Cc: Linda Armstrong, Doña Ana Dairies  
File



QUARTERLY GROUNDWATER  
MONITORING REPORT  
DOÑA ANA DAIRIES  
MESQUITE, NEW MEXICO

Prepared for:

Doña Ana Dairies  
Mesquite, New Mexico

Prepared by:

EA Engineering, Science,  
and Technology, Inc.  
320 Gold Avenue SW, Suite 1210  
Albuquerque, New Mexico 87102

August 2012

EA Project No. 1464103.0001



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**Quarterly Groundwater Monitoring Report**  
Doña Ana Dairies  
Mesquite, New Mexico

Prepared for:

Doña Ana Dairies  
Mesquite, New Mexico

Prepared by:

EA Engineering, Science,  
and Technology, Inc.  
320 Gold Avenue SW, Suite 1210  
Albuquerque, New Mexico

A handwritten signature in blue ink that reads "Teri McMillan".

Teri McMillan  
Project Manager

8/29/12

Date

A handwritten signature in blue ink that reads "Jay Snyder".

Jay Snyder  
Senior Hydrogeologist

8/29/12

Date

August 2012

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## 1.0 INTRODUCTION

On behalf of Doña Ana Dairies (Dairies), EA Engineering, Science, and Technology, Inc. (EA) has prepared this Quarterly Monitoring Report for Doña Ana Dairies located south of Las Cruces, New Mexico. The report was completed in accordance with the *Stage 1 and 2 Abatement Plan Proposal and Sampling and Analysis Plan, Doña Ana Dairies, Doña Ana County, New Mexico* dated December 11, 2006 and August 11, 2008, respectively, and the Conceptual Work Plan (CWP) dated February 1, 2008. All were prepared to satisfy requirements stated in the New Mexico Administrative Code (NMAC), Title 20, 6.2 §4106 through §4110. The Stage 1 and 2 Abatement Plan was approved on June 16, 2008 by the New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB). The Sampling and Analysis Plan was approved by the NMED GWQB on September 25, 2008.

### 1.1 Objective

The objectives of this monitoring program is to satisfy the requirements set forth in NMAC 20.6.2 4106 C, Stage 1 Abatement Plan monitoring program.

The following work was performed to meet the objectives of the monitoring program, and included:

- Between April 23 – 25, 2012, two representatives from D&H Petroleum and Environmental Services, Inc. (D&H) gauged all abatement plan (AP) and discharge plan (DP) monitoring wells.
- Starting on April 25, 2012, D&H representatives collected groundwater samples from the 21 AP wells (DAD-01 through DAD-14 and DAD-16 through DAD-22), each Dairy's DP monitoring wells, and DP specified lagoons. The sampling campaign lasted about three weeks, ending on May 14, 2012. The samples were delivered to TraceAnalysis, Inc. and analyzed for nitrate using EPA Method 300.0 or SM 4500 NO<sub>3</sub> E, chloride by EPA Method 300.0, total dissolved solids (TDS) by Method SM 2540C, and total Kjeldhal nitrogen (TKN) by Method SM 4500 N org C;
- The most recent groundwater gauging and analytical results are compiled into this Quarterly Groundwater Monitoring Report.

### 1.2 Background

In April 7, 2006, correspondence, NMED required a Stage 1 Abatement Plan for 13 dairies in Doña Ana County, based on analytical results from DP monitoring of on-site compliance monitoring wells that showed concentrations of nitrate, chloride and TDS exceeding ground water standards promulgated in New Mexico Water Quality Control Commission (NMWQCC) Regulations (20 NMAC 6.2 §3103). On October 30, 2006, the Dairies notified NMED that they had reached agreement to work as a group and submit a joint response to NMED's request (Doña Ana Dairies, 2006).

On December 11, 2006, on behalf of the Doña Ana Dairies, Golder Associates (Golder) submitted a Stage 1 and 2 Abatement Plan Proposal to address impacts to groundwater in the

area of the Dairies (Golder 2006). The first major deliverable in the Abatement Plan Proposal was an Existing Data Report (EDR) to bring together in one document historical data and practices of the constituent dairies.

The EDR, submitted on February 1, 2008, (Golder 2008a) was intended to satisfy the Dairies commitment for compilation and submission of existing data identified in the Doña Ana Dairies response (2006) to the NMED requirement for Stage I Abatement Plans. Section 9 of the EDR outlined data gaps identified during the preparation of the report, as well as the actions recommended. To facilitate the discussion of the path forward after the submittal of the EDR and concurrent with the EDR submission, a conceptual work plan (CWP) (Golder 2008b).

On July 15, 2008, the Dairies, Golder and NMED met (Golder 2008c). During that meeting, plume maps presented in the EDR (Golder 2008a), new monitoring data, and knowledge of well locations and groundwater chemistry results at adjacent DP-regulated facilities were used to identify data gaps with respect to ground water flow direction and plume delineation. The agreed upon data gaps yielded well locations (including contingency locations) recorded in the meeting minutes (Golder 2008c) and depicted in the Sampling and Analysis Plan (SAP) dated August 8, 2008 (Golder 2008d). The SAP outlined the details of the field operations to be implemented for completion of data gaps, such that a Site Investigation Report (§4106.C.6) and Stage 2 Abatement Plan (§4106.D) could be prepared.

Groundwater gauging was conducted concurrent to discussions with NMED at the Dairies for four quarters, February 2008, June 2008, September 2008, and December 2008, to determine the current and historical site groundwater gradient.

In May 2009, field work was conducted as outlined in the SAP and ten (10) AP monitoring wells (DAD-01 through DAD-10) were installed. In July 2009, the Site Investigation Report was submitted to the NMED.

On October 10 through October 14, 2011 and November 10 through 18, 2011, eleven soil borings were advanced at the site and converted into monitoring wells DAD-12 through DAD-14, DAD-16 through DAD-22, and DP well 177-03A. Quarterly groundwater monitoring is currently being conducted.

## 2.0 GROUNDWATER MONITORING ACTIVITIES

Groundwater monitoring activities conducted by D&H included gauging and sampling all DP and AP monitoring wells. Groundwater samples were analyzed for nitrate, chloride, TDS, and TKN. The resulting data from this groundwater monitoring event are compiled and presented herein.

### 2.1 Well Gauging

On April 23 – 25, 2012, two representatives from D&H gauged the DP and AP monitoring wells with an electronic water level indicator. Table 1 provides a summary of the groundwater gauging data collected from the monitoring network. Potentiometric surface maps were constructed based on these data (Figures 2, 3, 4, and 5).

### 2.2 Groundwater Sampling

Beginning May 9 through May 14, 2012, D&H sampled the AP monitoring wells DAD-01 through DAD-14, DAD-16 through DAD-19, and DAD-21 through DAD-22 with disposable bailers. Wells were purged of three well volumes with a new disposable bailer per well prior to sample collection and were sampled from clean to dirty to the extent possible to minimize cross-contamination. All non-dedicated or disposable equipment was decontaminated between wells with an Alconox™ solution to further ensure sample quality. Well DAD-20 had an obstruction and could not be sampled.

DP wells were sampled between April 25, 2012 and May 8, 2012. Prior to sampling, DP wells were purged three well volumes if practicable by hand-bailing with a new disposable bailer per well or pumping with a dedicated pump. Field parameters including, at a minimum, specific conductance, pH, and temperature were monitored and recorded for most of the monitoring wells. The sampling field forms are presented in Appendix A. All meters were calibrated and/or checked with standards in accordance with manufacturer's specifications prior to daily use. Purge water was ground discharged. Copies of the field forms are included in Appendix A.

All groundwater samples were collected immediately after purging. Sampling was either accomplished by carefully pouring groundwater from the bailer into the sample containers or by pumping groundwater through polyethylene tubing into the sample container. Sample containers were provided by TraceAnalysis. Container size, type, sample preservatives, analytical methods, and holding times are specified in Table 3. All samples were preserved in accordance with method requirements, labeled, then immediately cooled to <6°C with ice and delivered under chain-of-custody to TraceAnalysis in El Paso, Texas. All analytical laboratory reports are provided in Appendix B.



### 3.0 GROUNDWATER MONITORING RESULTS

#### 3.1 Hydraulic Gradient and Direction of Groundwater Flow

This quarter, groundwater was present beneath the site at depths from 10.97 feet below top of casing (ft TOC) in well DAD-03 to 128.71 ft TOC in Dominguez #2 well 42-12. Groundwater is encountered at shallower depths near the Mesquite Drain and at greater depths near I-10 where the topographic elevation increases. Well DAD-20 could not be gauged due to an obstruction in the well.

Potentiometric surface maps were completed using the monitoring well gauging data for the northern, central, and southern portions of the Dairies and are provided as Figures 2, 3, 4, and 5. Hydrographs were completed for the monitoring well network and are provided in Appendix C. In general, water levels have decreased when compared to the last monitoring event conducted in January 2012 (See hydrographs presented in Appendix C). An average decrease of 0.96 feet (8.28 inches) was observed in the AP monitoring wells.

The groundwater flow direction throughout the northern portion, central portion and the southern regional aquifer of the Dairies was toward the east-southeast, whereas the gradient in the southern perched aquifer of the dairy near Anthony, New Mexico, flows south-southwest. The hydraulic gradient across the APA is approximately 0.001 ft./ft.

#### 3.2 Groundwater Analytical Results

Groundwater analyte concentrations were below the NMWQCC standard for nitrate (10 mg/L) in all but six of the 20 AP monitoring wells sampled. DAD-06, DAD-09, DAD-12, DAD-14, DAD-19, and DAD-22 had concentrations of 11.0 milligrams per liter (mg/L), 50.9 mg/L, 23.1 mg/L, 28.8 mg/L, 54.8 mg/L, and 18.3 mg/L respectively. Chloride concentrations exceeded the NMWQCC standard (250 mg/L) in the 20 sampled abatement wells. TDS was also above the NMWQCC standard (1,000 mg/L) in 20 of the abatement wells.

The nitrate concentration increased in wells DAD-02, DAD-05, DAD-10, DAD-12, DAD-13, DAD-14, and DAD-16. The most significant change was observed in well DAD-14; it increased from 20.3 mg/L to 28.8 mg/L. The nitrate concentration in wells DAD-01, DAD-04, DAD-06, DAD-07, DAD-08, DAD-09, DAD-11, DAD-18, DAD-19, DAD-21, and DAD-22 decreased with the most significant change observed in DAD-09; it decreased from 59.8 mg/L to 50.9 mg/L since the last monitoring event in January 2012. Nitrate concentrations in wells DAD-03 and DAD-17 remained below detection limits, and well DAD-20 was unable to be sampled due to an obstruction in the well.

Additionally, concentrations of chloride and TDS in all wells remain relatively constant compared to levels measured in the past, with the exception of the TDS concentrations in wells DAD-07, which increased from 1,640 mg/L to 2,150 mg/L, DAD-10, which increased from 800 mg/L to 1,400 mg/L, DAD-17, which increased from 714 mg/L to 1,580 mg/L, and DAD-19, which increase from 2,950 mg/L to 3460 mg/L. Chloride concentrations ranged from 353 mg/L in DAD-17 to 1,200 mg/L in DAD-03, and TDS values ranged from 1,400 mg/L in DAD-10 to

4,160 mg/L in DAD-03. The chloride and TDS data reported for well DAD-17 appear suspect. Table 4 summarizes the AP monitoring wells analytical laboratory results found in Appendix B. Nitrate and chloride concentration trends for select DAD wells are presented in Appendix D.

DP groundwater analytical results are summarized in Table 5. Groundwater samples were obtained within a three week period ending on May 8, 2012. These data were combined with the analytical data collected from the 20 AP monitoring wells and are plotted on Figures 7, 8, 9 and 10. Analytical laboratory reports are included in Appendix B. The following discussions summarize the results by area at the Dairies.

### Northern Portion

The downgradient extent of the nitrate plume within the northern portion is defined by well DAD-02 with a nitrate concentration of 7.71 mg/L. The upgradient well (northern land application well 86/340-1) had a nitrate concentration of 12.1 mg/L, which is just above the NMWQCC standard for nitrate (10 mg/L). All eastern cross-gradient wells, Dominguez #2 wells 42-10, 42-11, and 42-12, and AP well DAD-01, have nitrate concentrations below the standard. The western delineating cross-gradient well Dominguez 624-05 had a nitrate concentration of 3.70 mg/L. Generally, nitrate concentrations have been stable over the last year of sampling.

The chloride and TDS concentrations are above standards in all wells sampled within the northern portion. As in past monitoring events, both chloride and TDS concentrations upgradient (in well 86/340-1) of the Dairies are above NMWQCC standards at 641 mg/L and 2,480 mg/L, respectively.

### Central Portion

The highest nitrate concentrations were observed in Big Sky Dairy well 833-07 and 833-09 at concentrations of 95.6 mg/L and 80.4 mg/L, respectively. Big Sky Dairy well 833-07 is located downgradient of the lagoon. The extent of the nitrate plume is defined in the Central Portion.

Chloride and TDS concentrations are above standards in all wells within the central portion. The highest chloride concentration was observed in Buena Vista Dairy II well 74-03 at 1,330 mg/L, and the highest TDS concentration was observed in River Valley Dairy well 167-04 at 4,020 mg/L. Well 74-03 is located upgradient of Buena Vista Dairy II and is located downgradient from a residential area that previously used septic tanks.

### Southern Portion

Nitrate is present within both the regional and perched aquifers in the southern portion of the Dairies; however, all of the wells in the regional aquifer are below the NMWQCC standard of 10 mg/L. In the shallow perched aquifer the nitrate plume is not defined downgradient (southwest). The well with the highest nitrate concentration was Del Oro Dairy well 692-01 with 163 mg/L.

Chloride and TDS concentrations are above NMWQCC standards in all wells sampled within the southern portion. Chloride concentrations in this area ranged from 339 mg/L in Del Oro Dairy

well 692-02 to 1,060 mg/L in Del Oro Dairy well 692-01, while TDS ranged from 1,350 mg/L to 4,820 mg/L in well Del Oro Dairy wells 692-02 and 692-01, respectively. Upgradient well Del Oro 692-08 had a chloride concentration of 364 mg/L and a TDS concentration of 1,560 mg/L.

#### 4.0 CONCLUSION AND RECOMMENDATIONS

The groundwater monitoring event included the gauging of all DP and DAD wells and sampling of 20 DAD wells in addition to the DP wells. Based on the data collected, the following conclusions and recommendations are presented:

- The depth to groundwater at the site ranged from 10.97 to 128.06 feet below the top of casing.
- In general, water levels have decreased when compared to the last monitoring event conducted in January 2012.
- The AP well DAD-20 was not gauged or sampled for this event due to an obstruction in the well.
- The groundwater flow direction at the Dairies within the regional groundwater aquifer is east-southeast. The hydraulic gradient is 0.001 ft./ft.
- The perched groundwater aquifer at Del Oro Dairy has a groundwater flow direction toward the southwest.
- Drain locations at the Dairies and Anthony Waste Water Treatment Plant were not gauged, and will not be gauged for future events.
- Nitrate was below the NMWQCC standards in all but 6 of the 20 groundwater samples collected from all the AP DAD wells.
- Chloride was above NMWQCC standards in all monitoring wells sampled.
- TDS was above the NMWQCC standard in all wells sampled.
- Chloride and TDS remain above standards in wells upgradient of the northern, central, and southern portions of the plume at the Dairies. Chloride and TDS are regionally elevated above standards and not necessarily attributed to by the Dairies.

## **5.0 REFERENCES**

- Doña Ana Dairies. 2006. Letter Regarding Agreement for Joint Stage 1 and Stage 2 Abatement Plan and Storm Water and Wastewater Pond Upgrades. Letter from Mr. Michael Weatherly, Chairman, Doña Ana Dairies, to Mr. William Olson, Chief, Ground Water Quality Bureau. October 30.
- Golder Associates, Inc. (Golder). 2006. Stage 1 and 2 Abatement Plan Proposal, prepared for New Mexico Environment Department, Remediation Oversight Section, on behalf of Doña Ana Dairies. December 11.
- Golder 2008a. Existing Data Report and Conceptual Work Plan, Doña Ana Dairies, Mesquite, New Mexico. February 1.
- Golder 2008b. Conceptual Work Plan. Doña Ana Dairies, Mesquite, New Mexico. February 1.
- Golder 2008c. Notes for the Meeting Regarding New Monitoring Well Installation. Meeting Participants: Doña Ana Dairy representative, DAD technical representatives, and NMED staff. July 28.
- Golder 2008d. Sampling and Analysis Plan. Doña Ana Dairies, Mesquite, New Mexico. August 11.
- New Mexico Environment Department. 2008. Conditional Approval of Stage 1 Abatement Plan for Doña Ana Dairies. Letter from Mr. Bill Olson, Chief, Ground Water Quality Bureau, to Mr. Weatherly, Doña Ana Dairies. June 16.
- New Mexico Environment Department. 2008. Approval of Sampling and Analysis Plan for the Doña Ana Dairies, Stage 1 Abatement Plan, Doña Ana County, New Mexico. September 25.

## **TABLES**

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
<b>NORTHERN AREA</b>						
<b>Northern Land Application Area</b>						
70-03	23-Apr-2012	424580.78	1510233.88	3871.43	52.84	3818.59
	30-Jan-2012				51.41	3820.02
	8-Dec-2011				51.49	3819.94
	19-Jul-2011				50.77	3820.66
	20-Apr-2011				49.69	3821.74
	17-Jan-2011				48.70	3822.73
	14-Sep-2010				49.02	3822.41
	24-Jun-2010				48.99	3822.44
	22-Mar-2010				48.90	3822.53
	8-Dec-2009				48.72	3822.71
	28-Aug-2009				49.21	3822.22
	26-May-2009				48.91	3822.52
	11-Dec-2008				48.02	3823.41
	28-Sep-2008				48.06	3823.37
	11-Jun-2008				49.20	3822.23
5-Feb-2008	47.95	3823.48				
14-Nov-2007	48.10	3823.33				
12-Sep-2007	48.70	3822.73				
70/86/340-01	23-Apr-2012	427320.92	1508461.05	3866.77	45.91	3820.86
	30-Jan-2012				45.02	3821.75
	8-Dec-2011				45.17	3821.60
	19-Jul-2011				44.49	3822.28
	20-Apr-2011				43.15	3823.62
	17-Jan-2011				42.00	3824.77
	14-Sep-2010				41.79	3824.98
	24-Jun-2010				42.67	3824.10
	22-Mar-2010				42.21	3824.56
	8-Dec-2009				42.02	3824.75
	28-Aug-2009				42.39	3824.38
	26-May-2009				42.33	3824.44
	11-Dec-2008				41.15	3825.62
	28-Sep-2008				41.58	3825.19
	11-Jun-2008				42.31	3824.46
5-Feb-2008	41.07	3825.70				
14-Nov-2007	41.38	3825.39				
12-Sep-2007	41.46	3825.31				
86/340-01	23-Apr-2012	432021.33	1503216.90	3876.14	52.20	3823.94
	30-Jan-2012				51.10	3825.04
	8-Dec-2011				51.20	3824.94
	19-Jul-2011				50.36	3825.78
	20-Apr-2011				48.91	3827.23
	17-Jan-2011				47.00	3829.14
	14-Sep-2010				47.63	3828.51
	24-Jun-2010				48.22	3827.92
	22-Mar-2010				47.66	3828.48
	8-Dec-2009				47.39	3828.75
	28-Aug-2009				47.75	3828.39
	26-May-2009				47.86	3828.28
	11-Dec-2008				46.68	3829.46
	28-Sep-2008				47.44	3828.70
	11-Jun-2008				48.11	3828.03
5-Feb-2008	46.68	3829.46				
14-Nov-2007	47.11	3829.03				
12-Sep-2007	47.85	3828.29				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
<b>Former Daybreak Dairy (Del Norte Dairy)</b>						
126-04	23-Apr-2012	423258.23	1510546.24	3850.31	31.46	3818.85
	26-Jan-2012				30.89	3819.42
	8-Dec-2011				30.84	3819.47
	19-Jul-2011				30.26	3820.05
	20-Apr-2011				29.09	3821.22
	17-Jan-2011				28.20	3822.11
	14-Sep-2010				28.60	3821.71
	24-Jun-2010				28.21	3822.10
	22-Mar-2010				28.33	3821.98
	8-Dec-2009				28.17	3822.14
	28-Aug-2009				28.50	3821.81
	26-May-2009				28.30	3822.01
	11-Dec-2008				27.56	3822.75
	27-Sep-2008				27.96	3822.35
	10-Jun-2008				28.61	3821.70
6-Feb-2008	27.53	3822.78				
14-Nov-2007	27.61	3822.70				
11-Sep-2007	28.19	3822.12				
126-05	23-Apr-2012	422293.26	1510649.84	3842.62	24.21	3818.41
	26-Jan-2012				23.52	3819.10
	8-Dec-2011				23.50	3819.12
	19-Jul-2011				22.72	3819.90
	20-Apr-2011				21.74	3820.88
	21-Jan-2011				21.30	3821.32
	14-Sep-2010				20.91	3821.71
	24-Jun-2010				21.13	3821.49
	22-Mar-2010				21.06	3821.56
	8-Dec-2009				20.88	3821.74
	28-Aug-2009				20.83	3821.79
	26-May-2009				20.91	3821.71
	11-Dec-2008				20.29	3822.33
	27-Sep-2008				20.42	3822.20
	10-Jun-2008				21.26	3821.36
6-Feb-2008	20.34	3822.28				
14-Nov-2007	20.32	3822.30				
11-Sep-2007	20.74	3821.88				
126-07	23-Apr-2012	423613.62	1509986.47	3850.94	31.84	3819.10
	26-Jan-2012				31.23	3819.71
	8-Dec-2011				31.28	3819.66
	19-Jul-2011				30.30	3820.64
	20-Apr-2011				28.59	3822.35
	27-Jan-2011				28.43	3822.51
	14-Sep-2010				28.45	3822.49
	24-Jun-2010				28.74	3822.20
	22-Mar-2010				28.57	3822.37
	8-Dec-2009				28.37	3822.57
	28-Aug-2009				28.61	3822.33
	26-May-2009				28.47	3822.47
	11-Dec-2008				27.70	3823.24
	27-Sep-2008				27.97	3822.97
	10-Jun-2008				28.78	3822.16
6-Feb-2008	27.71	3823.23				
14-Nov-2007	27.63	3823.31				
11-Sep-2007	28.06	3822.88				



**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
126-09	23-Apr-2012	425154.15	1510994.31	3893.35	73.98	3819.37
	26-Jan-2012				72.24	3821.11
	8-Dec-2011				73.34	3820.01
	19-Jul-2011				73.19	3820.16
	20-Apr-2011				72.11	3821.24
	21-Jan-2011				71.00	3822.35
	14-Sep-2010				71.52	3821.83
	29-Jun-2010				72.23	3821.12
	22-Mar-2010				71.03	3822.32
	8-Dec-2009				70.94	3822.41
	28-Aug-2009				71.73	3821.62
	26-May-2009				71.12	3822.23
	11-Dec-2008				70.27	3823.08
	27-Sep-2008				70.79	3822.56
	10-Jun-2008				71.47	3821.88
	6-Feb-2008				70.08	3823.27
14-Nov-2007	70.46	3822.89				
11-Sep-2007	71.39	3821.96				
126-12	23-Apr-2012	421492.11	1510198.45	3838.88	20.22	3818.66
	30-Jan-2012				19.79	3819.09
	8-Dec-2011				19.55	3819.33
	19-Jul-2011				18.27	3820.61
	20-Apr-2011				17.62	3821.26
	17-Jan-2011				17.00	3821.88
	16-Sep-2010				16.48	3822.40
	24-Jun-2010				17.30	3821.58
	24-Jun-2010				17.30	3821.58
	22-Mar-2010				17.19	3821.69
	8-Dec-2009				16.99	3821.89
	28-Aug-2009				16.49	3822.39
	26-May-2009				16.85	3822.03
	11-Dec-2008				16.37	3822.51
	27-Sep-2008				16.29	3822.59
	10-Jun-2008				17.19	3821.69
6-Feb-2008	16.62	3822.26				
14-Nov-2007	16.33	3822.55				
11-Sep-2007	16.56	3822.32				
126-13	23-Apr-2012	423431.96	1510657.41	3857.37	38.52	3818.85
	26-Jan-2012				37.80	3819.57
	8-Dec-2011				37.86	3819.51
	19-Jul-2011				37.29	3820.08
	20-Apr-2011				35.23	3822.14
	13-Jan-2011				35.23	3822.14
	14-Sep-2010				35.66	3821.71
	24-Jun-2010				36.01	3821.36
	22-Mar-2010				35.40	3821.97
	8-Dec-2009				35.24	3822.13
	28-Aug-2009				35.60	3821.77
	26-May-2009				35.37	3822.00
	11-Dec-2008				34.62	3822.75
	27-Sep-2008				34.99	3822.38
	10-Jun-2008				35.69	3821.68
	6-Feb-2008				NA	NA
14-Nov-2007	16.33	3841.04				
11-Sep-2007	NA	NA				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
<b>Mountain View Dairy</b>						
70-01	23-Apr-2012	423303.43	1510585.63	3851.84	33.09	3818.75
	26-Jan-2012				32.29	3819.55
	8-Dec-2011				32.40	3819.44
	9-Jul-2011				31.77	3820.07
	20-Apr-2011				30.69	3821.15
	17-Jan-2011				29.72	3822.12
	14-Sep-2010				30.19	3821.65
	24-Jun-2010				29.30	3822.54
	22-Mar-2010				Unable to open well	
	8-Dec-2009				29.75	3822.09
	28-Aug-2009				30.08	3821.76
	26-May-2009				29.88	3821.96
	11-Dec-2008				29.13	3822.71
	27-Sep-2008				29.79	3822.05
	10-Jun-2008				30.20	3821.64
	5-Feb-2008				29.10	3822.74
13-Nov-2007	29.25	3822.59				
12-Sep-2007	29.77	3822.07				
70-02	23-Apr-2012	423412.73	1511192.51	3861.25	42.60	3818.65
	26-Jan-2012				41.81	3819.44
	8-Dec-2011				41.89	3819.36
	19-Jul-2011				41.52	3819.73
	20-Apr-2011				40.46	3820.79
	17-Jan-2011				38.90	3822.35
	14-Sep-2010				39.96	3821.29
	24-Jun-2010				39.01	3822.24
	22-Mar-2010				39.54	3821.71
	8-Dec-2009				39.42	3821.83
	28-Aug-2009				39.81	3821.44
	26-May-2009				39.56	3821.69
	11-Dec-2008				38.84	3822.41
	27-Sep-2008				39.20	3822.05
	10-Jun-2008				39.90	3821.35
	6-Feb-2008				39.77	3821.48
14-Nov-2007	39.01	3822.24				
11-Sep-2007	39.60	3821.65				
<b>Buena Vista Dairy I</b>						
86-01	23-Apr-2012	421534.62	1511667.76	3864.96	46.86	3818.10
	30-Jan-2012				46.34	3818.62
	8-Dec-2011				46.22	3818.74
	19-Jul-2011				45.66	3819.30
	20-Apr-2011				44.28	3820.68
	17-Jan-2011				44.30	3820.66
	16-Sep-2010				44.09	3820.87
	24-Jun-2010				44.39	3820.57
	22-Mar-2010				44.19	3820.77
	8-Dec-2009				43.89	3821.07
	28-Aug-2009				43.96	3821.00
	26-May-2009				44.03	3820.93
	11-Dec-2008				43.53	3821.43
	28-Sep-2008				43.60	3821.36
	10-Jun-2008				44.44	3820.52
	5-Feb-2008				43.69	3821.27
13-Nov-2007	43.78	3821.18				
12-Sep-2007	44.21	3820.75				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
86-02	23-Apr-2012	421792.08	1510881.53	3848.08	29.43	3818.65
	30-Jan-2012				28.94	3819.14
	8-Dec-2011				28.77	3819.31
	19-Jul-2011				27.74	3820.34
	20-Apr-2011				27.18	3820.90
	17-Jan-2011				26.34	3821.74
	16-Sep-2010				26.18	3821.90
	24-Jun-2010				26.79	3821.29
	22-Mar-2010				26.54	3821.54
	8-Dec-2009				26.33	3821.75
	28-Aug-2009				26.11	3821.97
	26-May-2009				26.29	3821.79
	11-Dec-2008				25.77	3822.31
	28-Sep-2008				25.78	3822.3
	10-Jun-2008				26.65	3821.43
5-Feb-2008	26.95	3821.13				
13-Nov-2007	25.88	3822.2				
12-Sep-2007	26.19	3821.89				
<b>Bright Star Dairy</b>						
340-01	23-Apr-2012	421410.13	1511423.42	3858.48	40.16	3818.32
	25-Jan-2012				39.70	3818.78
	8-Dec-2011				39.54	3818.94
	19-Jul-2011				38.74	3819.74
	20-Apr-2011				38.14	3820.34
	17-Jan-2011				37.33	3821.15
	14-Sep-2010				37.20	3821.28
	24-Jun-2010				38.05	3820.43
	22-Mar-2010				37.48	3821.00
	8-Dec-2009				37.26	3821.22
	28-Aug-2009				37.10	3821.38
	26-May-2009				37.26	3821.22
	11-Dec-2008				36.79	3821.69
	27-Sep-2008				36.77	3821.71
	10-Jun-2008				37.63	3820.85
6-Feb-2008	37.03	3821.45				
14-Nov-2007	37.00	3821.48				
11-Sep-2007	37.36	3821.12				
340-02	23-Apr-2012	420641.08	1512051.57	3869.76	51.61	3818.15
	25-Jan-2012				51.31	3818.45
	8-Dec-2011				51.07	3818.69
	19-Jul-2011				50.24	3819.52
	20-Apr-2011				48.86	3820.90
	17-Jan-2011				49.00	3820.76
	14-Sep-2010				48.80	3820.96
	24-Jun-2010				49.67	3820.09
	22-Mar-2010				49.17	3820.59
	8-Dec-2009				49.03	3820.73
	28-Aug-2009				48.79	3820.97
	26-May-2009				48.94	3820.82
	11-Dec-2008				48.62	3821.14
	28-Sep-2008				48.48	3821.28
	10-Jun-2008				49.30	3820.46
5-Feb-2008	48.90	3820.86				
14-Nov-2007	48.84	3820.92				
12-Sep-2007	49.28	3820.48				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
<b>Former D&amp;J Dairy (Dominguez 2)</b>						
42-02	23-Apr-2012	419982.45	1511126.19	3844.69	25.46	3819.23
	26-Jan-2012				25.71	3818.98
	8-Dec-2011				25.35	3819.34
	19-Jul-2011				23.15	3821.54
	19-Apr-2011				22.80	3821.89
	18-Jan-2011				23.30	3821.39
	15-Sep-2010				22.34	3822.35
	24-Jun-2010				22.84	3821.85
	22-Mar-2010				23.16	3821.53
	8-Dec-2009				22.87	3821.82
	28-Aug-2009				22.43	3822.26
	26-May-2009				22.73	3821.96
	11-Dec-2008				22.91	3821.78
	27-Sep-2008				22.28	3822.41
	10-Jun-2008				23.12	3821.57
	6-Feb-2008				23.43	3821.26
13-Nov-2007	23.00	3821.69				
12-Sep-2007	23.15	3821.54				
42-03	23-Apr-2012	419710.55	1514064.35	3898.46	81.57	3816.89
	25-Jan-2012				81.18	3817.28
	8-Dec-2011				81.26	3817.20
	19-Jul-2011				81.33	3817.13
	19-Apr-2011				80.21	3818.25
	18-Jan-2011				79.33	3819.13
	15-Sep-2010				79.91	3818.55
	24-Jun-2010				81.12	3817.34
	22-Mar-2010				79.57	3818.89
	8-Dec-2009				79.12	3819.34
	28-Aug-2009				79.26	3819.20
	26-May-2009				79.42	3819.04
	11-Dec-2008				78.89	3819.57
	27-Sep-2008				78.91	3819.55
	10-Jun-2008				79.91	3818.55
	6-Feb-2008				79.76	3818.70
13-Nov-2007	79.15	3819.31				
12-Sep-2007	79.71	3818.75				
42-06	23-Apr-2012	420021.61	1511465.15	3850.15	31.37	3818.78
	25-Jan-2012				31.51	3818.64
	8-Dec-2011				31.19	3818.96
	19-Jul-2011				29.37	3820.78
	19-Apr-2011				29.66	3820.49
	18-Jan-2011				29.18	3820.97
	15-Sep-2010				28.36	3821.79
	24-Jun-2010				28.96	3821.19
	22-Mar-2010				29.04	3821.11
	8-Dec-2009				28.90	3821.25
	28-Aug-2009				28.44	3821.71
	26-May-2009				28.70	3821.45
	11-Dec-2008				28.75	3821.40
	27-Sep-2008				28.27	3821.88
	10-Jun-2008				29.03	3821.12
	6-Feb-2008				29.24	3820.91
13-Nov-2007	28.87	3821.28				
12-Sep-2007	29.03	3821.12				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
42-07	23-Apr-2012	420584.8	1513076.66	3891.52	Dry	
	25-Jan-2012				Dry	
	8-Dec-2011				Dry	
	19-Jul-2011				Dry	
	19-Apr-2011				72.19	3819.33
	18-Jan-2011				71.37	3820.15
	15-Sep-2010				71.64	3819.88
	24-Jun-2010				72.24	3819.28
	22-Mar-2010				71.43	3820.09
	8-Dec-2009				71.26	3820.26
	28-Aug-2009				71.26	3820.26
	26-May-2009				71.31	3820.21
	11-Dec-2008				70.87	3820.65
	27-Sep-2008				70.95	3820.57
	10-Jun-2008				71.71	3819.81
	6-Feb-2008				71.00	3820.52
13-Nov-2007	71.12	3820.40				
12-Sep-2007	71.61	3819.91				
42-08	23-Apr-2012	419994.93	1511197.91	3846.53	27.51	3819.02
	26-Jan-2012				27.68	3818.85
	8-Dec-2011				27.33	3819.20
	19-Jul-2011				25.24	3821.29
	19-Apr-2011				25.72	3820.81
	18-Jan-2011				25.28	3821.25
	15-Sep-2010				24.37	3822.16
	24-Jun-2010				24.91	3821.62
	22-Mar-2010				25.15	3821.38
	8-Dec-2009				24.91	3821.62
	28-Aug-2009				24.46	3822.07
	26-May-2009				24.75	3821.78
	11-Dec-2008				24.88	3821.65
	27-Sep-2008				24.30	3822.23
	10-Jun-2008				25.13	3821.40
	6-Feb-2008				25.41	3821.12
13-Nov-2007	25.00	3821.53				
12-Sep-2007	25.13	3821.40				
42-09	23-Apr-2012	419729.17	1512255.76	3865.25	46.93	3818.32
	25-Jan-2012				46.95	3818.30
	8-Dec-2011				46.76	3818.49
	19-Jul-2011				45.54	3819.71
	19-Apr-2011				45.38	3819.87
	18-Jan-2011				44.87	3820.38
	15-Sep-2010				44.21	3821.04
	24-Jun-2010				44.99	3820.26
	22-Mar-2010				44.72	3820.53
	8-Dec-2009				44.70	3820.55
	28-Aug-2009				44.32	3820.93
	26-May-2009				44.50	3820.75
	11-Dec-2008				44.39	3820.86
	27-Sep-2008				44.12	3821.13
	10-Jun-2008				44.77	3820.48
	6-Feb-2008				44.80	3820.45
13-Nov-2007	44.47	3820.78				
12-Sep-2007	44.73	3820.52				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
42-10	23-Apr-2012	421426.39	1514460.4	3929.28	111.87	3817.41
	25-Jan-2012				110.98	3818.30
	8-Dec-2011				111.16	3818.12
	19-Jul-2011				111.21	3818.07
	19-Apr-2011				110.06	3819.22
	18-Jan-2011				109.19	3820.09
	15-Sep-2010				110.24	3819.04
	27-Jun-2010				110.35	3818.93
	22-Mar-2010				109.47	3819.81
	8-Dec-2009				109.41	3819.87
	28-Aug-2009				109.67	3819.61
	26-May-2009				109.53	3819.75
	11-Dec-2008				109.00	3820.28
	27-Sep-2008				109.49	3819.79
	11-Jun-2008				109.88	3819.40
	6-Feb-2008				108.98	3820.30
14-Nov-2007	109.36	3819.92				
12-Sep-2007	109.92	3819.36				
42-11	23-Apr-2012	420693.98	1515270.32	3939.31	122.09	3817.22
	25-Jan-2012				121.67	3817.64
	8-Dec-2011				121.83	3817.48
	19-Jul-2011				121.73	3817.58
	19-Apr-2011				120.64	3818.67
	18-Jan-2011				120.01	3819.30
	15-Sep-2010				121.02	3818.29
	27-Jun-2010				121.05	3818.26
	22-Mar-2010				120.18	3819.13
	8-Dec-2009				120.21	3819.10
	28-Aug-2009				120.51	3818.80
	26-May-2009				120.35	3818.96
	11-Dec-2008				119.88	3819.43
	27-Sep-2008				120.29	3819.02
	11-Jun-2008				120.57	3818.74
	6-Feb-2008				119.84	3819.47
14-Nov-2007	120.24	3819.07				
12-Sep-2007	120.74	3818.57				
42-12	23-Apr-2012	420972.09	1515423.88	3945.83	128.71	3817.12
	25-Jan-2012				128.06	3817.77
	8-Dec-2011				128.14	3817.69
	19-Jul-2011				128.01	3817.82
	19-Apr-2011				126.37	3819.46
	18-Jan-2011				126.37	3819.46
	15-Sep-2010				127.38	3818.45
	27-Jun-2010				127.43	3818.40
	22-Mar-2010				126.50	3819.33
	8-Dec-2009				126.60	3819.23
	28-Aug-2009				126.84	3818.99
	26-May-2009				126.68	3819.15
	11-Dec-2008				126.18	3819.65
	27-Sep-2008				126.68	3819.15
	11-Jun-2008				126.88	3818.95
	6-Feb-2008				126.16	3819.67
14-Nov-2007	126.55	3819.28				
12-Sep-2007	127.04	3818.79				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
42-13	23-Apr-2012	419734.06	1512534.42	3873.10	54.96	3818.14
	25-Jan-2012				54.99	3818.11
	8-Dec-2011				54.83	3818.27
	19-Jul-2011				53.77	3819.33
	19-Apr-2011				53.50	3819.60
	18-Jan-2011				52.95	3820.15
	15-Sep-2010				52.44	3820.66
	24-Jun-2010				53.21	3819.89
	22-Mar-2010				52.84	3820.26
	8-Dec-2009				52.79	3820.31
	28-Aug-2009				52.45	3820.65
	26-May-2009				52.64	3820.46
	11-Dec-2008				52.49	3820.61
	27-Sep-2008				52.23	3820.87
	10-Jun-2008				52.91	3820.19
	6-Feb-2008				52.84	3820.26
13-Nov-2007	52.56	3820.54				
12-Sep-2007	52.83	3820.27				
<b>Dominguez Dairy</b>						
624-01	24-Apr-2012	418826.21	1512131.46	3843.72	26.02	3817.70
	25-Jan-2012				25.51	3818.21
	7-Dec-2011				25.19	3818.53
	19-Jul-2011				23.22	3820.50
	19-Apr-2011				23.75	3819.97
	18-Jan-2011				23.53	3820.19
	15-Sep-2010				21.40	3822.32
	24-Jun-2010				22.48	3821.24
	22-Mar-2010				22.83	3820.89
	8-Dec-2009				23.33	3820.39
	28-Aug-2009				22.72	3821.00
	27-May-2009				22.92	3820.80
	11-Dec-2008				23.11	3820.61
	27-Sep-2008				22.62	3821.10
	10-Jun-2008				22.72	3821.00
	5-Feb-2008				23.64	3820.08
13-Nov-2007	22.87	3820.85				
12-Sep-2007	22.94	3820.78				
624-02	23-Apr-2012	417335.25	1512201.42	3835.45	17.97	3817.48
	24-Jan-2012				17.16	3818.29
	7-Dec-2011				17.30	3818.15
	19-Jul-2011				15.23	3820.22
	19-Apr-2011				15.94	3819.51
	17-Jan-2011				15.66	3819.79
	20-Sep-2010				14.04	3821.41
	24-Jun-2010				13.93	3821.52
	22-Mar-2010				15.24	3820.21
	8-Dec-2009				15.61	3819.84
	28-Aug-2009				14.85	3820.60
	27-May-2009				15.14	3820.31
	11-Dec-2008				15.47	3819.98
	27-Sep-2008				14.97	3820.48
	10-Jun-2008				14.87	3820.58
	5-Feb-2008				16.50	3818.95
13-Nov-2007	15.40	3820.05				
12-Sep-2007	14.94	3820.51				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
624-04	23-Apr-2012	418542.24	1508104.07	3835.69	Dry	
	25-Jan-2012				Dry	
	8-Dec-2011				Dry	
	19-Jul-2011				15.39	3820.30
	19-Apr-2011				13.66	3822.03
	18-Jan-2011				13.99	3821.70
	15-Sep-2010				11.43	3824.26
	24-Jun-2010				13.49	3822.20
	22-Mar-2010				14.83	3820.86
	8-Dec-2009				13.48	3822.21
	28-Aug-2009				12.49	3823.20
	26-May-2009				12.89	3822.80
	11-Dec-2008				12.99	3822.70
	27-Sep-2008				12.31	3823.38
	10-Jun-2008				14.45	3821.24
	5-Feb-2008				14.13	3821.56
13-Nov-2007	13.60	3822.09				
12-Sep-2007	14.83	3820.86				
624-05	23-Apr-2012	419777.52	1509829.65	3835.27	15.90	3819.37
	25-Jan-2012				15.81	3819.46
	7-Dec-2011				15.25	3820.02
	3-Aug-2011				13.38	3821.89
	19-Apr-2011				13.86	3821.41
	18-Jan-2011				13.11	3822.16
	15-Sep-2010				12.01	3823.26
	24-Jun-2010				12.71	3822.56
	22-Mar-2010				13.21	3822.06
	8-Dec-2009				12.54	3822.73
	28-Aug-2009				12.03	3823.24
	26-May-2009				12.58	3822.69
	11-Dec-2008				12.82	3822.45
	27-Sep-2008				11.97	3823.30
	10-Jun-2008				13.19	3822.08
	5-Feb-2008				13.44	3821.83
13-Nov-2007	13.01	3822.26				
12-Sep-2007	13.31	3821.96				
624-06	23-Apr-2012	418502.42	1513981.08	3868.18	51.83	3816.35
	25-Jan-2012				51.80	3816.38
	13-Dec-2011				50.89	3817.29
	19-Jul-2011				50.43	3817.75
	19-Apr-2011				49.79	3818.39
	18-Jan-2011				49.31	3818.87
	21-Sep-2010				48.73	3819.45
	24-Jun-2010				50.33	3817.85
	22-Mar-2010				49.62	3818.56
	8-Dec-2009				48.96	3819.22
	28-Aug-2009				48.87	3819.31
	26-May-2009				49.14	3819.04
	11-Dec-2008				48.89	3819.29
	27-Sep-2008				48.71	3819.47
	10-Jun-2008				49.67	3818.51
	5-Feb-2008				49.11	3819.07
13-Nov-2007	48.94	3819.24				
12-Sep-2007	49.17	3819.01				



**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
624-07	23-Apr-2012	418012.23	1514707.77	3872.25	Dry	
	25-Jan-2012				55.50	3816.75
	13-Dec-2011				55.46	3816.79
	19-Jul-2011				54.55	3817.70
	19-Apr-2011				54.64	3817.61
	18-Jan-2011				53.91	3818.34
	15-Sep-2010				52.30	3819.95
	24-Jun-2010				55.27	3816.98
	22-Mar-2010				54.21	3818.04
	8-Dec-2009				53.32	3818.93
	28-Aug-2009				53.22	3819.03
	26-May-2009				53.76	3818.49
	11-Dec-2008				53.59	3818.66
	27-Sep-2008				53.35	3818.90
	10-Jun-2008				54.34	3817.91
	5-Feb-2008				53.81	3818.44
13-Nov-2007	53.26	3818.99				
12-Sep-2007	53.03	3819.22				
624-08	23-Apr-2012	421461.78	1507712.04	3838.70	Dry	
	25-Jan-2012				Dry	
	8-Dec-2011				Dry	
	3-Aug-2011				Dry	
	18-Apr-2011				17.72	3820.98
	18-Jan-2011				16.03	3822.67
	14-Sep-2010				14.83	3823.87
	24-Jun-2010				16.44	3822.26
	22-Mar-2010				16.42	3822.28
	8-Dec-2009				16.02	3822.68
	28-Aug-2009				15.20	3823.50
	26-May-2009				15.54	3823.16
	11-Dec-2008				14.96	3823.74
	27-Sep-2008				14.84	3823.86
	10-Jun-2008				16.12	3822.58
	5-Feb-2008				15.37	3823.33
13-Nov-2007	14.71	3823.99				
12-Sep-2007	15.33	3823.37				
<b>Gonzalez Dairy</b>						
177-01	23-Apr-12	417300.94	1512942.63	3834.27	16.32	3817.95
	26-Jan-12				16.71	3817.56
	7-Dec-11				16.36	3817.91
	19-Jul-11				14.64	3819.63
	19-Apr-2011				14.84	3819.43
	17-Jan-2011				14.43	3819.84
	15-Sep-2010				13.30	3820.97
	23-Jun-2010				14.11	3820.16
	22-Mar-2010				14.75	3819.52
	8-Dec-2009				14.68	3819.59
	28-Aug-2009				14.16	3820.11
	26-May-2009				14.35	3819.92
	10-Dec-2008				14.64	3819.63
	27-Sep-2008				14.21	3820.06
	10-Jun-2008				14.50	3819.77
6-Feb-2008	15.06	3819.21				
13-Nov-2007	14.53	3819.74				
13-Sep-2007	14.03	3820.24				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
177-02	24-Apr-2012	416738.21	1513246.51	3834.66	17.91	3816.75
	24-Jan-2012				17.61	3817.05
	7-Dec-2011				16.92	3817.74
	19-Jul-2011				15.41	3819.25
	19-Apr-2011				15.47	3819.19
	17-Jan-2011				14.94	3819.72
	15-Sep-2010				14.23	3820.43
	23-Jun-2010				14.86	3819.80
	22-Mar-2010				15.59	3819.07
	8-Dec-2009				15.29	3819.37
	28-Aug-2009				14.90	3819.76
	26-May-2009				15.09	3819.57
	10-Dec-2008				15.37	3819.29
	27-Sep-2008				14.95	3819.71
	10-Jun-2008				15.41	3819.25
6-Feb-2008	15.74	3818.92				
13-Nov-2007	15.39	3819.27				
13-Sep-2007	14.72	3819.94				
177-03A	24-Apr-2012	416206.71	1513777.17	3835.75	18.57	3817.18
	24-Jan-2012				18.63	3817.12
	13-Dec-2011				18.51	3817.24
177-04	24-Apr-12	416796.99	1513733.28	3840.33	23.36	3816.97
	24-Jan-12				22.47	3817.86
	7-Dec-11				22.97	3817.36
	19-Jul-11				21.66	3818.67
	19-Apr-2011				21.41	3818.92
	17-Jan-2011				21.22	3819.11
	15-Sep-2010				20.36	3819.97
	23-Jun-2010				21.05	3819.28
	22-Mar-2010				21.71	3818.62
	8-Dec-2009				21.14	3819.19
	28-Aug-2009				20.86	3819.47
	27-May-2009				21.13	3819.20
	10-Dec-2008				21.37	3818.96
	27-Sep-2008				20.86	3819.47
	10-Jun-2008				21.63	3818.70
6-Feb-2008	21.59	3818.74				
13-Nov-2007	21.30	3819.03				
13-Sep-2007	20.84	3819.49				
177-05	24-Apr-12	417302.42	1514116.55	3852.16	36.04	3816.12
	24-Jan-12				35.02	3817.14
	7-Dec-11				35.19	3816.97
	19-Jul-11				34.07	3818.09
	19-Apr-2011				32.91	3819.25
	17-Jan-2011				33.72	3818.44
	15-Sep-2010				32.68	3819.48
	23-Jun-2010				33.59	3818.57
	22-Mar-2010				34.10	3818.06
	8-Dec-2009				33.22	3818.94
	28-Aug-2009				32.95	3819.21
	26-May-2009				33.26	3818.90
	10-Dec-2008				33.60	3818.56
	27-Sep-2008				32.95	3819.21
	10-Jun-2008				33.96	3818.20
6-Feb-2008	33.58	3818.58				
13-Nov-2007	33.27	3818.89				
13-Sep-2007	33.12	3819.04				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
177-06	24-Apr-12	417301.84	1514765.63	3866.02	Dry	
	24-Jan-12				49.40	3816.62
	7-Dec-11				49.85	3816.17
	19-Jul-11				49.31	3816.71
	19-Apr-2011				48.92	3817.10
	17-Jan-2011				48.18	3817.84
	15-Sep-2010				47.64	3818.38
	23-Jun-2010				48.79	3817.23
	22-Mar-2010				49.12	3816.90
	8-Dec-2009				47.60	3818.42
	28-Aug-2009				47.53	3818.49
	26-May-2009				48.03	3817.99
	10-Dec-2008				48.72	3817.30
	27-Sep-2008				47.52	3818.50
	10-Jun-2008				49.31	3816.71
	6-Feb-2008				48.00	3818.02
13-Nov-2007	48.88	3817.14				
13-Sep-2007	48.84	3817.18				
177-07R	24-Apr-12	415240.93	1515476.47	3858.91	43.56	3815.35
	24-Jan-12				43.08	3815.83
	7-Dec-11				43.46	3815.45
	19-Jul-11				42.91	3816.00
	19-Apr-2011				41.96	3816.95
177-07	17-Jan-2011	415258.95	1515471.64	3859.96	Dry	Dry
	15-Sep-2010				Dry	Dry
	23-Jun-2010				Dry	Dry
	22-Mar-2010				Dry	Dry
	8-Dec-2009				Dry	Dry
	10-Dec-2008				Dry	Dry
	27-Sep-2008				Dry	Dry
	10-Jun-2008				Dry	Dry
	6-Feb-2008				Dry	Dry
	13-Nov-2007				Dry	Dry
13-Sep-2007	Dry	Dry				
<b>CENTRAL AREA</b>						
<b>Buena Vista Dairy II</b>						
74-01	24-Apr-2012	405434.93	1519310.15	3841.01	34.27	3806.74
	24-Jan-2012				33.36	3807.65
	8-Dec-2011				33.63	3807.38
	19-Jul-2011				33.31	3807.70
	20-Apr-2011				31.97	3809.04
	21-Jan-2011				32.23	3808.78
	16-Sep-2010				31.97	3809.04
	23-Jun-2010				32.08	3808.93
	22-Mar-2010				32.07	3808.94
	8-Dec-2009				31.45	3809.56
	28-Aug-2009				32.20	3808.81
	26-May-2009				32.20	3808.81
	10-Dec-2008				31.31	3809.70
	27-Sep-2008				31.64	3809.37
	10-Jun-2008				32.00	3809.01
	5-Feb-2008				31.66	3809.35
14-Nov-2007	31.21	3809.80				
12-Sep-2007	31.63	3809.38				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
<b>Buena Vista Dairy II Continued</b>						
74-02	24-Apr-2012	404574.08	1519035.52	3820.58	14.30	3806.28
	24-Jan-2012				13.96	3806.62
	8-Dec-2011				15.49	3805.09
	19-Jul-2011				14.19	3806.39
	20-Apr-2011				12.45	3808.13
	17-Jan-2011				12.53	3808.05
	16-Sep-2010				12.45	3808.13
	23-Jun-2010				12.87	3807.71
	22-Mar-2010				12.72	3807.86
	8-Dec-2009				11.88	3808.70
	28-Aug-2009				12.53	3808.05
	26-May-2009				12.70	3807.88
	10-Dec-2008				11.65	3808.93
	27-Sep-2008				12.03	3808.55
	10-Jun-2008				12.39	3808.19
5-Feb-2008	11.94	3808.64				
14-Nov-2007	11.52	3809.06				
12-Sep-2007	12.33	3808.25				
74-03	24-Apr-2012	407163.61	1516711.72	3823.36	13.99	3809.37
	24-Jan-2012				13.60	3809.76
	8-Dec-2011				13.70	3809.66
	19-Jul-2011				13.17	3810.19
	20-Apr-2011				12.11	3811.25
	17-Jan-2011				12.63	3810.73
	16-Sep-2010				12.41	3810.95
	23-Jun-2010				12.72	3810.64
	22-Mar-2010				12.94	3810.42
	8-Dec-2009				12.88	3810.48
	28-Aug-2009				12.63	3810.73
	26-May-2009				12.94	3810.42
	10-Dec-2008				13.00	3810.36
	27-Sep-2008				12.94	3810.42
	10-Jun-2008				12.66	3810.7
5-Feb-2008	12.94	3810.42				
14-Nov-2007	12.77	3810.59				
12-Sep-2007	12.53	3810.83				
74-04	24-Apr-2012	405488.65	1519864.48	3853.17	47.05	3806.12
	24-Jan-2012				45.78	3807.39
	8-Dec-2011				45.98	3807.19
	19-Jul-2011				45.61	3807.56
	20-Apr-2011				44.19	3808.98
	17-Jan-2011				44.02	3809.15
	16-Sep-2010				44.19	3808.98
	23-Jun-2010				44.26	3808.91
	22-Mar-2010				44.25	3808.92
	8-Dec-2009				43.86	3809.31
	28-Aug-2009				44.49	3808.68
	26-May-2009				44.56	3808.61
	10-Dec-2008				43.70	3809.47
	27-Sep-2008				43.99	3809.18
	10-Jun-2008				44.40	3808.77
5-Feb-2008	43.41	3809.76				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
74-05	24-Apr-2012	404747.71	1519885.3	3845.35	40.05	3805.30
	24-Jan-2012				38.78	3806.57
	8-Dec-2011				39.18	3806.17
	19-Jul-2011				38.84	3806.51
	20-Apr-2011				37.99	3807.36
	17-Jan-2011				36.96	3808.39
	16-Sep-2010				37.00	3808.35
	23-Jun-2010				37.44	3807.91
	22-Mar-2010				37.23	3808.12
	8-Dec-2009				36.74	3808.61
	28-Aug-2009				37.32	3808.03
	26-May-2009				37.47	3807.88
	10-Dec-2008				36.53	3808.82
	27-Sep-2008				36.88	3808.47
	10-Jun-2008				37.39	3807.96
5-Feb-2008	36.77	3808.58				
<b>River Valley Dairy</b>						
167-01	24-Apr-2012	402518.37	1518459.71	3818.94	16.01	3802.93
	24-Jan-2012				14.60	3804.34
	8-Dec-2011				15.06	3803.88
	19-Jul-2011				16.81	3802.13
	25-Apr-2011				14.51	3804.43
	17-Jan-2011				12.33	3806.61
	15-Sep-2010				12.19	3806.75
	25-Jun-2010				13.31	3805.63
	22-Mar-2010				13.46	3805.48
	8-Dec-2009				12.11	3806.83
	28-Aug-2009				11.99	3806.95
	26-May-2009				12.43	3806.51
	10-Dec-2008				12.13	3806.81
	27-Sep-2008				12.09	3806.85
	10-Jun-2008				12.95	3805.99
5-Feb-2008	12.62	3806.32				
14-Nov-2007	12.68	3806.26				
167-01A	24-Apr-2012	402518.18	1518936.72	3818.88	16.29	3802.59
	24-Jan-2012				14.59	3804.29
	13-Dec-2011				15.13	3803.75
	19-Jul-2011				16.04	3802.84
	25-Apr-2011				14.13	3804.75
	17-Jan-2011				12.38	3806.50
	15-Sep-2010				12.21	3806.67
	22-Jun-2010				13.74	3805.14
	22-Mar-2010				13.22	3805.66
	8-Dec-2009				12.17	3806.71
	28-Aug-2009				12.23	3806.65
	26-May-2009				12.62	3806.26
	10-Dec-2008				12.03	3806.85
	27-Sep-2008				12.18	3806.70
	10-Jun-2008				13.16	3805.72

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
167-02	24-Apr-2012	402498.3	1519354.81	3819.64	Dry	
	24-Jan-2012				15.84	3803.80
	8-Dec-2011				15.92	3803.72
	19-Jul-2011				Dry	
	25-Apr-2011				13.48	3806.16
	17-Jan-2011				13.49	3806.15
	15-Sep-2010				13.68	3805.96
	22-Jun-2010				15.23	3804.41
	22-Mar-2010				14.69	3804.95
	8-Dec-2009				13.32	3806.32
	28-Aug-2009				13.65	3805.99
	26-May-2009				13.86	3805.78
	10-Dec-2008				13.43	3806.21
	27-Sep-2008				13.71	3805.93
	10-Jun-2008				14.70	3804.94
	5-Feb-2008				13.54	3806.10
	14-Nov-2007				13.65	3805.99
11-Sep-2007	13.98	3805.66				
167-03	24-Apr-2012	402981.73	1519415.73	3825.66	21.97	3803.69
	24-Jan-2012				20.94	3804.72
	8-Dec-2011				21.73	3803.93
	19-Jul-2011				23.22	3802.44
	25-Apr-2011				18.78	3806.88
	17-Jan-2011				18.86	3806.80
	15-Sep-2010				18.81	3806.85
	22-Jun-2010				19.90	3805.76
	22-Mar-2010				19.71	3805.95
	8-Dec-2009				18.62	3807.04
	28-Aug-2009				18.90	3806.76
	27-May-2009				19.26	3806.40
	10-Dec-2008				18.41	3807.25
	27-Sep-2008				18.72	3806.94
	10-Jun-2008				19.82	3805.84
	5-Feb-2008				18.64	3807.02
	14-Nov-2007				18.55	3807.11
11-Sep-2007	19.02	3806.64				
167-04	24-Apr-2012	402032.19	1519884.6	3827.60	25.05	3802.55
	24-Jan-2012				23.36	3804.24
	8-Dec-2011				24.01	3803.59
	19-Jul-2011				24.36	3803.24
	25-Apr-2011				21.23	3806.37
	17-Jan-2011				21.18	3806.42
	15-Sep-2010				Well Damaged	
	22-Jun-2010				Well Damaged	
	22-Mar-2010				Well Damaged	
	8-Dec-2009				Well Damaged	
	28-Aug-2009				21.57	3806.03
	26-May-2009				21.60	3806.00
	10-Dec-2008				21.01	3806.59
	27-Sep-2008				21.01	3806.59
	10-Jun-2008				22.20	3805.40
	5-Feb-2008				21.51	3806.09
	14-Nov-2007				21.44	3806.16
11-Sep-2007	21.68	3805.92				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
167-05	24-Apr-2012	397947.44	1520446.03	3815.44	14.99	3800.45
	30-Jan-2012				13.86	3801.58
	13-Dec-2011				14.10	3801.34
	19-Jul-2011				13.69	3801.75
	19-Apr-2011				12.97	3802.47
	17-Jan-2011				11.90	3803.54
	15-Sep-2010				11.52	3803.92
	25-Jun-2010				12.43	3803.01
	22-Mar-2010				12.22	3803.22
	8-Dec-2009				11.96	3803.48
	28-Aug-2009				11.63	3803.81
	26-May-2009				11.45	3803.99
	10-Dec-2008				11.54	3803.90
	27-Sep-2008				11.20	3804.24
	10-Jun-2008				12.65	3802.79
	5-Feb-2008				12.36	3803.08
14-Nov-2007	12.77	3802.67				
11-Sep-2007	12.91	3802.53				
167-06	24-Apr-2012	404479.35	1519603.88	3834.84	29.84	3805.00
	24-Jan-2012				28.48	3806.36
	8-Dec-2011				29.10	3805.74
	19-Jul-2011				28.75	3806.09
	25-Apr-2011				26.71	3808.13
	17-Jan-2011				26.73	3808.11
	15-Sep-2010				26.70	3808.14
	22-Jun-2010				27.17	3807.67
	22-Mar-2010				27.02	3807.82
	8-Dec-2009				26.40	3808.44
	28-Aug-2009				26.96	3807.88
	26-May-2009				27.15	3807.69
	10-Dec-2008				26.18	3808.66
	27-Sep-2008				26.54	3808.30
	10-Jun-2008				27.10	3807.74
	5-Feb-2008				26.46	3808.38
14-Nov-2007	26.60	3808.24				
11-Sep-2007	26.74	3808.10				
167-07	24-Apr-2012	402562.23	1518480.34	3819.08	15.84	3803.24
	24-Jan-2012				14.54	3804.54
	8-Dec-2011				15.45	3803.63
	25-Jul-2011				15.39	3803.69
	25-Apr-2011				14.95	3804.13
	17-Jan-2011				12.39	3806.69
	15-Sep-2010				11.98	3807.10
	22-Jun-2010				12.94	3806.14
	22-Mar-2010				13.03	3806.05
	8-Dec-2009				12.18	3806.90
	28-Aug-2009				12.06	3807.02
	26-May-2009				12.56	3806.52
	10-Dec-2008				12.24	3806.84
	27-Sep-2008				12.20	3806.88
10-Jun-2008	13.00	3806.08				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
167-08	24-Apr-2012	399352.96	1519889.65	3817.96	16.71	3801.25
	24-Jan-2012				15.25	3802.71
	8-Dec-2011				15.52	3802.44
	19-Jul-2011				15.59	3802.37
	19-Apr-2011				13.95	3804.01
	17-Jan-2011				13.42	3804.54
	15-Sep-2010				12.92	3805.04
	25-Jun-2010				14.69	3803.27
	22-Mar-2010				13.73	3804.23
	8-Dec-2009				13.46	3804.50
	28-Aug-2009				13.23	3804.73
	26-May-2009				12.87	3805.09
	10-Dec-2008				13.42	3804.54
	27-Sep-2008				NM	NM
10-Jun-2008	14.02	3803.94				
167-09	24-Apr-2012	398473.95	1519259.34	3817.00	15.12	3801.88
	24-Jan-2012				14.60	3802.40
	8-Dec-2011				14.42	3802.58
	19-Jul-2011				13.17	3803.83
	19-Apr-2011				12.78	3804.22
	17-Jan-2011				12.70	3804.30
	15-Sep-2010				11.95	3805.05
	25-Jun-2010				13.01	3803.99
	22-Mar-2010				12.88	3804.12
	8-Dec-2009				12.82	3804.18
	28-Aug-2009				12.43	3804.57
	26-May-2009				12.44	3804.56
	10-Dec-2008				12.78	3804.22
	27-Sep-2008				12.07	3804.93
10-Jun-2008	12.94	3804.06				
<b>Big Sky Dairy</b>						
833-01	24-Apr-2012	399617.23	1521136.33	3839.55	Dry	
	24-Jan-2012				Dry	
	8-Dec-2011				Dry	
	18-Jul-2011				Dry	
	19-Apr-2011				35.44	3804.11
	17-Jan-2011				35.20	3804.35
	14-Sep-2010				34.76	3804.79
	22-Jun-2010				36.08	3803.47
	22-Mar-2010				35.49	3804.06
	8-Dec-2009				35.25	3804.30
	28-Aug-2009				35.25	3804.30
	26-May-2009				34.69	3804.86
	10-Dec-2008				34.99	3804.56
	28-Sep-2008				34.58	3804.97
10-Jun-2008	36.13	3803.42				
5-Feb-2008	35.51	3804.04				
14-Nov-2007	35.70	3803.85				
12-Sep-2007	35.79	3803.76				



**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
833-02	24-Apr-2012	401200.32	1520639.92	3836.04	33.49	3802.55
	24-Jan-2012				34.01	3802.03
	8-Dec-2011				33.08	3802.96
	18-Jul-2011				32.92	3803.12
	19-Apr-2011				31.92	3804.12
	17-Jan-2011				30.43	3805.61
	14-Sep-2010				30.34	3805.70
	22-Jun-2010				31.37	3804.67
	22-Mar-2010				30.87	3805.17
	8-Dec-2009				30.40	3805.64
	28-Aug-2009				30.58	3805.46
	26-May-2009				30.24	3805.80
	10-Dec-2008				30.13	3805.91
	28-Sep-2008				29.80	3806.24
	10-Jun-2008				31.21	3804.83
	5-Feb-2008				30.63	3805.41
14-Nov-2007	30.60	3805.44				
12-Sep-2007	30.63	3805.41				
833-03	24-Apr-2012	401392.09	1521955.23	3867.06	Dry	
	24-Jan-2012				Dry	
	8-Dec-2011				Dry	
	18-Jul-2011				Dry	
	19-Apr-2011				61.92	3805.14
	17-Jan-2011				61.02	3806.04
	14-Sep-2010				60.91	3806.15
	22-Jun-2010				61.90	3805.16
	22-Mar-2010				61.41	3805.65
	8-Dec-2009				61.16	3805.90
	28-Aug-2009				61.50	3805.56
	26-May-2009				61.26	3805.80
	10-Dec-2008				60.76	3806.30
	28-Sep-2008				61.59	3805.47
	10-Jun-2008				61.83	3805.23
	5-Feb-2008				61.11	3805.95
14-Nov-2007	61.08	3805.98				
12-Sep-2007	61.11	3805.95				
833-04	24-Apr-2012	402898.52	1520659.33	3845.79	42.32	3803.47
	24-Jan-2012				40.87	3804.92
	8-Dec-2011				41.55	3804.24
	18-Jul-2011				41.05	3804.74
	19-Apr-2011				39.24	3806.55
	17-Jan-2011				38.80	3806.99
	14-Sep-2010				38.84	3806.95
	22-Jun-2010				39.19	3806.60
	22-Mar-2010				39.13	3806.66
	8-Dec-2009				38.85	3806.94
	28-Aug-2009				39.24	3806.55
	26-May-2009				39.31	3806.48
	10-Dec-2008				38.41	3807.38
	28-Sep-2008				38.42	3807.37
	10-Jun-2008				39.46	3806.33
	5-Feb-2008				38.61	3807.18
14-Nov-2007	38.54	3807.25				
12-Sep-2007	38.96	3806.83				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
833-05	24-Apr-2012	399712.39	1522374.73	3865.51	64.40	3801.11
	24-Jan-2012				63.60	3801.91
	8-Dec-2011				63.63	3801.88
	18-Jul-2011				63.23	3802.28
	19-Apr-2011				62.33	3803.18
	24-Jan-2011				61.90	3803.61
	14-Sep-2010				61.05	3804.46
	22-Jun-2010				61.97	3803.54
	22-Mar-2010				61.52	3803.99
	8-Dec-2009				61.39	3804.12
	28-Aug-2009				61.52	3803.99
	26-May-2009				61.14	3804.37
	10-Dec-2008				61.07	3804.44
	28-Sep-2008				60.99	3804.52
	10-Jun-2008				62.28	3803.23
5-Feb-2008	61.52	3803.99				
833-06	24-Apr-2012	402219.48	1522652.04	3878.20	73.97	3804.23
	24-Jan-2012				73.50	3804.70
	8-Dec-2011				73.41	3804.79
	18-Jul-2011				72.93	3805.27
	25-Apr-2001				72.16	3806.04
	17-Jan-2011				71.43	3806.77
	14-Sep-2010				72.05	3806.15
	22-Jun-2010				72.08	3806.12
	22-Mar-2010				72.00	3806.20
	8-Dec-2009				71.92	3806.28
	28-Aug-2009				72.22	3805.98
	26-May-2009				72.02	3806.18
	10-Dec-2008				70.95	3807.25
	28-Sep-2008				70.87	3807.33
	10-Jun-2008				71.78	3806.42
5-Feb-2008	71.47	3806.73				
833-07	24-Apr-2012	399298.8	1522082.75	3860.70	60.25	3800.45
	24-Jan-2012				59.71	3800.99
	8-Dec-2011				59.26	3801.44
	18-Jul-2011				58.99	3801.71
	19-Apr-2011				57.95	3802.75
	17-Jan-2011				56.87	3803.83
	14-Sep-2010				56.61	3804.09
	22-Jun-2010				57.55	3803.15
	22-Mar-2010				57.05	3803.65
	8-Dec-2009				56.94	3803.76
	28-Aug-2009				57.02	3803.68
	26-May-2009				56.64	3804.06
	10-Dec-2008				56.58	3804.12
	28-Sep-2008				58.53	3802.17
	10-Jun-2008				57.88	3802.82
5-Feb-2008	57.11	3803.59				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
833-08	24-Apr-2012	400535.64	1521938.23	3861.76	59.81	3801.95
	24-Jan-2012				58.86	3802.90
	8-Dec-2011				58.96	3802.80
	18-Jul-2011				58.36	3803.40
	25-Apr-2011				56.54	3805.22
	17-Jan-2011				56.55	3805.21
	14-Sep-2010				56.34	3805.42
	22-Jun-2010				57.32	3804.44
	22-Mar-2010				56.83	3804.93
	8-Dec-2009				56.63	3805.13
	28-Aug-2009				56.83	3804.93
	26-May-2009				56.41	3805.35
	10-Dec-2008				56.34	3805.42
	28-Sep-2008				56.07	3805.69
	10-Jun-2008				57.46	3804.30
5-Feb-2008	56.78	3804.98				
833-09	24-Apr-2012	398280.67	1520918.52	3826.27	26.44	3799.83
	24-Jan-2012				25.42	3800.85
	8-Dec-2011				25.08	3801.19
	18-Jul-2011				25.41	3800.86
	25-Apr-2011				22.86	3803.41
	17-Jan-2011				22.87	3803.40
	15-Sep-2010				22.56	3803.71
	22-Jun-2010				23.99	3802.28
	22-Mar-2010				23.20	3803.07
	8-Dec-2009				22.87	3803.40
	28-Aug-2009				22.67	3803.60
	26-May-2009				22.40	3803.87
	10-Dec-2008				22.65	3803.62
	28-Sep-2008				22.18	3804.09
	10-Jun-2008				23.71	3802.56
5-Feb-2008	23.23	3803.04				
833-10	24-Apr-2012	396715.89	1520283.6	3820.76	21.11	3799.65
	24-Jan-2012				20.14	3800.62
	8-Dec-2011				19.95	3800.81
	18-Jul-2011				19.23	3801.53
	19-Apr-2011				18.67	3802.09
	17-Jan-2011				17.80	3802.96
	15-Sep-2010				17.29	3803.47
	22-Jun-2010				18.80	3801.96
	22-Mar-2010				18.38	3802.38
	8-Dec-2009				17.72	3803.04
	28-Aug-2009				17.22	3803.54
	26-May-2009				17.40	3803.36
	10-Dec-2008				17.71	3803.05
	28-Sep-2008				16.98	3803.78
	10-Jun-2008				18.17	3802.59
5-Feb-2008	18.11	3802.65				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
<b>Sunset/Desert Land Dairy</b>						
257-01	24-Apr-2012	395856.31	1520572.16	3820.33	21.01	3799.32
	24-Jan-2012				20.09	3800.24
	8-Dec-2011				20.18	3800.15
	18-Jul-2011				19.75	3800.58
	19-Apr-2011				18.52	3801.81
	18-Jan-2011				17.83	3802.50
	15-Sep-2010				17.15	3803.18
	22-Jun-2010				18.15	3802.18
	22-Mar-2010				18.40	3801.93
	8-Dec-2009				17.66	3802.67
	28-Aug-2009				16.99	3803.34
	26-May-2009				17.41	3802.92
	10-Dec-2008				17.87	3802.46
	27-Sep-2008				16.75	3803.58
	10-Jun-2008				17.88	3802.45
5-Feb-2008	17.59	3802.74				
14-Nov-2007	18.53	3801.80				
12-Sep-2007	18.10	3802.23				
257-02	24-Apr-2012	394728.34	1521030.29	3813.67	15.27	3798.40
	24-Jan-2012				13.90	3799.77
	8-Dec-2011				14.38	3799.29
	19-Jul-2011				13.50	3800.17
	19-Apr-2011				12.59	3801.08
	18-Jan-2011				11.84	3801.83
	15-Sep-2010				10.86	3802.81
	22-Jun-2010				11.08	3802.59
	22-Mar-2010				12.22	3801.45
	8-Dec-2009				11.52	3802.15
	28-Aug-2009				10.86	3802.81
	26-May-2009				11.38	3802.29
	10-Dec-2008				11.67	3802.00
	27-Sep-2008				9.75	3803.92
	10-Jun-2008				11.82	3801.85
5-Feb-2008	11.67	3802.00				
14-Nov-2007	12.22	3801.45				
12-Sep-2007	11.55	3802.12				
257-03	24-Apr-2012	397935.69	1518746.14	3814.74	11.56	3803.18
	24-Jan-2012				10.89	3803.85
	1-Nov-2011				11.29	3803.45
	18-Jul-2011				8.77	3805.97
	19-Apr-2011				9.31	3805.43
	17-Jan-2011				10.04	3804.70
	21-Sep-2010				9.26	3805.48
	22-Jun-2010				9.11	3805.63
	22-Mar-2010				10.45	3804.29
	8-Dec-2009				9.78	3804.96
	28-Aug-2009				9.43	3805.31
	26-May-2009				9.55	3805.19
	10-Dec-2008				10.26	3804.48
	27-Sep-2008				9.73	3805.01
	10-Jun-2008				9.70	3805.04
5-Feb-2008	11.04	3803.70				
14-Nov-2007	9.03	3805.71				
12-Sep-2007	9.61	3805.13				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
257/260-01	24-Apr-2012	397678.36	1519948.22	3814.04	12.98	3801.06
	30-Jan-2012				12.26	3801.78
	1-Nov-2011				12.79	3801.25
	18-Jul-2011				10.65	3803.39
	26-Apr-2011				11.66	3802.38
	17-Jan-2011				10.44	3803.60
	15-Sep-2010				9.94	3804.10
	22-Jun-2010				10.90	3803.14
	22-Mar-2010				10.71	3803.33
	8-Dec-2009				10.42	3803.62
	28-Aug-2009				10.11	3803.93
	26-May-2009				10.00	3804.04
	10-Dec-2008				10.48	3803.56
	27-Sep-2008				9.80	3804.24
	10-Jun-2008				11.00	3803.04
	5-Feb-2008				10.99	3803.05
14-Nov-2007	11.21	3802.83				
12-Sep-2007	NM	NM				
<b>Additional Wells</b>						
Bruce1	18-Jul-2011	388741.02	1523777.06	3808.92	Destroyed	
	19-Apr-2011				11.17	3797.75
	17-Jan-2011				11.13	3797.79
	15-Sep-2010				10.38	3798.54
	23-Jun-2010				10.99	3797.93
	21-Mar-2010				11.50	3797.42
	8-Dec-2009				11.05	3797.87
	27-Aug-2009				10.41	3798.51
	27-May-2009				10.77	3798.15
	10-Dec-2008				11.28	3797.64
	27-Sep-2008				10.93	3797.99
	10-Jun-2008				11.28	3797.64
	5-Feb-2008				11.47	3797.45
Bruce2	5-Feb-2008	NM	NM	NM	Destroyed	
	10-Jun-2008				8.33	--
<b>SOUTHERN AREA</b>						
<b>Del Oro Dairy</b>						
692-01	24-Apr-2012	373615.88	1531529.38	3844.13	58.43	3785.70
	25-Jan-2012				78.58	Pumping
	9-Dec-2011				58.19	3785.94
	18-Jul-2011				57.79	3786.34
	19-Apr-2011				57.39	3786.74
	18-Jan-2011				57.17	3786.96
	15-Sep-2010				57.57	3786.56
	30-Jun-2010				61.15	Pumping
	22-Mar-2010				58.01	3786.12
	9-Dec-2009				58.25	3785.88
	29-Aug-2009				58.19	3785.94
	26-May-2009				57.80	3786.33
	11-Dec-2008				Pumping	NM
	28-Sep-2008				Pumping	NM
	11-Jun-2008				57.75	3786.38
	6-Feb-2008				57.42	3786.71
	14-Nov-2007				57.38	3786.75
13-Sep-2007	57.46	3786.67				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
692-02	24-Apr-2012	372984.72	1531192.1	3840.84	55.71	3785.13
	25-Jan-2012				54.70	3786.14
	13-Dec-2011				54.94	3785.90
	18-Jul-2011				55.10	3785.74
	19-Apr-2011				54.68	3786.16
	18-Jan-2011				54.32	3786.52
	15-Sep-2010				54.39	3786.45
	30-Jun-2010				54.50	3786.34
	22-Mar-2010				54.90	3785.94
	9-Dec-2009				55.11	3785.73
	28-Aug-2009				55.03	3785.81
	26-May-2009				55.38	3785.46
	11-Dec-2008				54.93	3785.91
	28-Sep-2008				54.69	3786.15
	11-Jun-2008				54.93	3785.91
	6-Feb-2008				54.74	3786.10
14-Nov-2007	54.42	3786.42				
13-Sep-2007	54.61	3786.23				
692-04	24-Apr-2012	372982.53	1531555.21	3842.66	57.13	3785.53
	25-Jan-2012				56.34	3786.32
	9-Dec-2011				56.91	3785.75
	18-Jul-2011				56.92	3785.74
	19-Apr-2011				56.47	3786.19
	18-Jan-2011				56.15	3786.51
	15-Sep-2010				55.90	3786.76
	30-Jun-2010				56.81	3785.85
	22-Mar-2010				56.81	3785.85
	8-Dec-2009				56.86	3785.80
	28-Aug-2009				56.82	3785.84
	26-May-2009				57.09	3785.57
	11-Dec-2008				56.71	3785.95
	28-Sep-2008				56.41	3786.25
	11-Jun-2008				56.54	3786.12
	6-Feb-2008				56.40	3786.26
14-Nov-2007	55.95	3786.71				
13-Sep-2007	56.19	3786.47				
692-05	24-Apr-2012	374807.26	1532403	3854.26	77.96	3776.30
	24-Jan-2012				76.80	3777.46
	9-Dec-2011				77.39	3776.87
	18-Jul-2011				77.59	3776.67
	19-Apr-2011				76.46	3777.80
	18-Jan-2011				75.55	3778.71
	15-Sep-2010				76.14	3778.12
	30-Jun-2010				76.20	3778.06
	22-Mar-2010				75.01	3779.25
	9-Dec-2009				75.52	3778.74
	28-Aug-2009				76.15	3778.11
	26-May-2009				75.65	3778.61
	11-Dec-2008				74.95	3779.31
	28-Sep-2008				75.36	3778.90
	11-Jun-2008				75.72	3778.54
	6-Feb-2008				74.84	3779.42
14-Nov-2007	75.90	3778.36				
13-Sep-2007	75.84	3778.42				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
692-06	24-Apr-2012	375054.77	1532411.83	3856.48	79.84	3776.64
	30-Jan-2012				78.99	3777.49
	9-Dec-2011				79.32	3777.16
	18-Jul-2011				79.43	3777.05
	19-Apr-2011				78.32	3778.16
	18-Jan-2011				77.44	3779.04
	15-Sep-2010				78.02	3778.46
	30-Jun-2010				78.12	3778.36
	22-Mar-2010				76.91	3779.57
	9-Dec-2009				77.44	3779.04
	28-Aug-2009				78.04	3778.44
	26-May-2009				77.53	3778.95
	11-Dec-2008				76.79	3779.69
	28-Sep-2008				77.25	3779.23
	11-Jun-2008				77.60	3778.88
	6-Feb-2008				76.76	3779.72
14-Nov-2007	77.80	3778.68				
13-Sep-2007	77.75	3778.73				
692-07	24-Apr-2012	374944.88	1532019.81	3848.20	71.84	3776.36
	24-Jan-2012				70.30	3777.90
	13-Dec-2011				70.54	3777.66
	18-Jul-2011				71.32	3776.88
	19-Apr-2011				70.22	3777.98
	18-Jan-2011				69.01	3779.19
	15-Sep-2010				69.72	3778.48
	30-Jun-2010				69.87	3778.33
	22-Mar-2010				68.59	3779.61
	9-Dec-2009				68.97	3779.23
	28-Aug-2009				69.71	3778.49
	26-May-2009				69.35	3778.85
	11-Dec-2008				68.38	3779.82
	28-Sep-2008				68.99	3779.21
	11-Jun-2008				69.35	3778.85
	6-Feb-2008				68.44	3779.76
14-Nov-2007	69.46	3778.74				
13-Sep-2007	69.46	3778.74				
692-08	24-Apr-2012	375535.69	1531378.09	3843.09	65.84	3777.25
	30-Jan-2012				64.58	3778.51
	9-Dec-2011				64.65	3778.44
	18-Jul-2011				65.79	3777.30
	19-Apr-2011				64.32	3778.77
	18-Jan-2011				62.49	3780.60
	1-Oct-2010				63.83	3779.26
	30-Jun-2010				63.71	3779.38
	22-Mar-2010				62.45	3780.64
	9-Dec-2009				62.57	3780.52
	28-Aug-2009				63.42	3779.67
	26-May-2009				64.03	3779.06
	11-Dec-2008				61.83	3781.26
	28-Sep-2008				63.42	3779.67
	11-Jun-2008				63.40	3779.69
	6-Feb-2008				62.02	3781.07
14-Nov-2007	63.25	3779.84				
13-Sep-2007	64.02	3779.07				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
692-09	24-Apr-2012	373575.83	1532395.09	3856.32	81.17	3775.15
	25-Jan-2012				79.80	3776.52
	8-Dec-2011				80.44	3775.88
	18-Jul-2011				80.78	3775.54
	19-Apr-2011				79.65	3776.67
	17-Jan-2011				78.52	3777.80
	15-Sep-2010				79.33	3776.99
	30-Jun-2010				79.52	3776.80
	22-Mar-2010				78.13	3778.19
	9-Dec-2009				78.79	3777.53
	28-Aug-2009				79.48	3776.84
	26-May-2009				78.89	3777.43
	11-Dec-2008				78.11	3778.21
	28-Sep-2008				78.55	3777.77
	11-Jun-2008				79.03	3777.29
	6-Feb-2008				78.16	3778.16
14-Nov-2007	79.15	3777.17				
13-Sep-2007	79.93	3776.39				
<b>Anthony Waste Water Treatment Plant</b>						
MW-1	25-Apr-2012	372097.86	1532364.36	3843.03	58.28	3784.75
	30-Jan-2012				57.89	3785.14
	9-Dec-2011				58.01	3785.02
	18-Jul-2011				58.44	3784.59
	20-Apr-2011				58.35	3784.68
	18-Jan-2011				58.20	3784.83
	15-Sep-2010				58.28	3784.75
	24-Jun-2010				58.50	3784.53
	22-Mar-2010				58.43	3784.60
	9-Dec-2009				58.15	3784.88
	28-Aug-2009				58.07	3784.96
	27-May-2009				58.41	3784.62
	MW-2				25-Apr-2012	NM
30-Jan-2012		59.30	3783.95			
9-Dec-2011		59.33	3783.92			
18-Jul-2011		59.41	3783.84			
20-Apr-2011		59.42	3783.83			
18-Jan-2011		59.31	3783.94			
15-Sep-2010		59.08	3784.17			
24-Jun-2010		59.37	3783.88			
22-Mar-2010		59.44	3783.81			
9-Dec-2009		59.19	3784.06			
28-Aug-2009		58.98	3784.27			
27-May-2009	59.45	3783.80				
MW-3	25-Apr-2012	NM	NM	3841.24	57.32	3783.92
	30-Jan-2012				56.80	3784.44
	8-Dec-2011				56.87	3784.37
	18-Jul-2011				56.98	3784.26
	19-Apr-2011				56.93	3784.31
	18-Jan-2011				56.73	3784.51
	15-Sep-2010				Could not access	
	24-Jun-2010				56.91	3784.33
	22-Mar-2010				56.93	3784.31
	9-Dec-2009				56.69	3784.55
	28-Aug-2009				56.54	3784.70
	27-May-2009				56.96	3784.28



**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
<b>ABATEMENT PLAN MONITOR WELLS</b>						
DAD-01	23-Apr-2012	422970.59	1512825.76	3886.16	68.19	3817.97
	25-Jan-2012				67.15	3819.01
	8-Dec-2011				67.41	3818.75
	19-Jul-2011				67.41	3818.75
	25-Apr-2011				65.86	3820.30
	18-Jan-2011				65.37	3820.79
	16-Sep-2010				65.86	3820.30
	24-Jun-2010				66.58	3819.58
	21-Mar-2010				65.46	3820.70
	9-Dec-2009				65.32	3820.84
	29-Aug-2009				65.68	3820.48
26-May-2009	65.43	3820.73				
DAD-02	24-Apr-2012	413002.98	1517319.93	3875.82	63.45	3812.37
	25-Jan-2012				62.91	3812.91
	8-Dec-2011				63.07	3812.75
	19-Jul-2011				62.63	3813.19
	18-Apr-2011				62.11	3813.71
	17-Jan-2011				61.37	3814.45
	16-Sep-2010				61.79	3814.03
	25-Jun-2010				62.95	3812.87
	21-Mar-2010				61.43	3814.39
	9-Dec-2009				61.46	3814.36
	29-Aug-2009				61.65	3814.17
26-May-2009	61.59	3814.23				
DAD-03	24-Apr-2012	407721.31	1516497.85	3820.58	10.97	3809.61
	25-Jan-2012				10.60	3809.98
	8-Dec-2011				10.70	3809.88
	19-Jul-2011				10.29	3810.29
	18-Apr-2011				10.12	3810.46
	24-Jan-2011				9.36	3811.22
	16-Sep-2010				9.40	3811.18
	24-Jun-2010				9.97	3810.61
	21-Mar-2010				9.90	3810.68
	9-Dec-2009				9.79	3810.79
	29-Aug-2009				9.72	3810.86
26-May-2009	9.89	3810.69				
DAD-04	24-Apr-2012	404576.66	1517413.28	3821.47	14.27	3807.20
	25-Jan-2012				13.40	3808.07
	8-Dec-2011				13.84	3807.63
	19-Jul-2011				13.63	3807.84
	18-Apr-2011				13.21	3808.26
	17-Jan-2011				12.71	3808.76
	16-Sep-2010				12.14	3809.33
	23-Jun-2010				12.59	3808.88
	21-Mar-2010				12.88	3808.59
	9-Dec-2009				12.10	3809.37
	29-Aug-2009				12.13	3809.34
26-May-2009	12.31	3809.16				

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
DAD-05	24-Apr-2012	396712.87	1519102.06	3816.01	14.14	3801.87
	25-Jan-2012				14.11	3801.90
	8-Dec-2011				14.05	3801.96
	18-Jul-2011				12.31	3803.70
	18-Apr-2011				12.58	3803.43
	17-Jan-2011				12.50	3803.51
	16-Sep-2010				11.87	3804.14
	23-Jun-2010				12.95	3803.06
	21-Mar-2010				12.92	3803.09
	9-Dec-2009				12.13	3803.88
	29-Aug-2009				11.85	3804.16
	26-May-2009				12.07	3803.94
DAD-06	24-Apr-2012	404273.19	1522081.00	3887.71	82.13	3805.58
	25-Jan-2012				81.32	3806.39
	8-Dec-2011				81.55	3806.16
	18-Jul-2011				80.94	3806.77
	20-Apr-2011				80.16	3807.55
	17-Jan-2011				79.43	3808.28
	16-Sep-2010				79.68	3808.03
	25-Jun-2010				80.33	3807.38
	21-Mar-2010				79.85	3807.86
	9-Dec-2009				79.95	3807.76
	29-Aug-2009				80.46	3807.25
	26-May-2009				80.32	3807.39
DAD-07	24-Apr-2012	399270.18	1524320.88	3891.38	90.25	3801.13
	25-Jan-2012				89.75	3801.63
	8-Dec-2011				89.35	3802.03
	18-Jul-2011				88.98	3802.40
	20-Apr-2011				88.34	3803.04
	17-Jan-2011				87.94	3803.44
	16-Sep-2010				88.29	3803.09
	25-Jun-2010				88.49	3802.89
	21-Mar-2010				88.00	3803.38
	9-Dec-2009				88.19	3803.19
	29-Aug-2009				88.45	3802.93
	26-May-2009				88.14	3803.24
DAD-08	24-Apr-2012	395287.38	1522575.07	3849.15	50.34	3798.81
	25-Jan-2012				49.62	3799.53
	13-Dec-2011				50.12	3799.03
	18-Jul-2011				49.97	3799.18
	20-Apr-2011				48.87	3800.28
	18-Jan-2011				47.80	3801.35
	17-Sep-2010				47.05	3802.10
	25-Jun-2010				48.06	3801.09
	21-Mar-2010				47.76	3801.39
	9-Dec-2009				47.42	3801.73
	29-Aug-2009				47.18	3801.97
	26-May-2009				47.38	3801.77

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
DAD-09	24-Apr-2012	373259.30	1530905.70	3838.03	53.40	3784.63
	25-Jan-2012				52.67	3785.36
	13-Dec-2011				52.62	3785.41
	18-Jul-2011				52.28	3785.75
	18-Apr-2011				51.89	3786.14
	17-Jan-2011				51.09	3786.94
	17-Sep-2010				51.55	3786.48
	29-Jun-2010				52.20	3785.83
	21-Mar-2010				51.84	3786.19
	9-Dec-2009				52.12	3785.91
	29-Aug-2009				52.23	3785.80
26-May-2009	52.49	3785.54				
<b>Abatement Plan Monitor Wells Continued</b>						
DAD-10	24-Apr-2012	372980.55	1532375.33	3854.93	80.36	3774.57
	25-Jan-2012				78.76	3776.17
	13-Dec-2011				79.07	3775.86
	18-Jul-2011				80.29	3774.64
	20-Apr-2011				79.13	3775.80
	17-Jan-2011				77.82	3777.11
	17-Sep-2010				78.66	3776.27
	29-Jun-2010				78.59	3776.34
	21-Mar-2010				77.19	3777.74
	9-Dec-2009				77.92	3777.01
	29-Aug-2009				78.72	3776.21
26-May-2009	77.90	3777.03				
DAD-11 (177-03)	24-Apr-12	416211.35	1513814.71	3835.90	19.12	3816.78
	25-Jan-12				18.40	3817.50
	13-Dec-11				18.75	3817.15
	19-Jul-11				17.54	3818.36
	19-Apr-2011				17.31	3818.59
	17-Jan-2011				16.99	3818.91
	15-Sep-2010				16.24	3819.66
	23-Jun-2010				16.53	3819.37
	22-Mar-2010				17.29	3818.61
	8-Dec-2009				16.82	3819.08
	28-Aug-2009				16.63	3819.27
	26-May-2009				16.92	3818.98
	10-Dec-2008				17.05	3818.85
	27-Sep-2008				16.65	3819.25
	10-Jun-2008				17.53	3818.37
6-Feb-2008	17.33	3818.57				
13-Nov-2007	17.19	3818.71				
13-Sep-2007	16.61	3819.29				
DAD-12	23-Apr-2011	419731.54	1512274.77	3866.72	48.44	3818.28
	25-Jan-2012				48.01	3818.71
	6-Dec-2011				48.15	3818.57
DAD-13	23-Apr-2012	417879.08	1515673.13	3898.44	83.56	3814.88
	25-Jan-2012				82.72	3815.72
	8-Dec-2011				82.88	3815.56

**TABLE 1. SUMMARY OF MONITOR WELL FLUID GAUGING DATA  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Measured	Northing <sup>a</sup>	Easting <sup>a</sup>	Casing Elevation <sup>b</sup>	Depth to Water <sup>c</sup>	Ground Water Elevation <sup>b</sup>
DAD-14	24-Apr-2012	414923.33	1514695.26	3841.90	26.07	3815.83
	25-Jan-2012				26.10	3815.80
	8-Dec-2011				26.30	3815.60
DAD-16	24-Apr-2012	400628.77	1519350.74	3819.28	17.64	3801.64
	25-Jan-2012				16.50	3802.78
	8-Dec-2011				16.58	3802.70
DAD-17	24-Apr-2012	393991.97	1520267.94	3817.75	21.01	3796.74
	25-Jan-2012				17.74	3800.01
	9-Dec-2011				19.21	3798.54
DAD-18	24-Apr-2012	395714.14	1520588.96	3821.59	22.20	3799.39
	25-Jan-2012				21.33	3800.26
	6-Dec-2011				21.43	3800.16
DAD-19	24-Apr-2012	400164.47	1522027.92	3864.50	63.31	3801.19
	25-Jan-2012				62.25	3802.25
	6-Dec-2011				62.29	3802.21
DAD-20	25-Apr-2012	371751.45	1531188.19	3833.27	Obstruction in Well	
	25-Jan-2012				50.65	3782.62
	6-Dec-2011				50.66	3782.61
DAD-21	24-Apr-2012	374013.39	1530983.98	3839.62	53.61	3786.01
	30-Jan-2012				53.44	3786.18
	6-Dec-2011				53.24	3786.38
DAD-22	25-Apr-2012	373029.62	1530352.69	3827.14	43.86	3783.28
	25-Jan-2012				43.22	3783.92
	13-Dec-2011				43.27	3783.87

NOTES:

<sup>a</sup> Horizontal control to NM State Plane Coordinates Central NAD83 Grid Coordinates (in feet)

<sup>b</sup> Vertical Control to NAVD88 Datum in feet above mean sea level

<sup>c</sup> Measured in feet below the top of casing at survey point on north side of well

<sup>d</sup> Measured in feet

Wells were gauged on a different date by Magee and Associates Inc.

Wells were gauged on a different date by EnviroCompliance Inc.

Measured data were suspect and corrected to reflect appropriate trends in accordance with surrounding wells

**TABLE 2. SUMMARY OF SAMPLE ANALYTICAL METHODS AND COLLECTION REQUIREMENTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Target Analytes	Analytical Method	Sample Container	Preservative	Holding Time
<b>Groundwater Samples</b>				
Nitrate/Nitrite	EPA 300.0/SM 4500 NO3 E	250 mL HDPE Bottle	H <sub>2</sub> SO <sub>4</sub> to pH,2, Cool to <6°C,	28 Days
Total Kjeldhal Nitrogen	SM 4500 NORG C	250 mL HDPE Bottle	H <sub>2</sub> SO <sub>4</sub> to pH,2, Cool to <6°C,	28 Days
Chloride	EPA 300.0	250 mL HDPE Bottle	Cool to <6°C	28 Days
Total Dissolved Solids	SM 2540 C MOD	250 mL HDPE Bottle	Cool to <6°C	28 Days
NOTES: °C = Degree Celsius ASTM = American Society for Testing and Materials EPA = U.S. Environmental Protection Agency HDPE = High-density polyethylene				

**TABLE 3. ABATEMENT PLAN MONITORING WELLS GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)	Sulfate (mg/l)	
<b>Abatement Plan Monitoring Wells</b>							
DAD-01	9-May-12	6.88	2.80	401	1,660	NA	
	31-Jan-12	9.90	2.52	439	1,520	NA	
	27-Oct-11	9.56	3.50	436	1,840	256	
	20-Jul-11	12.0	2.38	426	1,650	NA	
	20-Apr-11	10.3	<2.17	460	1,710	NA	
	24-Jan-11	19.8	3.50	408	1,820	NA	
	16-Sep-10	7.56	<10.0	439	1,800	NA	
	29-Jun-10	8.55	<1.0	491	2,120	NA	
	21-Mar-10	6.3	<5.0	500	1,780	NA	
	NMED Split	9-Dec-09	7.5	1.5	550	2,010	NA
		9-Dec-09	7.3	2.8	468	356	264
		29-Aug-09	7.3	<5.0	540	1,970	NA
12-May-09		5.6	<1.0	540	1,800	NA	
DAD-02	9-May-12	7.71	<1.72	373	1,830	NA	
	31-Jan-12	7.66	<2.17	335	1,720	NA	
	27-Oct-11	8.30	2.52	380	1,360	475	
	20-Jul-11	7.66	<2.17	374	1,750	NA	
	21-Apr-11	7.97	<2.17	434	1,760	NA	
	24-Jan-11	6.38	2.80	443	2,240	NA	
	16-Sep-10	3.44	<10.0	385	1,790	NA	
	29-Jun-10	8.11	<0.5	364	1,870	NA	
	21-Mar-10	8.1	<1.0	420	1,970	NA	
	NMED Split	9-Dec-09	9.0	<1.0	440	1,920	NA
		9-Dec-09	9	0.39	388	1,970	586
		29-Aug-09	9.9	<2.0	490	1,890	NA
14-May-09		7.4	<5.0	350	1,700	NA	
DAD-03 *	9-May-12	<0.114	2.66	1,200	4,160	NA	
	31-Jan-12	<0.500	4.34	1,340	4,350	NA	
	26-Oct-11	<0.500	3.22	1,790	5,420	1100	
	20-Jul-11	<1.00	3.22	1,630	4,720	NA	
	21-Apr-11	<0.500	<2.17	1,870	5,600	NA	
	24-Jan-11	<0.00955	4.20	1,590	4,660	NA	
	16-Sep-10	0.217	<10.0	1,370	4,320	NA	
	29-Jun-10	<0.5	6.18	1,570	5,150	NA	
	21-Mar-10	<10	<1.0	2,200	5,620	NA	
	NMED Split	9-Dec-09	<10	<5.0	2,100	5,590	NA
		9-Dec-09	<0.1	0.88	1,570	5,300	1,160
		29-Aug-09	<0.10	<5.0	1,400	4,420	NA
12-May-09		<10	<5.0	1,200	5,000	NA	
DAD-04	9-May-12	0.305	<1.72	502	1,970	NA	
	31-Jan-12	2.05	<2.17	493	2,320	NA	
	26-Oct-11	<0.500	2.80	590	2,950	380	
	20-Jul-11	<0.500	<2.17	670	2,540	NA	
	20-Apr-11	<0.500	<2.17	584	2,570	NA	
	24-Jan-11	<0.00955	2.66	608	2,400	NA	
	16-Sep-10	<0.100	<10.0	683	2,560	NA	
	29-Jun-10	<0.5	1.4	570	2,330	NA	
	29-Jun-10	<0.5	1.4	570	2,330	NA	
	21-Mar-10	<2.0	<2.0	620	2,460	NA	
	NMED Split	9-Dec-09	<2.0	1.7	810	2,720	NA
		9-Dec-09	<0.1	1.2	659	2,630	373
29-Aug-09		<2.0	<5.0	690	2,690	NA	
13-May-09		<2.0	<5.0	690	2,700	NA	

**TABLE 3. ABATEMENT PLAN MONITORING WELLS GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)	Sulfate (mg/l)
DAD-05	9-May-12	0.908	2.10	566	2,380	NA
	1-Feb-12	<0.500	<2.17	558	2,020	NA
	26-Oct-11	<0.500	2.66	647	900	377
	20-Jul-11	<0.500	5.04	599	2,460	NA
	20-Apr-11	<0.500	<2.17	430	1,810	NA
	20-Jan-11	0.128	2.10	477	1,870	NA
	16-Sep-10	<2.50	<10.0	536	2,220	NA
	29-Jun-10	<0.5	1.1	627	2,550	NA
	21-Mar-10	<2.0	<1.0	630	2,340	NA
	9-Dec-09	<2.0	1.3	710	2,420	NA
	9-Dec-09	<0.1	0.95	563	2,290	362
	29-Aug-09	<2.0	<2.0	630	2,310	NA
	13-May-09	<2.0	<5.0	640	2,700	NA
Duplicate	13-May-09	<10	1.6	618	2,260	NA
DAD-06	9-May-12	11.0	<1.72	375	1,570	NA
	31-Jan-12	13.6	<2.17	382	1,510	NA
	27-Oct-11	9.20	<2.17	322	1,060	228
	20-Jul-11	18.0	3.64	358	1,370	NA
	21-Apr-11	18.0	<2.17	349	1,330	NA
	24-Jan-11	12.2	2.10	360	1,270	NA
	16-Sep-10	9.20	<10.0	359	1,370	NA
	29-Jun-10	11.6	<2.0	365	1,460	NA
	21-Mar-10	10	<2.0	390	1,390	NA
	9-Dec-09	10	<1.0	380	1,380	NA
	9-Dec-09	8.6	0.36	354	1,440	262
	29-Aug-09	8.2	<5.0	390	1,260	NA
	14-May-09	11	<5.0	350	1,300	NA
Duplicate	14-May-09	8.17	0.4	338	1,250	NA
DAD-07	9-May-12	3.81	<1.72	588	2,150	NA
	31-Jan-12	5.40	<2.17	610	1,640	NA
	26-Oct-11	5.22	2.24	591	750	426
	20-Jul-11	4.67	2.80	554	1,880	NA
	20-Apr-11	4.14	<2.17	525	1,780	NA
	19-Jan-11	0.410	<2.05	518	1,740	NA
	16-Sep-10	<2.50	<10.0	637	1,990	NA
	29-Jun-10	5.17	<0.5	569	2,060	NA
	21-Mar-10	5.1	<1.0	640	1,970	NA
	9-Dec-09	5.4	<1.0	620	1,900	NA
	9-Dec-09	5.2	<0.1	536	1,870	403
	29-Aug-09	4.4	<5.0	610	1,780	NA
	14-May-09	4.6	<1.0	530	1,800	NA
DAD-08	9-May-12	2.39	<1.72	1,150	3,260	NA
	31-Jan-12	2.69	<2.17	1,250	2,990	NA
	26-Oct-11	2.80	<2.17	1,260	2,500	471
	20-Jul-11	3.36	3.78	1,320	3,060	NA
	20-Apr-11	4.33	<2.17	1,300	3,280	NA
	19-Jan-11	<0.239	2.10	1,240	2,600	NA
	17-Sep-10	<2.50	<10.0	1,370	3,230	NA
	29-Jun-10	2.53	<1.0	1,290	5,950	NA
	21-Mar-10	<4.0	<1.0	1,300	3,270	NA
	9-Dec-09	<4.0	<1.0	1,400	3,290	NA
	9-Dec-09	3.1	0.26	1,400	3,070	509
	29-Aug-09	<4.0	<2.0	1,500	3,180	NA
	14-May-09	3.0	<5.0	1,300	3,600	NA

**TABLE 3. ABATEMENT PLAN MONITORING WELLS GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)	Sulfate (mg/l)
DAD-09	10-May-12	50.9	<1.72	561	2,270	NA
	31-Jan-12	59.8	<2.17	622	2,220	NA
	26-Oct-11	77.7	<2.17	728	1,600	433
	20-Jul-11	70.2	<2.17	727	2,500	NA
	20-Apr-11	47.5	<2.17	483	1,910	NA
	19-Jan-11	42.8	2.38	745	2,600	NA
	17-Sep-10	22.6	<10.0	204	47	NA
	29-Jun-10	59.2	<5.0	667	2,240	NA
	21-Mar-10	29	<5.0	290	1,190	NA
	9-Dec-09	26	<5.0	300	1,190	NA
NMED Split	9-Dec-09	22	1.6	228	1,170	152
	29-Aug-09	46	<5.0	640	2,320	NA
	13-May-09	44	<5.0	740	2,400	NA
DAD-10	10-May-12	1.52	<1.72	361	1,400	NA
	31-Jan-12	<0.500	<2.17	433	800	NA
	26-Oct-11	3.33	2.80	384	1,150	206
	20-Jul-11	2.29	<2.17	383	1,290	NA
	20-Apr-11	1.30	<2.17	411	1,340	NA
	19-Jan-11	12.7	2.10	429	1,140	NA
	17-Sep-10	2.73	<10.0	404	1,320	NA
	29-Jun-10	1.28	<1.0	390	1,360	NA
	21-Mar-10	<2.0	<1.0	420	1,380	NA
	9-Dec-09	1.4	<1.0	460	1,360	NA
NMED Split	9-Dec-09	1.5	<0.1	378	1,340	196
	29-Aug-09	1.2	<1.0	420	1,340	NA
	14-May-09	<2.0	<1.0	410	1,300	NA
DAD-11 (formerly 177-03)	14-May-12	0.791	<1.72	359	1,550	NA
	1-Feb-12	2.38	<2.17	456	1,700	NA
	27-Oct-11	<0.500	<2.17	434	1,290	215
	2-Aug-11	<0.500	<2.17	427	1,490	NA
	5-May-11	<0.500	<2.17	398	1,360	NA
	25-Jan-11	4.60	<2.05	386	1,500	NA
	21-Sep-10	3.21	<10.0	369	1,520	NA
	29-Jun-10	1.6	<1.0	430	1,610	NA
	28-Apr-10	1.5	<1.0	450	1,600	NA
	20-Jan-10	1.4	<1.0	460	1,600	NA
	21-Oct-09	1.0	<1.0	430	1,600	NA
	7-Jul-09	0.80	<1.0	470	1,500	NA
	6-May-09	0.97	3.5	450	1,600	NA
22-Jan-09	1.00	<1.0	370	1,600	NA	
DAD-12	14-May-12	23.1	<1.72	561	2,870	NA
	1-Feb-12	20.8	<2.17	614	2,670	NA
	7-Dec-11	18.8	<2.17	597	2,620	616
DAD-13	10-May-12	8.66	<1.72	514	2,010	NA
	1-Feb-12	7.59	<2.17	537	1,960	NA
	27-Oct-11	7.51	2.52	536	3,700	321
DAD-14	14-May-12	28.8	<1.72	881	3,280	NA
	1-Feb-12	20.3	<2.17	861	2,880	NA
	27-Oct-11	17.2	2.80	835	1,780	447
DAD-15	Waiting for Access - Well Not Installed					
DAD-16	14-May-12	0.147	<1.72	378	2,080	NA
	1-Feb-12	<0.500	<2.17	438	1,960	NA
	27-Oct-11	<0.500	3.36	410	1,520	408



**TABLE 3. ABATEMENT PLAN MONITORING WELLS GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)	Sulfate (mg/l)
DAD-17	10-May-12	<0.114	<1.72	353	1,580	NA
	1-Feb-12	<0.500	3.36	113	714	NA
	26-Oct-11	<0.500	3.50	175	724	186
DAD-18	10-May-12	9.11	<1.72	558	2,700	NA
	1-Feb-12	9.62	<2.17	629	2,470	NA
	7-Dec-11	9.21	<2.17	639	2,670	495
DAD-19	10-May-12	54.8	<1.72	835	3,460	NA
	1-Feb-12	59.8	<2.17	913	2,950	NA
	7-Dec-11	47.4	<2.17	789	3,070	544
DAD-20	10-May-12	Obstruction in Well				
	31-Jan-12	21.2	<2.17	568	1,000	NA
	7-Dec-11	16.1	<2.17	611	2,020	383
DAD-21	10-May-12	1.16	<1.72	364	2,840	NA
	31-Jan-12	6.79	2.94	475	1,620	NA
	7-Dec-11	2.14	<2.17	396	1,600	219
DAD-22	10-May-12	18.3	<1.72	818	1,580	NA
	1-Feb-12	23.6	<2.17	908	3,000	NA
	26-Oct-11	29.5	2.52	781	3,860	494
<b>NMWQCC Standard</b>		<b>10</b>	<b>NA</b>	<b>250</b>	<b>1,000</b>	<b>600</b>
NOTES: Shading indicates exceedence of NMWQCC standard NA = Not analyzed ND = Non detect NMWQCC = New Mexico Water Quality Control Commission TDS = Total dissolved solids TKN = Total Kjeldahl Nitrogen * = DAD-03 (6-29-10) Roots in sample may have resulted in a measured TKN result.						

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
<b>Northern Area</b>					
<b>Northern Land Application Area</b>					
70-03	25-Apr-12	53.1	5.60	2,540	6,550
	2-Feb-12	67.6	<2.17	2,840	7,480
	7-Nov-11	61.6	<2.17	3,270	7,910
	3-Aug-11	63.1	2.80	3,140	8,040
	21-Apr-11	58.9	<2.17	3,130	8,040
	27-Jan-11	71.2	3.36	3,140	7,580
	22-Sep-10	62.8	<10.0	2,940	7,840
	30-Jun-10	57	<1.0	2,200	5,720
	26-Mar-10	29.6	ND	2,160	5,180
	15-Dec-09	27.1	ND	2,199	5,462
	2-Sep-09	25.4	ND	2,149	5,570
	4-Jun-09	18.6	ND	1,999	5,518
4-Mar-09	35.5	ND	2,074	5,418	
70/86/340-01	25-Apr-12	11.8	<1.72	1,620	4,280
	2-Feb-12	20.0	8.12	1,750	5,440
	7-Nov-11	25.5	4.76	1,970	5,920
	25-Jul-11	31.0	2.24	1,800	5,500
	21-Apr-11	35.0	<2.17	1,780	5,420
	27-Jan-11	53.5	<2.17	1,370	4,420
	22-Sep-10	39.8	<10.0	1,130	4,000
	30-Jun-10	52	<1.0	1,300	4,090
	26-Mar-10	53	ND	1,200	3,616
	15-Dec-09	64	ND	1,080	3,408
	2-Sep-09	50	ND	1,100	3,610
	4-Jun-09	28	ND	1,410	4,340
	4-Mar-09	39.3	ND	1,150	3,820
	86/340-01	25-Apr-12	12.1	<1.72	641
2-Feb-12		12.3	<2.17	655	2,960
7-Nov-11		11.6	3.08	593	2,910
25-Jul-11		10.2	<2.17	582	2,500
21-Apr-11		10.4	<2.17	512	2,660
27-Jan-11		7.99	<2.17	419	2,040
22-Sep-10		11.8	<10.0	331	2,060
30-Jun-10		13	<1.0	410	2,190
26-Mar-10		9.2	0.7	690	2,656
29-Jan-10		8.6	ND	530	2,258
2-Sep-09		8.8	ND	510	2,232
4-Jun-09		5.2	1.12	640	2,582
4-Mar-09		11.9	ND	675	2,674
<b>Former Daybreak Dairy (Del Norte Dairy)</b>					
126-04	30-Apr-12	15.7	<1.72	539	2,310
	26-Jan-12	17.4	<2.17	560	1,700
	7-Nov-11	18.2	3.92	581	2,470
	3-Aug-11	18.2	6.44	559	2,460
	22-Apr-11	18.0	5.74	594	2,500
	26-Jan-11	11.1	<2.17	570	2,380
	21-Sep-10	20.5	<10.0	542	2,460
	30-Jun-10	21	<5.0	490	2,160
	25-Mar-10	14.9	0.56	530	1,964
	15-Dec-09	11.5	ND	550	1,974
	2-Sep-09	9	ND	530	2,028
	4-Jun-09	5.81	ND	550	2,084
	5-Mar-09	14.1	ND	525	2,122

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
126-05	30-Apr-12	28.6	2.38	530	2,840
	26-Jan-12	30.1	<2.17	546	2,520
	4-Nov-11	31.2	<2.17	543	3,510
	4-Aug-11	29.5	4.20	525	2,540
	22-Apr-11	28.0	2.80	615	2,800
	26-Jan-11	25.2	3.64	553	2,870
	21-Sep-10	22.3	<10.0	504	2,240
	30-Jun-10	24	<5.0	540	2,750
	25-Mar-10	13.5	ND	640	2,736
	15-Dec-09	16.6	ND	630	2,554
	2-Sep-09	12.8	1.4	580	2,566
	4-Jun-09	10.1	ND	600	2,640
	5-Mar-09	19.9	1.03	610	2,828
126-07	30-Apr-12	18.8	<1.72	605	2,710
	26-Jan-12	18.8	2.24	666	2,790
	4-Nov-11	19.8	<2.17	668	2,270
	4-Aug-11	19.1	2.24	666	1,410
	22-Apr-11	21.2	<2.17	704	3,110
	27-Jan-11	22.4	<2.17	662	2,670
	21-Sep-10	24.9	<10.0	700	2,800
	30-Jun-10	26	<5.0	760	2,780
	25-Mar-10	12.1	ND	610	2,238
	15-Dec-09	13.8	ND	720	2,412
	2-Sep-09	10.9	ND	820	2,716
	4-Jun-09	19.0	ND	810	2,468
	5-Mar-09	16.8	ND	605	2,230
126-09	30-Apr-12	2.28	5.04	978	2,900
	26-Jan-12	3.93	7.00	1,100	3,180
	7-Nov-11	3.30	5.6	1,130	3,470
	4-Aug-11	3.19	<2.17	1,100	3,180
	22-Apr-11	3.31	<2.17	1,120	2,730
	22-Sep-10	2.50	<10.0	1110	3,320
	30-Jun-10	Not Sampled			
	25-Mar-10				
	15-Dec-09				
	2-Sep-09				
	4-Jun-09				
5-Mar-09					
126-12	30-Apr-12	12.9	1.96	401	2,270
	14-Feb-12	12.5	4.20	418	2,340
	4-Nov-11	13.3	<2.17	430	2,600
	4-Aug-11	13.6	<2.17	449	2,580
	22-Apr-11	13.2	<2.17	461	2,530
	27-Jan-11	12.2	<2.17	453	2,280
	22-Sep-10	12.6	<10.0	446	2,430
	30-Jun-10	15	<2.0	500	2,610
	25-Mar-10	8.9	ND	550	2,260
	15-Dec-09	8.7	ND	540	2,296
	2-Sep-09	12.8	0.56	530	2,336
	4-Jun-09	4.08	0.84	530	2,322
	5-Mar-09	11	ND	475	2,320
126-13	30-Apr-12	43.8	<1.72	784	3,120
	26-Jan-12	27.5	<2.17	735	2,800
	7-Nov-11	21.9	<2.17	735	3,060
	4-Aug-11	21.4	<2.17	735	2,840
	22-Apr-11	21.7	<2.17	754	2,640
	26-Jan-11	22.8	<2.17	768	3,130
	22-Sep-10	23.1	<10.0	750	2,850
	30-Jun-10	26	<5.0	810	3,000
	25-Mar-10	10.3	ND	940	2,740
	15-Dec-09	14.3	ND	910	2,832
	2-Sep-09	12.8	ND	840	2,746
	4-Jun-09	16.3	ND	970	2,768
	5-Mar-09	19.4	ND	845	2,800

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
<b>Mountain View Dairy</b>					
70-01	25-Apr-12	21.7	<1.72	659	2,490
	2-Feb-12	21.5	2.94	633	2,530
	7-Nov-11	21.1	5.18	622	1,860
	3-Aug-11	20.7	2.8	641	2,630
	22-Apr-11	22.7	22.4	646	2,760
	27-Jan-11	22.5	2.94	650	2,500
	22-Sep-10	19.3	12.3	617	2,610
	30-Jun-10	27	<1.0	600	2,400
	25-Mar-10	14.5	ND	670	2,096
	15-Dec-09	17.1	ND	640	2,218
	1-Sep-09	8.4	ND	630	2,244
	2-Jun-09	9.35	ND	640	2,112
	4-Mar-09	20.8	ND	610	2,254
70-02	25-Apr-12	37.9	<1.72	749	2,260
	2-Feb-12	37.5	<2.17	829	3,160
	7-Nov-11	37.7	<2.17	828	2,790
	4-Aug-11	36.8	5.04	798	3,160
	22-Apr-11	38.1	8.40	836	3,220
	27-Jan-11	44.2	6.02	863	3,390
	22-Sep-10	32.2	<10.0	829	3,070
	30-Jun-10	46	< 1.0	860	3,170
	25-Mar-10	19.6	ND	930	3,076
	15-Dec-09	18.3	ND	960	3,012
	9-Jan-09	21.4	ND	970	3,148
	2-Jun-09	17.8	ND	920	3,084
	4-Mar-09	35.8	ND	940	3,104
<b>Buena Vista Dairy I</b>					
86-01	26-Jan-11	95.4	16.0	2,300	6,240
	20-Sep-10	86.9	<10.0	2,330	6,500
	29-Jun-10	67	<1.0	1,800	5,010
	25-Mar-10	27.0	0.28	1,770	4,814
	15-Dec-09	29.8	ND	1,750	4,670
	1-Sep-09	26.1	ND	1,510	4,474
	2-Jun-09	46.5	4.76	1,590	4,464
	4-Mar-09	42	ND	1,659	4,850
86-02	26-Jan-11	23.4	2.24	641	3,110
	20-Sep-10	24.1	<10.0	613	2,980
	29-Jun-10	21	1.1	660	3,020
	25-Mar-10	16.2	0.7	740	2,740
	15-Dec-09	10.7	0.28	730	2,818
	1-Sep-09	7.2	ND	710	2,824
	2-Jun-09	2.95	ND	700	2,802
	4-Mar-09	16.4	ND	625	2,666
<b>Bright Star Dairy</b>					
340-01	25-Apr-12	26.3	61.0	681	2,540
	2-Feb-12	27.4	<2.17	661	2,780
	4-Nov-11	26.6	4.34	691	2,910
	25-Jul-11	28.3	4.20	747	2,830
	27-Jan-11	31.1	3.50	578	2,840
	21-Sep-10	24.8	<10.0	513	3,070
	29-Jun-10	29	<0.10	610	2,810
	24-Mar-10	18.8	ND	580	2,508
	15-Dec-09	13.1	ND	650	2,608
	1-Sep-09	12.20	ND	530	2,522
	2-Jun-09	8.67	ND	590	2,434
	4-Mar-09	28.3	ND	530	2,516

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
340-02	25-Apr-12	69.8	6.16	727	2,890
	2-Feb-12	77.6	<2.17	766	3,040
	4-Nov-11	75.0	5.74	755	3,620
	22-Jul-11	84.8	7.98	777	2,970
	27-Jan-11	94.1	2.24	760	3,500
	21-Sep-10	92.2	<10.0	778	3,260
	29-Jun-10	87	<0.10	850	3,180
	24-Mar-10	95	ND	930	3,070
	15-Dec-09	82	ND	910	3,072
	1-Sep-09	94	ND	890	3,072
	2-Jun-09	43.2	ND	880	2,954
4-Mar-09	41.5	ND	885	3,098	
<b>Former D&amp;J Dairy (Dominguez 2)</b>					
42-02	01-May-12	22.5	<1.72	431	2,210
	16-Feb-12	24.5	<2.17	465	2,770
	09-Nov-11	21.2	3.08	449	2,170
	02-Aug-11	20.5	2.38	424	2,360
	25-Apr-11	29.1	<2.17	365	2,140
	28-Jan-11	22.7	6.72	408	2,150
	1-Oct-10	21.0	<10.0	355	2,010
	27-Jun-10	27	<5.0	360	2,220
	6-Mar-10	31.3	<0.3	380	2,145
	16-Jan-10	25.7	0.3	350	2,090
	15-Sep-09	24.6	0.9	350	2,075
	3-Jun-09	30.6	0.6	320	2,045
	14-Mar-09	29.6	0.7	370	2,115
	42-03	1-May-12	51.5	<1.72	1,030
16-Feb-12		51.3	<2.17	1,130	3,760
9-Nov-11		58.9	2.80	1,000	3,660
1-Aug-11		59.2	<2.17	1,030	3,720
25-Apr-11		58.8	<2.17	1,080	3,620
28-Jan-11		69.5	3.78	1,160	3,690
1-Oct-10		63.0	<10.0	1,090	3,640
27-Jun-10		49	<5.0	1,100	3,780
6-Mar-10		39.6	<0.3	1,180	3,935
16-Jan-10		43.3	<0.3	1,200	3,800
15-Sep-09		52.3	0.3	1,130	3,765
3-Jun-09		48.2	0.3	1,240	3,860
14-Mar-09		32.2	<0.2	1,240	3,800
42-06		1-May-12	87.0	1.96	720
	16-Feb-12	92.4	<2.17	630	3,100
	9-Nov-11	101	<2.17	617	3,000
	2-Aug-11	88.6	3.22	525	2,980
	25-Apr-11	72.2	<2.17	454	2,500
	28-Jan-11	69.8	4.20	421	2,780
	1-Oct-10	113	<10.0	497	2,660
	27-Jun-10	46	<5.0	400	2,550
	6-Mar-10	43.1	<0.3	480	2,510
	16-Jan-10	44.2	0.3	1,150	2,600
	14-Sep-09	54.8	0.4	450	2,600
	3-Jun-09	0.02	<0.2	1,240	3,780
	14-Mar-09	49.7	0.2	480	2,540
	42-07	1-May-12	Dry		
16-Feb-12		Dry			
9-Nov-11		57.9	<2.17	1,090	3,450
2-Aug-11		Dry			
25-Apr-11		68.5	<2.17	1,230	4,080
28-Jan-11		88.3	4.48	1,130	4,180
1-Oct-10		92.0	<40.0	1,390	4,260
27-Jun-10		63	<5.0	1,400	4,330
6-Mar-10		63.1	<0.3	1,490	4,345
16-Jan-10		59.6	<0.3	1,480	4,275
15-Sep-09		66.6	<0.3	1,290	4,195
3-Jun-09		57.4	<0.2	1,550	4,225
14-Mar-09		43.7	<0.2	1,500	4,110

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
42-08	1-May-12	36.0	<1.72	246	1,700
	16-Feb-12	37.0	<2.17	254	1,850
	9-Nov-11	40.0	<2.17	269	1,770
	2-Aug-11	41.3	2.38	253	2,030
	25-Apr-11	51.4	2.66	201	1,970
	28-Jan-11	46.2	5.46	219	2,020
	1-Oct-10	49.0	<10.0	288	2,160
	27-Jun-10	75	<5.0	300	2,220
	6-Mar-10	76.8	<0.3	365	2,290
	16-Jan-10	82.8	<0.3	350	2,315
	15-Sep-09	87.1	0.7	410	2,340
	3-Jun-09	65.8	0.8	380	2,175
	14-Mar-09	43.2	0.4	400	2,220
	42-09	1-May-12	50.3	<1.72	542
16-Feb-12		50.7	<2.17	627	2,920
9-Nov-11		47.8	<2.17	591	1,810
1-Aug-11		55.0	<2.17	579	2,750
25-Apr-11		65.8	<2.17	664	2,820
28-Jan-11		44.9	<2.17	537	2,940
28-Sep-10		38.0	<10.0	591	2,760
27-Jun-10		68	<5.0	610	3,010
6-Mar-10		NS	NS	NS	NS
16-Jan-10		52.8	<0.3	690	2,970
15-Sep-09		68.8	0.7	650	3,000
3-Jun-09		66.5	0.7	690	3,000
14-Mar-09		59.5	0.4	700	3,050
42-10		1-May-12	0.236	<1.72	363
	16-Feb-12	<0.500	<2.17	419	1,440
	8-Nov-11	<0.500	<2.17	425	1,510
	2-Aug-11	<0.500	<2.17	469	1,540
	25-Apr-11	<0.500	<2.17	453	1,500
	28-Jan-11	2.15	<2.17	345	1,280
	1-Oct-10	0.220	<10.0	360	1,450
	27-Jun-10	<0.50	<1.0	420	1,490
	6-Mar-10	0.23	<0.3	440	1,500
	16-Jan-10	<0.03	<0.3	430	1,435
	15-Sep-09	0.16	<0.3	400	1,425
	3-Jun-09	0.21	<0.2	450	1,535
	14-Mar-09	0.02	<0.2	480	1,480
	42-11	1-May-12	1.24	<1.72	274
16-Feb-12		<0.500	<2.17	337	1,240
8-Nov-11		1.97	<2.17	334	1,480
2-Aug-11		3.07	<2.17	308	1,160
25-Apr-11		3.45	<2.17	304	795
28-Jan-11		0.470	2.38	285	1,300
1-Oct-10		0.620	<10.0	300	1,250
27-Jun-10		3.9	<1.0	290	1,080
6-Mar-10		0.51	<0.3	370	1,300
16-Jan-10		0.03	<0.3	370	1,325
15-Sep-09		0.41	<0.3	320	1,245
3-Jun-09		3.00	0.7	300	1,080
14-Mar-09		0.90	<0.2	310	1,225
42-12		1-May-12	0.750	<1.72	282
	16-Feb-12	<0.500	<2.17	341	1,200
	8-Nov-11	<0.500	<2.17	331	730
	2-Aug-11	<0.100	<2.17	331	1,340
	25-Apr-11	<0.500	<2.17	339	1,280
	28-Jan-11	0.580	<2.17	276	970
	1-Oct-10	4.50	<10.0	312	1,280
	27-Jun-10	0.72	<1.0	320	1,270
	6-Mar-10	0.13	<0.3	350	1,230
	16-Jan-10	0.42	<0.3	340	1,250
	15-Sep-09	0.65	<0.3	310	1,215
	3-Jun-09	0.82	<0.2	330	1,280
	14-Mar-09	0.70	<0.2	340	1,240

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
42-13	1-May-12	81.5	<1.72	902	3,550
	16-Feb-12	99.1	<2.17	1,020	3,880
	9-Nov-11	61.5	<2.17	901	3,160
	2-Aug-11	106	<2.17	1,900	3,280
	25-Apr-11	55.9	<2.17	1,000	3,600
	28-Jan-11	52.6	<2.17	868	3,720
	29-Sep-10	44.5	<10.0	833	3,360
	27-Jun-10	48	<5.0	1,000	3,810
	6-Mar-10	NS	NS	NS	NS
	16-Jan-10	46.3	<0.3	1,130	3,810
	15-Sep-09	54.8	0.5	1,100	3,940
	3-Jun-09	51.6	<0.2	1,110	3,775
	14-Mar-09	51.0	0.6	1,040	3,735
<b>Dominguez</b>					
624-01	30-Apr-12	8.69	36.4	1,400	4,180
	7-Feb-12	10.0	9.52	1,420	3,180
	4-Nov-11	10.8	5.60	1,430	3,460
	3-Aug-11	10.7	<2.17	1,580	3,970
	27-Apr-11	<0.500	30.8	1,330	4,040
	25-Jan-11	14.0	<2.17	1,280	3,760
	21-Sep-10	8.20	<10.0	1,260	3,780
	27-Jun-10	11	<2.0	1,600	4,520
	6-Mar-10	17.2	<0.3	910	2,610
	16-Jan-10	5.5	0.4	840	2,540
	15-Sep-09	6.5	0.6	760	2,455
	3-Jun-09	16.1	0.7	810	2,790
	14-Mar-09	21.9	0.3	1,190	3,305
624-02	30-Apr-12	16.4	4.06	1,160	3,650
	7-Feb-12	14.8	<2.17	1,200	3,720
	4-Nov-11	10.7	3.5	1,300	4,060
	3-Aug-11	12.2	<2.17	1,290	3,600
	27-Apr-11	11.6	7.70	1,340	4,170
	25-Jan-11	19.1	<2.17	1,290	3,700
	20-Sep-10	19.6	<10.0	1,300	4,130
	27-Jun-10	14	<2.0	1,400	4,230
	6-Mar-10	23.7	<0.3	1,400	3,880
	16-Jan-10	22.6	0.4	1,300	3,630
	15-Sep-09	19.9	0.8	1,260	3,625
	3-Jun-09	29.4	0.4	1,340	3,905
	14-Mar-09	26.5	0.4	1,240	3,655
624-04	30-Apr-12	Dry			
	7-Feb-12	Dry			
	4-Nov-11	Dry			
	3-Aug-11	1.84	<2.17	478	2,760
	27-Apr-11	2.60	5.74	566	2,830
	26-Jan-11	3.23	2.52	747	3,480
	21-Sep-10	6.0	<10.0	758	3,750
	27-Jun-10	3.7	1.4	810	3,950
	6-Mar-10	4.3	0.4	890	4,050
	16-Jan-10	4.2	0.7	800	3,845
	15-Sep-09	9.3	0.8	840	3,750
	3-Jun-09	16.0	0.6	520	2,900
	14-Mar-09	18.1	0.6	520	2,820
624-05	30-Apr-12	3.70	2.10	346	1,710
	7-Feb-12	3.38	<2.17	411	2,040
	4-Nov-11	2.58	4.20	385	1,980
	3-Aug-11	3.34	<2.17	1,080	1,940
	27-Apr-11	3.34	4.76	424	1,840
	26-Jan-11	3.62	<2.17	392	1,740
	21-Sep-10	11.9	<10.0	449	2,300
	27-Jun-10	27	< 5.0	480	2,450
	6-Mar-10	30.5	0.4	520	2,595
	16-Jan-10	21.4	0.9	520	2,605
	15-Sep-09	34.8	1.0	530	2,620
	3-Jun-09	33.8	1.3	500	2,650
	14-Mar-09	23.9	1.2	490	2,565

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
624-06	30-Apr-12	31.1	8.40	1,010	3,300
	7-Feb-12	30.9	6.30	1,080	3,020
	4-Nov-11	29.5	8.68	1,040	2,860
	3-Aug-11	29.8	<2.17	1,080	3,240
	27-Apr-11	29.0	3.50	1,050	3,180
	26-Jan-11	29.1	2.94	1,080	2,760
	21-Sep-10	26.7	<10.0	1,060	3,270
	27-Jun-10	30	<5.0	1,100	3,570
	6-Mar-10	28.3	<0.3	1,250	3,550
	16-Jan-10	52.2	0.6	2,100	3,545
	15-Sep-09	27.8	0.7	1,150	3,425
	3-Jun-09	38.3	0.8	70	4,300
	14-Mar-09	36.5	0.3	1,300	3,800
624-07	30-Apr-12	Dry			
	7-Feb-12	Not Sampled - insufficient water to sample			
	4-Nov-11	Not Sampled - insufficient water to sample			
	3-Aug-11	8.01	<2.17	473	1,600
	27-Apr-11	19.4	3.50	539	2,290
	26-Jan-11	14.7	5.60	516	1,900
	21-Sep-10	20.5	<10.0	531	2,200
	27-Jun-10	61	<5.0	880	3,550
	6-Mar-10	43.4	<0.3	1,080	3,825
	16-Jan-10	49.5	0.5	840	3,275
	15-Sep-09	50.1	0.4	960	3,280
	3-Jun-09	75.2	0.8	1,525	4,980
	14-Mar-09	54.3	0.3	1,160	3,580
624-08	30-Apr-12	Dry			
	7-Feb-12	Dry			
	4-Nov-11	Dry			
	3-Aug-11	Dry			
	27-Apr-11	2.45	3.50	200	1,400
	26-Jan-11	1.7	8.12	222	2,940
	21-Sep-10	<2.50	<10.0	197	1,200
	27-Jun-10	2.0	<1.0	220	1,310
	6-Mar-10	0.65	<0.3	280	1,330
	16-Jan-10	0.89	<0.3	240	1,215
	15-Sep-09	2.3	0.3	200	1,205
	3-Jun-09	1.7	0.7	210	1,280
	14-Mar-09	1.8	<0.2	205	1,165
<b>Gonzalez</b>					
177-01	26-Apr-12	28.5	<1.72	1,460	3,500
	6-Feb-12	28.1	<2.17	1,180	3,650
	3-Nov-11	27.4	2.66	1,170	3,790
	2-Aug-11	26.0	2.24	1,200	4,000
	4-May-11	26.6	<2.17	1,160	4,020
	25-Jan-11	23.3	4.06	1,160	3,540
	20-Sep-10	17.6	12.7	1,120	3,480
	29-Jun-10	34	<1.0	1,200	3,660
	28-Apr-10	31	<5.0	1,200	3,680
	20-Jan-10	32	<5.0	1,200	3,640
	21-Oct-09	35	<5.0	1,100	3,700
	7-Jul-09	35	<5.0	1,400	3,700
	6-May-09	34	<5.0	1,300	3,700
	22-Jan-09	33	<5.0	1,300	3,700



**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
177-02	26-Apr-12	36.0	<1.72	881	2,960
	6-Feb-12	37.0	<2.17	958	3,320
	3-Nov-11	32.7	<2.17	971	3,450
	3-Aug-11	34.4	2.80	997	3,340
	4-May-11	38.1	2.52	1,050	3,580
	25-Jan-11	31.6	3.36	1,050	3,640
	20-Sep-10	78.0	<10.0	964	3,630
	29-Jun-10	58	<1.0	1,000	3,830
	28-Apr-10	60	<5.0	1,100	3,860
	20-Jan-10	59	<5.0	1,200	4,020
	21-Oct-09	50	<5.0	1,200	4,000
	7-Jul-09	56	<5.0	1,300	4,000
6-May-09	52	<5.0	1,200	4,000	
22-Jan-09	72	<5.0	1,300	4,000	
177-03A	26-Apr-12	1.16	<1.72	378	1,430
	6-Feb-12	2.00	<2.17	452	1,580
	4-Nov-11	<0.500	3.50	436	1,850
177-04	26-Apr-12	21.7	<1.72	1,050	3,480
	2-Feb-12	22.5	<2.17	1,100	3,650
	3-Nov-11	27.5	<2.17	1,100	3,500
	2-Aug-11	21.6	<2.17	1,080	3,670
	4-May-11	21.2	3.64	1,100	3,740
	25-Jan-11	17.5	2.38	1,150	3,760
	20-Sep-10	4.83	<10.0	1,180	4,030
	29-Jun-10	26	<1.0	1,200	4,010
	28-Apr-10	26	<5.0	1,300	4,090
	20-Jan-10	27	<5.0	1,400	4,090
	21-Oct-09	29	<5.0	1,400	4,100
	7-Jul-09	32	<5.0	1,400	3,990
6-May-09	32	<5.0	1,300	3,800	
22-Jan-09	26	<5.0	1,200	1,700	
177-05	26-Apr-12	47.1	<1.72	1,090	3,440
	2-Feb-12	42.2	<2.17	1,170	3,590
	3-Nov-11	30.6	<2.17	1,190	3,060
	2-Aug-11	36.3	<2.17	1,120	3,420
	4-May-11	40.6	5.60	1,090	3,500
	25-Jan-11	39.2	2.10	1,060	3,240
	20-Sep-10	7.39	<10.0	1,050	3,500
	29-Jun-10	39	<1.0	1,100	3,470
	28-Apr-10	40	<5.0	1,200	3,460
	20-Jan-10	43	<5.0	1,100	3,330
	21-Oct-09	50	<5.0	1,100	3,300
	7-Jul-09	38	<5.0	1,200	3,270
6-May-09	40	<5.0	1,100	3,100	
22-Jan-09	40	<5.0	1,100	3,000	
177-06	26-Apr-12	Dry			
	2-Feb-12	16.1	4.76	934	2,940
	7-Dec-11	15.1	<2.17	892	2,760
	2-Aug-11	16.1	<2.17	910	3,020
	4-May-11	17.2	4.90	955	2,930
	25-Jan-11	19.2	<2.05	923	2,740
	20-Sep-10	<2.50	<10.0	890	2,880
	29-Jun-10	23	<1.0	940	2,960
	28-Apr-10	21	<5.0	980	2,960
	20-Jan-10	26	<5.0	1,000	2,910
	21-Oct-09	25	<5.0	980	2,900
	7-Jul-09	25	<5.0	1,000	2,850
	6-May-09	25	<5.0	1,000	2,800
	22-Jan-09	23	<5.0	960	2,800
177-07	15-Mar-03	44.4	1.5	1,205	4,007
177-07R	26-Apr-12	22.8	<1.72	1,010	2,690
	6-Feb-12	28.5	5.60	1,060	2,730
	4-Nov-11	29.3	2.66	1,050	2,830
	3-Aug-11	25.2	2.80	1,050	3,250
	7-Apr-11	21.4	2.52	1,070	8,660

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
<b>Central Area</b>					
<b>Buena Vista Dairy II</b>					
74-01	3-May-12	65.3	<1.72	778	3,265
	8-Feb-12	Not Sampled			
	3-Nov-11	64.6	<2.17	811	2,830
	1-Aug-11	73.2	<2.17	770	3,040
	26-Apr-11	67.8	<2.17	730	3,300
	25-Jan-11	41.7	13.0	738	2,960
	17-Sep-10	36.7	<10.0	695	2,760
	29-Jun-10	74	<1.0	850	3,350
	24-Mar-10	70	ND	840	3,070
	14-Dec-09	84	0.14	750	2,480
	1-Sep-09	92	ND	730	2,914
	2-Jun-09	33.2	ND	650	2,632
3-Mar-09	43.8	ND	735	2,666	
74-02	3-May-12	16.4	<1.72	495	1,980
	8-Feb-12	15.2	5.46	519	2,150
	3-Nov-11	26.3	<2.17	558	2,510
	29-Jul-11	52.8	2.24	630	2,710
	26-Apr-11	93.2	<2.17	831	3,610
	25-Jan-11	65.7	2.80	824	3,670
	17-Sep-10	30.6	<10.0	665	2,400
	29-Jun-10	45	<1.0	730	2,780
	24-Mar-10	20.6	ND	810	2,612
	14-Dec-09	14.6	0.14	770	2,452
	1-Sep-09	17.3	0.7	760	2,474
	2-Jun-09	17.6	0.84	820	4,866
3-Mar-09	45.1	ND	1,265	4,556	
74-03	3-May-12	9.92	<1.72	1,330	3,920
	8-Feb-12	11.0	<2.17	1,420	4,170
	3-Nov-11	27.6	<2.17	1,420	4,730
	1-Aug-11	15.0	<2.17	1,450	4,870
	26-Apr-11	4.17	<2.17	1,480	4,690
	25-Jan-11	2.02	<2.17	1,460	4,960
	20-Sep-10	21.3	<10.0	1,490	4,840
	29-Jun-10	1.5	<1.0	1,400	4,630
	24-Mar-10	6.1	ND	1,530	4,400
	14-Dec-09	14.1	ND	1,550	4,560
	1-Sep-09	18.9	ND	1,630	4,734
	2-Jun-09	2.9	ND	1,590	1,782
3-Mar-09	2.65	ND	1,510	4,664	
74-04	3-May-12	33.6	<1.72	436	1,800
	8-Feb-12	31.6	<2.17	473	2,020
	3-Nov-11	13.4	<2.17	439	1,080
	29-Jul-11	15.3	<2.17	438	1,580
	26-Apr-11	12.8	<2.17	451	1,820
	25-Jan-11	6.50	<2.17	434	1,810
	20-Sep-10	10.6	<10.0	441	1,640
	29-Jun-10	15	<1.0	500	1,840
	24-Mar-10	11.4	0.28	570	1,792
	14-Dec-09	11.5	ND	560	1,738
	1-Sep-09	19.3	ND	550	1,792
	2-Jun-09	7.2	ND	570	2,024
3-Mar-09	20.3	ND	530	1,884	

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
74-05	3-May-12	18.0	<1.72	421	1,900
	8-Feb-12	17.4	<2.17	442	1,960
	3-Nov-11	17.9	<2.17	442	960
	29-Jul-11	23.3	<2.17	449	2,000
	26-Apr-11	21.5	<2.17	446	1,900
	25-Jan-11	16.5	<2.17	446	1,940
	17-Sep-10	17.6	<10.0	439	1,880
	29-Jun-10	32	<1.0	520	2,070
	24-Mar-10	23.2	ND	620	1,960
	14-Dec-09	15.9	ND	600	1,924
	1-Sep-09	25.2	ND	540	1,964
	2-Jun-09	10.8	ND	560	2,068
3-Mar-09	33.2	ND	535	2,038	
<b>River Valley Dairy</b>					
167-01	2-May-12	Not Sampled			
	30-Jan-12	Not Sampled			
	2-Nov-11	Not Sampled			
	25-Jul-11	Not Sampled			
	28-Apr-11	<0.500	3.92	720	2,960
	20-Jan-11	Not Sampled			
	27-Sep-10	1.55	9.94	731	2,540
	28-Jun-10	Not Sampled			
	5-Mar-10				
	15-Jan-10				
	14-Sep-09				
	2-Jun-09				
15-Mar-09					
167-01A	2-May-12	2.55	1.82	781	3,180
	30-Jan-12	2.54	3.50	755	2,940
	2-Nov-11	11.2	4.62	1,080	3,620
	25-Jul-11	2.13	3.92	943	3,330
	28-Apr-11	4.03	<2.17	1,030	3,710
	20-Jan-11	1.26	2.1	968	5,100
	22-Sep-10	1.40	3.36	1,010	3,470
	28-Jun-10	6.07	1.1	1,050	3,710
	5-Mar-10	9.3	0.8	1,040	3,605
	15-Jan-10	5.3	0.5	1,090	3,590
	14-Sep-09	13.4	0.6	1,040	3,530
	2-Jun-09	13.7	0.7	980	3,505
15-Mar-09	22.2	0.2	740	3,130	
167-02	2-May-12	Not Sampled			
	30-Jan-12	Not Sampled			
	2-Nov-11	<0.500	3.64	432	650
	25-Jul-11	Dry			
	28-Apr-11	<0.500	2.94	500	1,910
	20-Jan-11	0.716	< 2.05	546	1,840
	22-Sep-10	<0.846	<10.0	610	2,100
	28-Jun-10	Not Sampled			
	5-Mar-10				
	15-Jan-10				
	14-Sep-09				
	2-Jun-09				
28-Apr-08	7.0				
167-03	2-May-12	17.5	<1.72	499	2,220
	27-Jan-12	21.0	<2.17	572	2,250
	2-Nov-11	22.0	<2.17	564	2,150
	25-Jul-11	18.5	6.16	543	2,250
	28-Apr-11	17.1	<2.17	508	2,210
	20-Jan-11	13.2	2.24	467	1,880
	22-Sep-10	9.19	<10.0	472	2,120
	28-Jun-10	20.4	<5.0	567	2,310
	5-Mar-10	18.4	<0.3	610	2,265
	15-Jan-10	13.7	0.6	620	2,015
	14-Sep-09	23.1	0.4	590	2,240
	2-Jun-09	25.0	0.5	680	2,515
15-Mar-09	30.9	0.2	760	2,615	

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)	
167-04	2-May-12	18.6	13.6	1,050	4,020	
	27-Jan-12	15.6	3.50	1,500	4,840	
	2-Nov-11	Not Sampled - insufficient water to sample				
	26-Jul-11	19.3	4.62	1,270	4,560	
	28-Apr-11	7.95	73.1	1,610	4,960	
	20-Jan-11	Not Sampled				
	28-Jun-10					
	5-Mar-10					
	15-Jan-10					
	14-Sep-09	6.7	0.4	1,630	5,240	
	2-Jun-09	8.5	0.4	1,525	5,045	
	15-Mar-09	16.4	0.2	1,570	5,210	
	167-05	2-May-12	3.50	2.24	777	3,180
		30-Jan-12	4.40	<2.17	808	3,140
2-Nov-11		3.89	3.64	782	2,560	
26-Jul-11		4.41	3.22	792	3,070	
28-Apr-11		12.9	2.80	976	3,630	
20-Jan-11		3.53	2.52	748	2,980	
23-Sep-10		2.70	<10.0	758	2,820	
28-Jun-10		4.07	<1.0	789	2,930	
5-Mar-10		2.9	<0.3	960	2,945	
15-Jan-10		1.8	<0.3	380	715	
14-Sep-09		1.9	0.4	890	2,970	
2-Jun-09		1.8	0.9	850	3,005	
15-Mar-09		4.6	0.2	910	3,230	
167-06		2-May-12	27.2	<1.72	688	2,480
	30-Jan-12	29.1	<2.17	754	2,880	
	2-Nov-11	35.7	<2.17	716	3,390	
	25-Jul-11	35.0	5.32	702	2,640	
	28-Apr-11	35.4	<2.17	676	2,790	
	20-Jan-11	29.6	2.38	634	2,560	
	22-Sep-10	19.8	<10.0	655	2,630	
	28-Jun-10	34.8	2.35	687	2,700	
	5-Mar-10	30.9	<0.3	730	2,730	
	15-Jan-10	26.2	0.4	750	2,755	
	14-Sep-09	40.4	<0.3	700	2,680	
	2-Jun-09	31.5	0.4	790	2,715	
	15-Mar-09	36.2	0.7	730	2,715	
	167-07	2-May-12	0.0285	<1.72	367	1,890
30-Jan-12		<0.500	<2.17	411	1,850	
2-Nov-11		<0.500	<2.17	366	2,460	
25-Jul-11		<1.00	3.50	446	4,400	
28-Apr-11		<0.500	<2.17	292	1,750	
20-Jan-11		0.448	2.10	239	1,280	
22-Sep-10		0.0400	2.10	268	1,590	
28-Jun-10		<0.5	<2.0	287	1,600	
5-Mar-10		0.16	<0.3	370	1,650	
15-Jan-10		<0.03	<0.3	250	2,065	
14-Sep-09		0.19	<0.3	390	1,700	
2-Jun-09		0.11	0.4	740	2,575	
15-Mar-09		0.11	0.2	1,090	3,165	
167-08		2-May-12	0.399	<1.72	744	2,580
	30-Jan-12	<0.500	<2.17	805	2,440	
	2-Nov-11	1.93	<2.17	759	2,520	
	26-Jul-11	3.77	4.20	779	3,030	
	28-Apr-11	3.74	<2.17	793	2,740	
	20-Jan-11	<0.239	2.10	764	2,640	
	23-Sep-10	0.250	<10.0	756	2,720	
	28-Jun-10	5.51	<0.5	804	2,990	
	5-Mar-10	5.5	<0.3	830	2,750	
	15-Jan-10	0.84	<0.3	720	2,530	
	14-Sep-09	2.9	0.3	640	2,380	
	2-Jun-09	2.1	0.6	750	2,785	
	15-Mar-09	3.2	0.2	740	2,710	

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
167-09	2-May-12	14.5	<1.72	1,070	4,000
	30-Jan-12	13.2	2.80	1,010	3,590
	3-Nov-11	7.53	8.40	988	3,590
	26-Jul-11	<1.00	3.78	736	2,300
	28-Apr-11	<0.500	2.38	467	2,140
	20-Jan-11	0.0147	<2.05	429	2,160
	24-Sep-10	0.0300	<10.0	432	1,500
	28-Jun-10	<0.5	<1.0	491	2,160
	5-Mar-10	0.05	<0.3	580	2,150
	15-Jan-10	<0.03	<0.3	500	2,250
	14-Sep-09	<0.03	<0.3	530	2,055
	2-Jun-09	0.04	0.7	540	2,205
	15-Mar-09	0.07	0.2	630	2,400
<b>Big Sky Dairy</b>					
833-01	7-May-12	Dry			
	15-Feb-12	Dry			
	1-Nov-11	Dry			
	21-Jul-11	Dry			
	29-Apr-11	Not Sampled - insufficient water to sample			
	24-Jan-11	33.6	4.20	997	3,100
	23-Sep-10	29.1	<10.0	881	3,300
	28-Jun-10	1.7	1.8	180	790
	23-Mar-10	28.3	0.7	1,025	2,640
	14-Dec-09	21.8	ND	975	2,800
	31-Aug-09	15.3	ND	999	2,894
	1-Jun-09	8.6	ND	1,030	2,382
	2-Mar-09	37.1	ND	1,070	3,750
833-02	7-May-12	43.3	65.1	635	2,420
	15-Feb-12	87.2	4.34	889	3,660
	1-Nov-11	82.3	2.38	885	4,010
	21-Jul-11	91.6	3.08	880	3,510
	29-Apr-11	81.6	6.02	840	3,500
	24-Jan-11	69.3	2.66	789	3,090
	23-Sep-10	52.9	<10.0	833	3,650
	28-Jun-10	29	<5.0	560	2,200
	23-Mar-10	15.9	ND	660	2,066
	14-Dec-09	11.5	0.28	650	2,018
	31-Aug-09	12.4	ND	660	2,170
	1-Jun-09	<0.5	ND	650	3,358
	2-Mar-09	3.54	13.44	585	1,978
833-03	3-May-12	Dry			
	15-Feb-12	Dry			
	1-Nov-11	Dry			
	21-Jul-11	Dry			
	4-May-11	24.8	4.20	1,660	4,120
	24-Jan-11	30.4	2.66	1,650	4,090
	23-Sep-10	18.1	<10.0	1,410	3,880
	28-Jun-10	5.0	5.5	650	1,870
	23-Mar-10	14.0	ND	1,750	4,044
	14-Dec-09	11.8	0.28	1,839	4,280
	31-Aug-09	8.9	ND	1,760	4,216
	1-Jun-09	90.4	ND	1,620	3,060
	2-Mar-09	21.2	ND	1,580	3,970
833-04	3-May-12	24.1	<1.72	623	2,920
	15-Feb-12	49.9	<2.17	942	3,320
	1-Nov-11	43.4	<2.17	867	3,040
	21-Jul-11	45.3	2.52	883	3,410
	29-Apr-11	46.2	<2.17	902	3,280
	24-Jan-11	40.9	<2.05	755	3,040
	24-Sep-10	<50.0	<10.0	915	3,480
	28-Jun-10	18	<2.0	500	1,830
	23-Mar-10	11.3	ND	560	1,648
	14-Dec-09	11.2	0.42	570	1,750
	31-Aug-09	16.1	ND	630	1,986
	1-Jun-09	3.03	ND	580	1,968
	2-Mar-09	14.6	ND	600	1,884

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
833-05	3-May-12	12.8	<1.72	1,030	2,790
	15-Feb-12	14.9	<2.17	1,230	3,100
	1-Nov-11	12.2	2.24	1,150	2,580
	21-Jul-11	12.0	2.66	1,210	3,180
	29-Apr-11	17.6	<2.17	1,330	3,300
	24-Jan-11	23.2	2.66	1,340	3,430
	24-Sep-10	28.9	<10.0	1,330	3,800
	28-Jun-10	12	<2.0	1,200	3,090
	23-Mar-10	12.2	ND	1,240	2,942
	14-Dec-10	6.7	0.56	1,280	3,096
	31-Aug-09	9.0	ND	1,220	3,152
	1-Jun-09	3.43	ND	1,230	3,026
2-Mar-09	11	ND	1,255	3,134	
833-06	3-May-12	20.7	<1.72	702	2,560
	14-Feb-12	26.4	<2.17	727	2,480
	2-Nov-11	28.8	3.08	688	1,900
	21-Jul-11	70.1	7.70	682	2,650
	4-May-11	36.4	7.70	717	2,440
	20-Jan-11	61.0	2.80	738	2,360
	23-Sep-10	64.3	<10.0	761	2,680
	28-Jun-10	23	<5.0	630	2,310
	23-Mar-10	24.8	2.38	700	2,184
	14-Dec-09	22.7	1.68	820	2,344
	31-Aug-09	25.1	1.96	790	2,708
	1-Jun-09	106	ND	680	2,280
2-Mar-09	66.4	ND	610	2,160	
833-07	7-May-12	95.6	7.56	1,460	4,880
	15-Feb-12	90.3	<2.17	1,340	4,660
	1-Nov-11	94.2	<2.17	1,090	3,840
	21-Jul-11	105	<2.17	115	4,090
	29-Apr-11	100	<2.17	1,220	4,380
	24-Jan-11	100	2.10	1,140	4,350
	24-Sep-10	129	<10.0	933	3,800
	28-Jun-10	69	<5.0	1,300	4,160
	23-Mar-10	106	ND	1,320	3,884
	14-Dec-09	101	0.42	1,260	3,988
	31-Aug-09	74	8.68	1,180	3,978
	1-Jun-09	12.4	8.68	1,180	3,964
2-Mar-09	33.2	ND	1,380	3,866	
833-08	3-May-12	61.4	<1.72	927	3,040
	15-Feb-12	77.6	<2.17	1,020	3,200
	1-Nov-11	69.8	4.20	966	3,080
	21-Jul-11	68.8	<2.17	963	3,240
	29-Apr-11	75.9	<2.17	950	3,330
	24-Jan-11	93.4	2.10	930	3,190
	23-Sep-10	91.8	<10.0	985	3,600
	28-Jun-10	35	<5.0	630	2,290
	23-Mar-10	33	ND	700	2,108
	14-Dec-09	31	ND	950	2,710
	31-Aug-09	63	ND	1,020	3,576
	1-Jun-09	41.4	ND	1,000	3,492
2-Mar-09	121	ND	700	2,038	

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
833-09	7-May-12	80.4	<1.72	745	3,830
	15-Feb-12	94.8	<2.17	725	3,580
	1-Nov-11	93.0	<2.17	779	3,880
	21-Jul-11	135	<2.17	1,070	4,550
	4-May-11	147	<2.17	1,420	5,540
	25-Jan-11	134	2.80	1,420	4,850
	24-Sep-10	58.2	<10.0	1,050	4,110
	28-Jun-10	50	<5.0	1,200	4,380
	23-Mar-10	16.3	0.56	1,100	3,624
	14-Dec-09	2.7	0.28	960	3,184
	31-Aug-09	6.6	ND	870	3,178
	1-Jun-09	18.10	1.12	880	3,164
2-Mar-09	7.07	ND	825	3,202	
833-10	7-May-12	3.95	<1.72	581	2,350
	15-Feb-12	3.18	<2.17	582	2,440
	1-Nov-11	3.69	<2.17	573	2,590
	21-Jul-11	4.63	3.78	597	2,480
	4-May-11	5.19	<2.17	714	2,670
	25-Jan-11	8.46	2.10	649	2,730
	24-Sep-10	<10.0	<10.0	654	2,250
	28-Jun-10	3.6	<1.0	750	2,790
	23-Mar-10	6.8	ND	1,220	3,868
	14-Dec-09	3.7	0.14	790	2,576
	31-Aug-09	4.7	ND	750	2,548
	1-Jun-09	7.1	ND	650	2,458
2-Mar-09	2.43	ND	855	2,954	
<b>Sunset/Desert Land Dairy</b>					
257-01	26-Apr-12	23.7	22.7	680	2,920
	9-Feb-12	19.4	<2.17	603	2,940
	1-Nov-11	28.4	<2.17	619	2,730
	22-Jul-11	44.8	<2.17	673	3,270
	26-Apr-11	103	3.78	870	4,440
	19-Jan-11	59.3	3.08	743	3,420
	24-Sep-10	58.0	<10.0	685	3,120
	28-Jun-10	100	<1.0	820	3,800
	24-Mar-10	187	ND	1,100	4,342
	14-Dec-09	71	0.14	910	3,860
	31-Aug-09	49	ND	880	3,706
	2-Jun-09	64	ND	910	3,822
3-Mar-09	89	ND	1,135	4,652	
257-02	26-Apr-12	23.2	8.40	505	1,840
	9-Feb-12	11.1	<2.17	443	1,840
	1-Nov-11	19.3	2.24	442	3,150
	22-Jul-11	28.7	<2.17	501	2,160
	26-Apr-11	24.9	2.80	433	2,000
	19-Jan-11	13.3	2.52	455	1,500
	24-Sep-10	21.0	<10.0	445	1,590
	29-Jun-10	24	<1.0	560	2,180
	24-Mar-10	22.3	ND	570	1,840
	14-Dec-09	19.3	0.14	480	1,916
	31-Aug-09	14.2	ND	410	1,518
	2-Jun-09	1.86	ND	500	1,690
3-Mar-09	30.4	ND	495	1,632	
257-03	26-Apr-12	6.60	4.20	601	2,330
	14-Feb-12	11.2	<2.17	636	2,620
	1-Nov-11	7.37	2.80	537	2,210
	22-Jul-11	12.9	2.80	576	2,100
	26-Apr-11	12.5	5.88	525	2,400
	19-Jan-11	2.67	2.24	377	1,600
	24-Sep-10	8.00	<10.0	400	1,670
	29-Jun-10	17	1.1	660	2,570
	24-Mar-10	10.1	1.12	640	2,342
	14-Dec-09	5.9	0.56	760	2,638
	31-Aug-09	10.7	0.84	610	2,260
	2-Jun-09	5.99	ND	570	2,284
3-Mar-09	334*	ND	690	2,538	

**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

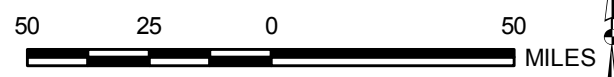
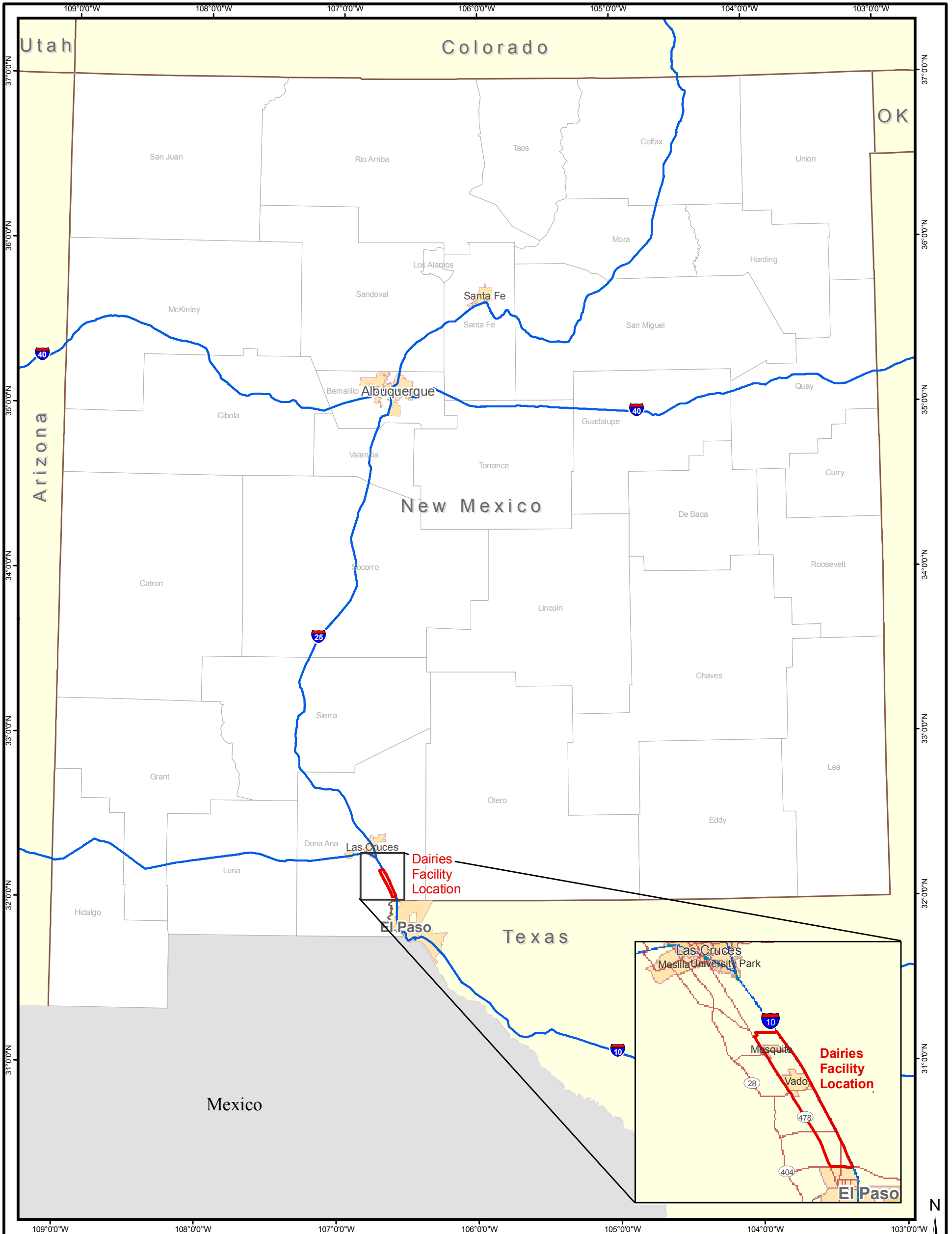
Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
257/260-01	26-Apr-12	6.83	2.80	575	2,660
	14-Feb-12	9.68	<2.17	565	2,180
	1-Nov-11	16.7	2.94	658	2,850
	22-Jul-11	4.66	3.64	440	1,860
	26-Apr-11	<0.500	4.34	624	2,580
	19-Jan-11	1.21	4.20	480	1,860
	24-Sep-10	11.0	<10.0	576	2,480
	30-Jun-10	5.4	<5.0	530	1,980
	23-Mar-10	5.0	ND	340	982
	14-Dec-09	45	26.32	220	520
	31-Aug-09	0.3	8.7	570	1,704
	2-Jun-09	1.65	7.0	660	1,936
3-Mar-09	3.98	1.12	555	1,908	
<b>McAnally Enterprises</b>					
MW-4	13-Mar-09	3.5	<0.5	2,110	5,686
<b>Southern Area</b>					
<b>Del Oro Dairy</b>					
692-01	8-May-12	163	<1.72	1,060	4,820
	17-Feb-12	166	7.28	1,090	4,000
	8-Nov-11	168	6.44	1,180	4,690
	29-Jul-11	176	<2.17	1,210	4,840
	22-Apr-11	140	3.22	998	3,880
	19-Jan-11	213	2.10	1,070	4,320
	1-Oct-10	222	<10.0	1,060	4,640
	30-Jun-10	230	<5.0	1,100	4,080
	30-Mar-10	117.5	3	1,080	3,991
	8-Dec-09	107	1	1,060	4,897
	12-Aug-09	127	3	1,120	4,955
	4-May-09	120	3	1,160	4,295
692-02	8-May-12	1.75	<1.72	339	1,350
	17-Feb-12	2.55	<2.17	410	1,490
	31-Oct-11	4.69	<2.17	451	1,720
	29-Jul-11	24.1	<2.17	504	2,280
	27-Apr-11	92.3	<10.0	921	3,080
	26-Jan-11	47.2	3.64	706	2,490
	1-Oct-10	Not Sampled			
	30-Jun-10	140	<5.0	1,100	3,520
	30-Mar-10	107.5	1	1,320	3,861
	8-Dec-09	96	1	1,200	4,073
	12-Aug-09	66	3	1,140	4,317
	4-May-09	52	1	1,100	3,337
692-03	30-Mar-10	Plugged and Abandoned			
	4-May-09				
692-04	8-May-12	39.6	<1.72	652	2,490
	17-Feb-12	30.2	<2.17	557	2,060
	31-Oct-11	22.9	<2.17	477	1,600
	29-Jul-11	25.2	<2.17	503	1,960
	22-Apr-11	98.5	<2.17	893	3,240
	19-Jan-11	148	3.22	1040	3,740
	28-Sep-10	67.0	<10.0	802	3,060
	30-Jun-10	50	<5.0	590	2,050
	30-Mar-10	28	1	600	2,012
	8-Dec-09	31	1	590	2,069
	12-Aug-09	26	1	680	2,158
	4-May-09	26	1	580	2,081
692-05	7-May-12	1.92	3.08	420	1,570
	17-Feb-12	2.52	<2.17	423	1,310
	8-Nov-11	2.30	2.94	383	1,230
	1-Aug-11	<1.00	3.50	420	1,710
	26-Apr-11	<2.50	<10.0	401	1,710
	19-Jan-11	4.12	2.10	443	1,280
	1-Oct-10	3.10	<10.0	420	1,430
	30-Jun-10	2.1	<1.0	500	1,490
	30-Mar-10	1.5	1	480	1,501
	8-Dec-09	1.4	1	540	1,538
	12-Aug-09	0.8	1	500	1,602
	4-May-09	1.0	1	500	1,477



**TABLE 4. DISCHARGE PLAN MONITORING WELL GROUNDWATER ANALYTICAL RESULTS  
DONA ANA DAIRIES, DONA ANA COUNTY, NEW MEXICO**

Monitoring Well	Date Sampled	Nitrate as N (mg/l)	TKN (mg/l)	Chloride (mg/l)	TDS (mg/l)
692-06	8-May-12	2.62	<1.72	397	1,620
	17-Feb-12	9.39	<2.17	459	1,200
	8-Nov-11	6.46	<2.17	425	1,450
	1-Aug-11	6.07	2.80	409	1,500
	26-Apr-11	4.50	<10.0	422	1,590
	19-Jan-11	4.95	2.10	431	1,360
	1-Oct-10	11.0	<10.0	373	1,490
	30-Jun-10	7.4	<1.0	440	1,470
	30-Mar-10	3.9	1	460	1,532
	8-Dec-09	2.3	1	540	1,609
	12-Aug-09	2.8	1	440	1,555
4-May-09	2.9	1	500	1,552	
692-07	8-May-12	3.55	<1.72	530	1,780
	17-Feb-12	4.76	<2.17	518	1,600
	12-Nov-11	5.22	<2.17	555	780
	1-Aug-11	<1.00	2.66	567	2,000
	26-Apr-11	39.3	<10.0	694	2,520
	19-Jan-20	17.2	2.38	589	1,100
	1-Oct-10	27.0	< 10.0	617	2,300
	30-Jun-10	Not Sampled			
	30-Mar-10	42	1	820	2,967
	8-Dec-09	28	1	860	3,131
	12-Aug-09	36	1	780	3,041
4-May-09	50	1	960	3,480	
692-08	8-May-12	1.84	<1.72	364	1,560
	17-Feb-12	3.94	<2.17	452	1,390
	8-Nov-11	2.60	2.80	436	1,340
	1-Aug-11	<1.00	<2.17	386	2,240
	26-Apr-11	3.49	<10.0	435	1,440
	19-Jan-11	3.26	<2.05	431	1,120
	1-Oct-10	5.70	<10.0	386	1,390
	30-Jun-10	3.5	<1.0	460	1,430
	30-Mar-10	3.0	1	520	1,518
	8-Dec-09	2.5	1	500	1,459
	12-Aug-09	1.8	1	520	1,476
4-May-09	2.0	1	480	1,476	
692-09	7-May-12	7.80	<1.72	391	1,470
	17-Feb-12	6.89	<2.17	457	1,450
	8-Nov-11	10.6	<2.17	455	1,400
	1-Aug-11	12.6	<2.17	407	1,300
	26-Apr-11	10.8	<10.0	420	1,140
	18-Jan-11	12.0	<2.05	460	1,160
	1-Oct-10	15.0	<10.0	387	1,480
	30-Jun-10	22	<5.0	480	1,500
	30-Mar-10	11	1	520	1,606
	8-Dec-09	10	1	460	1,536
	12-Aug-09	6	1	460	1,675
4-May-09	6	1	480	1,545	
<b>NMWQCC Standard</b>		<b>10</b>	<b>NA</b>	<b>250</b>	<b>1,000</b>
NOTES:					
Data suspect					
ND = Non-detect					
NMWQCC = New Mexico Water Quality Control Commission					
TDS = Total dissolved solids					
TKN = Total Kjeldahl nitrogen					
Highlight is at or above NMWQCC Standard					


## **FIGURES**



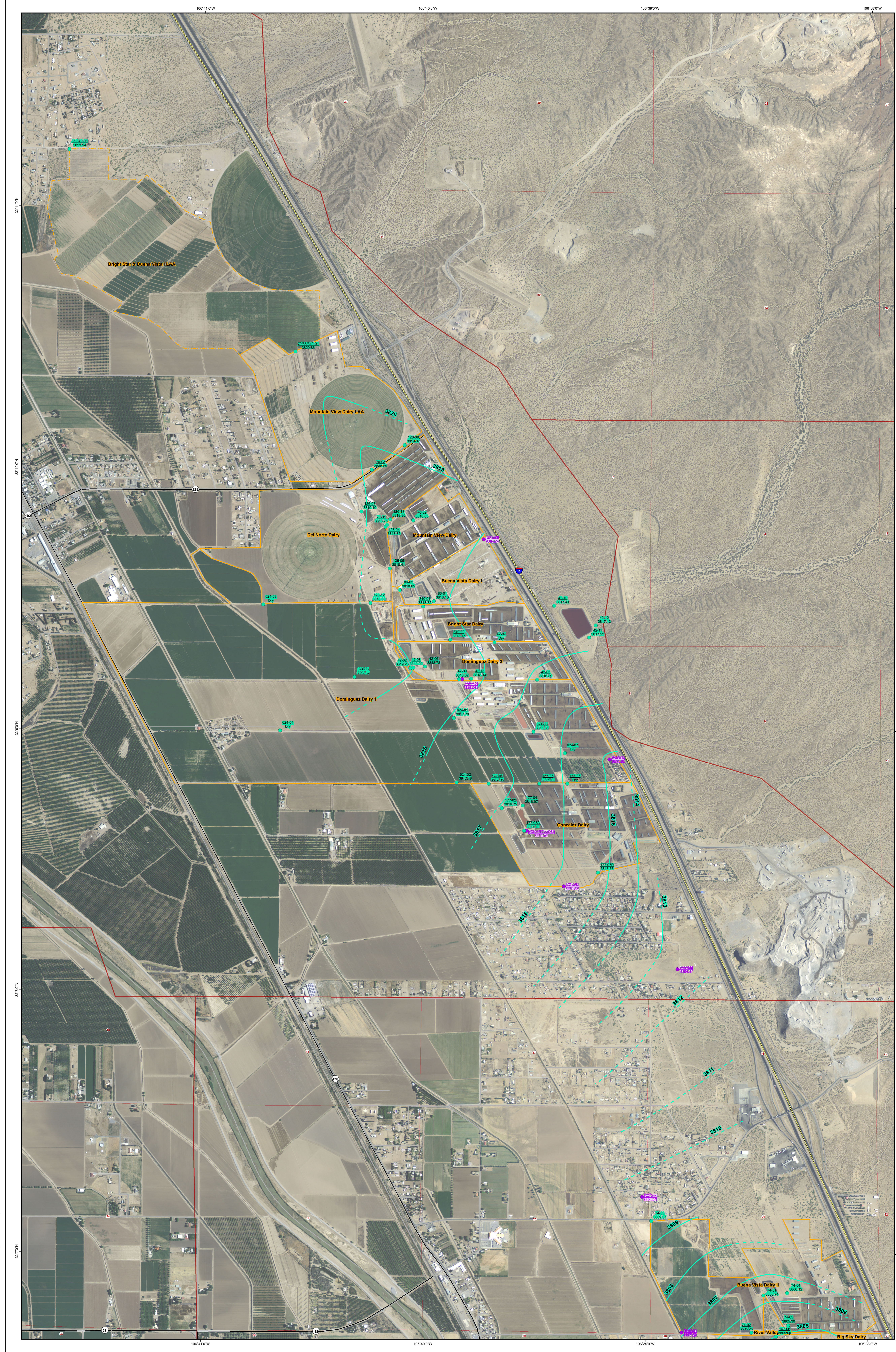
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WHEN PRODUCED AT 11X17IN

**LEGEND:**

 Facility Boundary

PROJECT		DOÑA ANA DAIRIES MESQUITE, NEW MEXICO	
TITLE		SITE LOCATION MAP	
	PROJECT No.	11x17_siteloc.mxd	
	DESIGN		SCALE AS SHOWN
	GIS		REV 0
	CHECK		
REVIEW			
			<b>FIGURE 1</b>

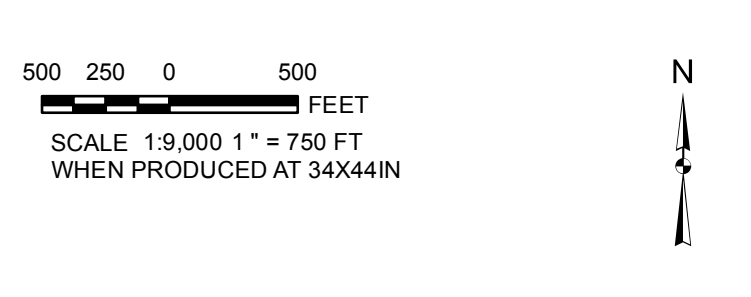
**REFERENCES**  
Base Data: ESRI, 2008.



- LEGEND**
- Discharge Plan Well With Water Elevations (Feet MSL)
  - Abatement Plan Well With Water Elevations (Feet MSL)
  - Potentiometric Contour
  - - - Potentiometric Contour - Assumed
  - Interstate Highway
  - State Highway
  - Other Road
  - ▭ Land Owned by Dairies
  - ▭ Land Application on Non-Dairy Property
  - ▭ Public Land Survey System

Note:  
NM = Not Measured

**REFERENCES**  
 Roads: Doña Ana County, 2001  
 Aerial Photography: NAIP, 2011  
 PLSS: BLM, 2000  
 Projection: State Plane NAD 83 New Mexico Central (feet)



PROJECT: DOÑA ANA DAIRIES  
MESQUITE, NEW MEXICO

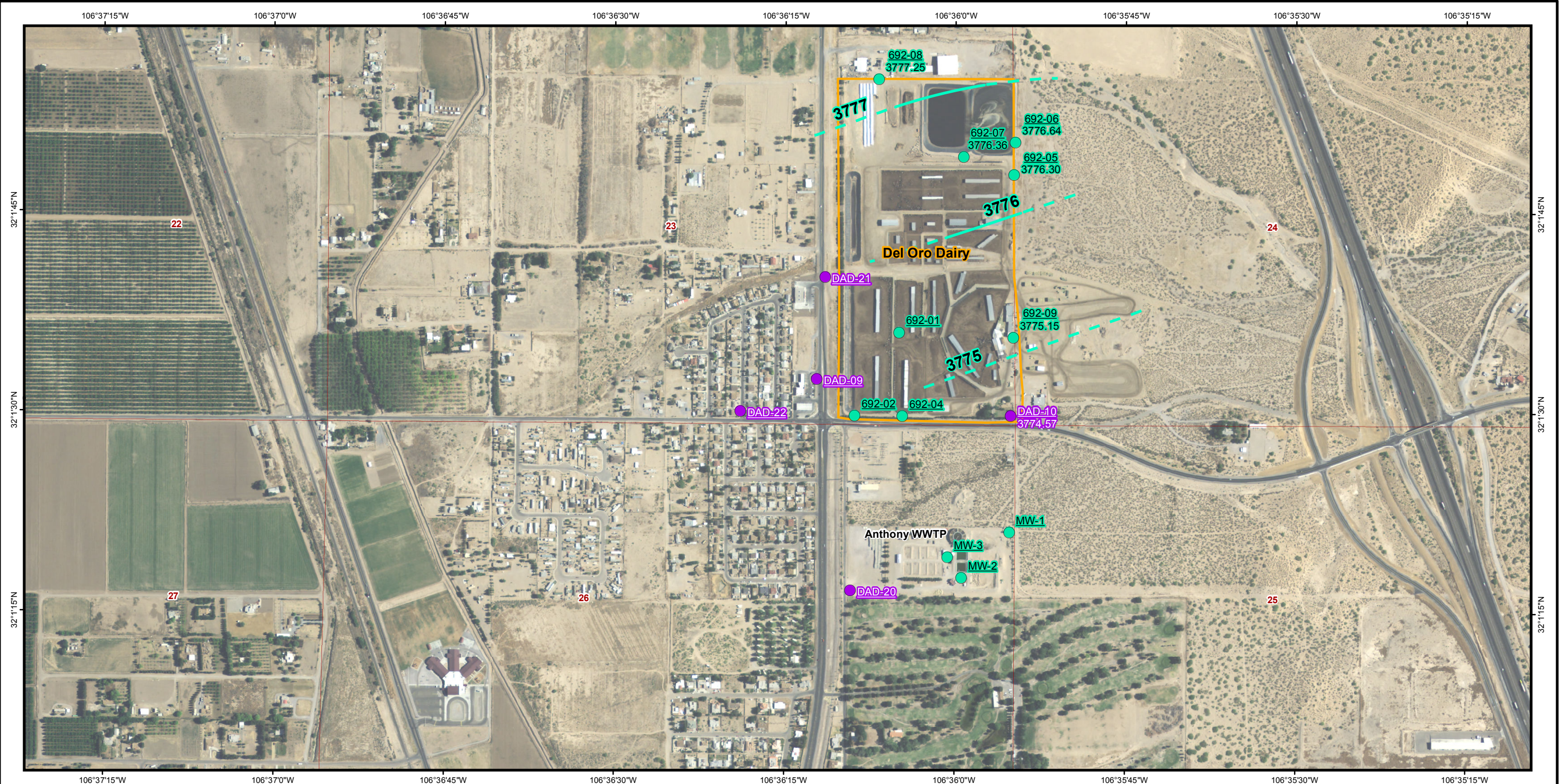
TITLE: POTENTIOMETRIC SURFACE MAP,  
APRIL 2012, NORTHERN PORTION

DATE:	PROJECT NO.:	DATE PLOT:	SCALE:

FIGURE 2



2012-08-14 R:\Industrial & Other\Dona Ana Dairies\GIS\MXDs\201204\SouthRegionAq\_Pot\_201204.mxd EA-Dallas\_jschwartz



**LEGEND:**

- Discharge Plan Well With Water Elevations (Feet MSL)
- Abatement Plan Well With Water Elevations (Feet MSL)
- Potentiometric Contour
- - - Potentiometric Contour - Assumed
- Land Owned by Dairies
- Public Land Survey System

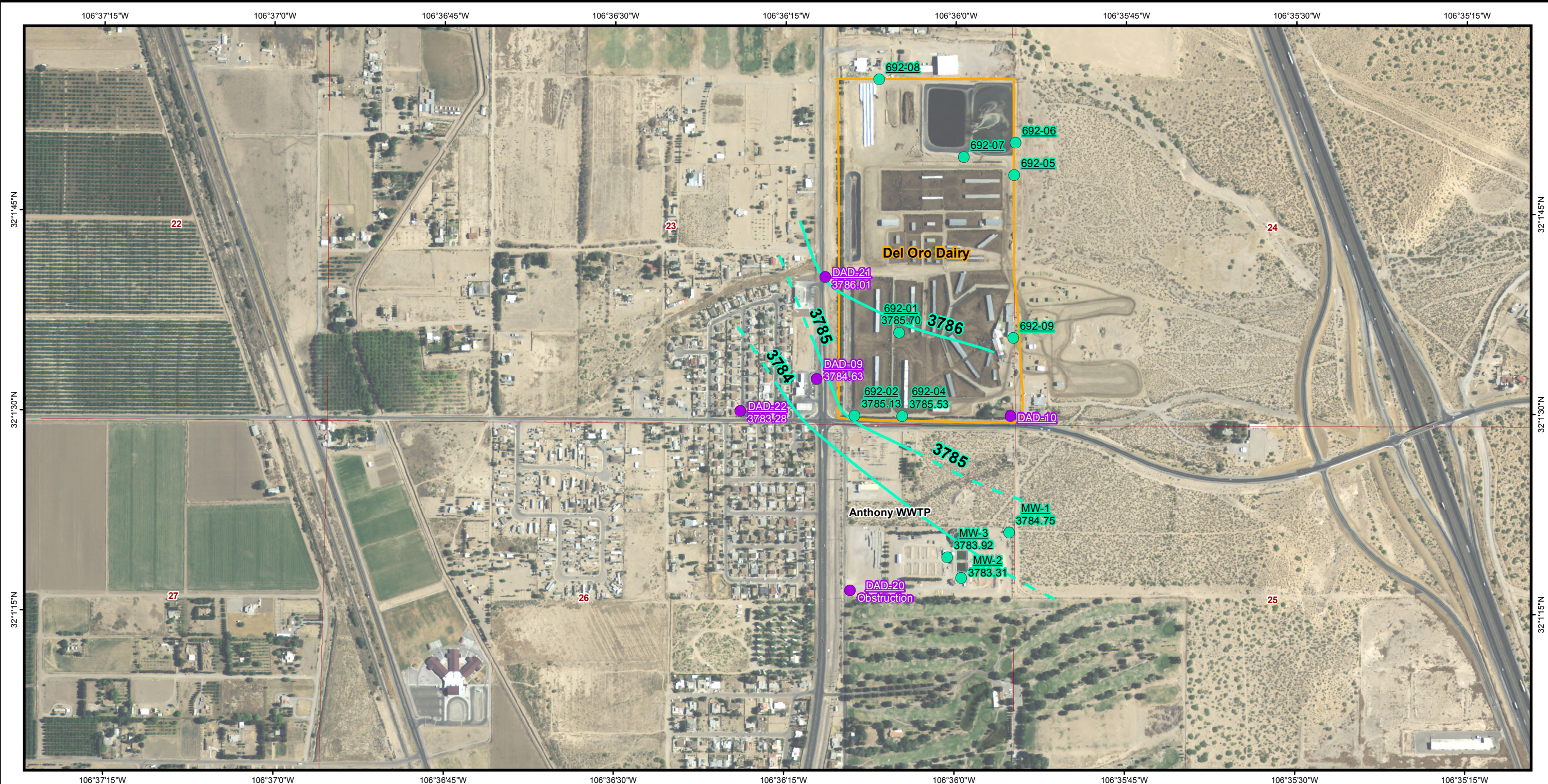
400 200 0 400  
 FEET  
 SCALE 1:9,000 1" = 750 FT  
 WHEN PRODUCED AT 11X17IN



**REFERENCES**  
 Aerial Photography: NAIP, 2011  
 PLSS: BLM, 2000  
 Projection: State Plane NAD 83 New Mexico Central (feet)

PROJECT		<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>	
TITLE		<b>POTENTIOMETRIC SURFACE MAP, APRIL 2012, SOUTHERN PORTION REGIONAL AQUIFER</b>	
	PROJECT No.	deloro_pot_regional200908.mxd	
	DESIGN		SCALE AS SHOWN
	GIS		REV 0
	CHECK		
REVIEW			FIGURE 4

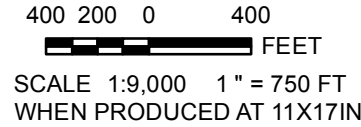
2012-08-14 R:\Industrial & Other\Dona Ana Dairies\GIS\MXDs\201204\SouthPerchAg\_Pot\_201204.mxd EA-Dallas\_jschwartz



**LEGEND:**

- Discharge Plan Well With Water Elevations (Feet MSL)
- Abatement Plan Well With Water Elevations (Feet MSL)
- Potentiometric Contour
- - - Potentiometric Contour - Assumed
- Land Owned by Dairies
- Public Land Survey System

**Note:**  
\* = Suspect Data (Point not used in contouring)



**REFERENCES**  
Aerial Photography: NAIP, 2011  
PLSS: BLM, 2000  
Projection: State Plane NAD 83 New Mexico Central (feet)

<b>PROJECT</b>		<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>	
<b>TITLE</b>		<b>POTENTIOMETRIC SURFACE MAP, APRIL 2012, SOUTHERN PORTION PERCHED AQUIFER</b>	
<b>PROJECT No.</b>		deloro_pot_regional200908.mxd	
<b>DESIGN</b>		SCALE AS SHOWN	REV 0
<b>GIS</b>		<b>FIGURE 5</b>	
<b>CHECK</b>			
<b>REVIEW</b>			



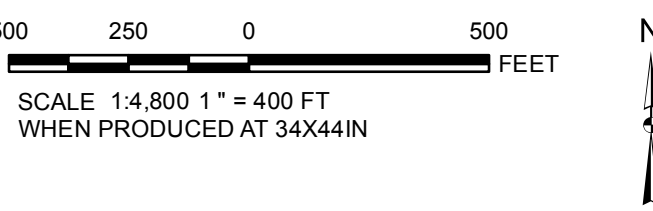


**LEGEND:**

- Abatement Plan Monitoring Wells
- Discharge Plan Monitoring Wells
- Interstate Highway
- State Highway
- Other Road
- Land Owned by Dairies
- Land Application on Non-Dairy Property
- Public Land Survey System

**Note:**  
\* Indicates data is suspect  
Units are in mg/L

**REFERENCES**  
Roads: Doña Ana County, 2001  
Aerial Photography: NAIP, 2011  
PLSS: BLM, 2000  
Projection: State Plane NAD 83 New Mexico Central (feet)



**DOÑA ANA DAIRIES  
MESQUITE, NEW MEXICO**

**GROUND WATER ANALYTICAL RESULTS,  
NORTHERN PORTION**

**MAY 2012**

**FIGURE 6**

2012 05 13 10:48:48 AM C:\Users\jgarcia\Documents\2012\20120513\20120513\_104848.dwg



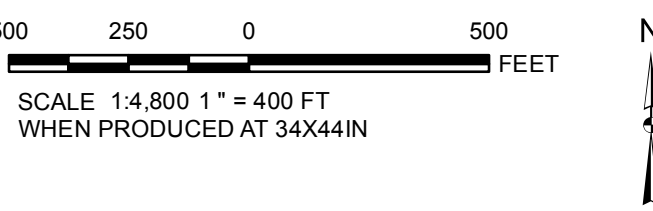


**LEGEND:**

- Abatement Plan Monitoring Wells
- Discharge Plan Monitoring Wells
- Interstate Highway
- State Highway
- Other Road
- ▭ Land Owned by Dairies
- ▭ Land Application on Non-Dairy Property
- ▭ Public Land Survey System

**Note:**  
\* Indicates suspect data  
Units are in mg/L

**REFERENCES**  
Roads: Doña Ana County, 2001  
Aerial Photography: NAIP, 2011  
PLSS: BLM, 2000  
Projection: State Plane NAD 83 New Mexico Central (ft)



PROJECT: DOÑA ANA DAIRIES  
MESQUITE, NEW MEXICO

DATE: MAY 2012

TITLE: GROUND WATER ANALYTICAL RESULTS  
CENTRAL PORTION

PROJECT NO.	DATE	SCALE

FIGURE 7

2012-05-15 11:45:00 AM DOÑA ANA DAIRIES MESQUITE, NEW MEXICO - CENTRAL PORTION - GROUND WATER ANALYTICAL RESULTS - FIGURE 7

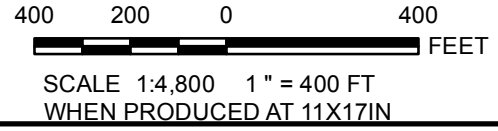


**LEGEND:**

- Abatement Plan Monitoring Wells
- Discharge Plan Monitoring Wells
- Land Owned by Dairies
- Public Land Survey System

**REFERENCES**

Aerial Photography: NAIP, 2011  
 PLSS: BLM, 2000  
 Projection: State Plane NAD 83 New Mexico Central (feet)



<b>PROJECT</b>			
<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>			
<b>TITLE</b>			
<b>GROUNDWATER ANALYTICAL RESULTS MAY 2012, SOUTHERN PORTION, REGIONAL AQUIFER</b>			
<b>PROJECT No.</b>	analytical_regional200908.mxd		
<b>DESIGN</b>		<b>SCALE</b>	AS SHOWN
<b>GIS</b>			<b>REV</b> 0
<b>CHECK</b>		<b>FIGURE 8</b>	
<b>REVIEW</b>			



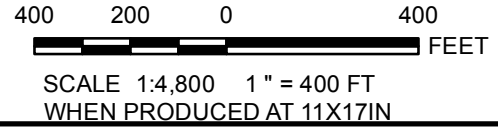


**LEGEND:**

- Abatement Plan Monitoring Wells
- Discharge Plan Monitoring Wells
- Land Owned by Dairies
- Public Land Survey System

**REFERENCES**

Aerial Photography: NAIP, 2011  
 PLSS: BLM, 2000  
 Projection: State Plane NAD 83 New Mexico Central (feet)



<b>PROJECT</b>			
<b>DOÑA ANA DAIRIES MESQUITE, NEW MEXICO</b>			
<b>TITLE</b>			
<b>GROUNDWATER ANALYTICAL RESULTS MAY 2012, SOUTHERN PORTION, PERCHED AQUIFER</b>			
	PROJECT No.	deloro_analytical_perched200908.mxd	
	DESIGN		SCALE AS SHOWN   REV 0
	GIS		
	CHECK		
REVIEW			
			FIGURE 9

**APPENDIX A  
SAMPLING FIELD FORMS**

ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID 833-01 Date gauged 5-7-12  
 Site Big Sky Time gauged \_\_\_\_\_  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water Dry Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth 36.48 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = \_\_\_\_\_ gallons)

GROUNDWATER SAMPLING DATA

Time/date purged Ø Purge Method Ø

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)

Actual purge volume Ø gal. Field measurements stabilized within ± 10%? Ø  
 Time/date sampled Ø Purged/sampled by Angel Mito Rivera  
 Sample method Ø  
 Requested analyses Cannot sample or purge well is dry.  
 Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 833-02  
 Site Big Sky  
 Date gauged 5-7-12  
 Time gauged 9:59  
 Depth to PSH \_\_\_\_\_ Feet  
 Well diameter 4 Inches  
 Depth to water 33.98 Feet  
 Height of fluid column 23.44 Feet  
 Total depth 57.42 Feet  
 Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 15 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 10:11 5-7-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DE (mg/L)
10:41	13	20.2	3658	8.90	180	2774
10:44	14	19.9	3803	8.68	192	2923
10:49	15	20.3	4040	8.52	199	3120

Actual purge volume 15 gal. Field measurements stabilized within ± 10%?

Time/date sampled 10:56 5-7-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID 833-03 Date gauged 5-3-12  
Site Big Sky Time gauged 10:38  
Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
Depth to water Dry Feet Height of fluid column \_\_\_\_\_ Feet  
Total depth 62.59 Feet Volume in well \_\_\_\_\_ Gallons  
(3 well volumes = 2 gallons)

GROUNDWATER SAMPLING DATA

Time/date purged 0 Purge Method \_\_\_\_\_

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)

Actual purge volume 0 gal. Field measurements stabilized within ± 10%? 0

Time/date sampled   Purged/sampled by Angel Nire to Rivera

Sample method  

Requested analyses Well is dry cannot purge or sample.

Comments/observations \_\_\_\_\_

Well Casing Volumes  
2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 833-04 Date gauged 5-3-12  
 Site Big Sky Time gauged 12:52  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 42.30 Feet Height of fluid column 11.91 Feet  
 Total depth 54.21 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 8 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 12:59 5-3-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
<u>1:15</u>	<u>6</u>	<u>22.8</u>	<u>3277</u>	<u>8.37</u>	<u>259</u>	<u>2457</u>
<u>1:20</u>	<u>7</u>	<u>21.3</u>	<u>3367</u>	<u>8.19</u>	<u>229</u>	<u>2544</u>
<u>1:23</u>	<u>8</u>	<u>22.5</u>	<u>3632</u>	<u>7.99</u>	<u>227</u>	<u>2775</u>

Actual purge volume 8 gal. Field measurements stabilized within ± 10%?

Time/date sampled 1:29 5-3-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft



# ATTACHMENT E MONITOR WELL SAMPLING FIELD FORM

## FLUID LEVEL DATA

Well ID 833-05 Date gauged 5-3-12  
 Site Big Sky Time gauged 11:23  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 64.38 Feet Height of fluid column 9.54 Feet  
 Total depth 73.92 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 6 gallons)

## GROUNDWATER SAMPLING DATA

Time/date purged 11:24 5-3-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
11:37	4	23.6	4946	7.95	241	3883
11:39	5	23.2	4955	7.45	246	3935
11:43	6	22.8	4988	7.41	241	3949

Actual purge volume 6 gal. Field measurements stabilized within ± 10%?

Time/date sampled 11:49 5-3-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 833-06 Date gauged 5-3-12  
 Site Big Sky Time gauged 9:55  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 74.01 Feet Height of fluid column 11.1 Feet  
 Total depth 85.11 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 7 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 9:57 5-3-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
10:11	5	21.7	4034	8.56	222	3105
10:14	6	21.3	4024	8.16	237	3110
10:18	7	21.4	4038	7.86	244	3121

Actual purge volume 7 gal. Field measurements stabilized within ± 10%?

Time/date sampled 10:25 5-3-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 833-07 Date gauged 5-7-12  
 Site Big Sky Time gauged 7:09  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 60.31 Feet Height of fluid column 13.11 Feet  
 Total depth 73.42 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 8 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 7:26 5-7-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
7:40	6	20.9	7433	9.24	145	6127
7:46	7	20.5	7463	8.32	158	6164
7:50	8	20.2	7471	8.05	166	6154

Actual purge volume 8 gal. Field measurements stabilized within ± 10%?

Time/date sampled 7:52 5-7-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 833-08 Date gauged 5-3-12  
 Site Big Sky Time gauged 10:45  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 59.84 Feet Height of fluid column 13.33 Feet  
 Total depth 73.17 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 9 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 10:47 5-3-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS DO (mg/L)
<u>11:00</u>	<u>7</u>	<u>23.3</u>	<u>4890</u>	<u>7.94</u>	<u>253</u>	<u>3821</u>
<u>11:04</u>	<u>8</u>	<u>22.9</u>	<u>5009</u>	<u>7.43</u>	<u>244</u>	<u>3945</u>
<u>11:07</u>	<u>9</u>	<u>22.7</u>	<u>5123</u>	<u>7.32</u>	<u>232</u>	<u>4051</u>

Actual purge volume 9 gal. Field measurements stabilized within ± 10%?

Time/date sampled 11:12 5-3-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID 833-09 Date gauged 5-7-12  
 Site Big Sky Time gauged 8:21  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 26.44 Feet Height of fluid column 13.35 Feet  
 Total depth 39.79 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 8 gallons)

GROUNDWATER SAMPLING DATA

Time/date purged 8:26 5-7-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS DO (mg/L)
8:36	6	20.4	5774	8.28	180	4622
8:41	7	20.7	5732	8.09	194	4588
8:44	8	20.6	5721	8.04	198	4592

Actual purge volume 8 gal. Field measurements stabilized within ± 10%?

Time/date sampled 8:49 5-7-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID 833-10 Date gauged 5-7-12  
 Site Big Sky Time gauged 8:58  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 21.10 Feet Height of fluid column 16.08 Feet  
 Total depth ~~22.20~~ Feet Volume in well \_\_\_\_\_ Gallons  
37.18  
 (3 well volumes = 11 gallons)

GROUNDWATER SAMPLING DATA

Time/date purged 9:07 5-7-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
9:26	9	18.7	3949	199	8.79	3051
9:32	10	18.4	3911	8.20	217	3022
9:36	11	18.3	3935	8.04	227	3040

Actual purge volume 11 gal. Field measurements stabilized within ± 10%?

Time/date sampled 9:42 5-7-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 340-01 Date gauged 4-25-12  
 Site Bright Str Time gauged 2:07  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 40.15 Feet Height of fluid column 7 Feet  
 Total depth 47.15 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 4 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 2:09 4-25-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
2:11	2	22.0	4661	8.74	213	3644
2:12	3	21.4	4729	8.09	227	3697
2:14	4	21.6	4717	7.80	244	3687

Actual purge volume 4 gal. Field measurements stabilized within ± 10%?

Time/date sampled 14:16 4-25-12 Purged/sampled by Angel N. Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

## ATTACHMENT E MONITOR WELL SAMPLING FIELD FORM

### FLUID LEVEL DATA

Well ID 340-02 Date gauged 4-25-12  
 Site Bright Star Time gauged 2:21  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 29.43 Feet Height of fluid column 18.85 Feet  
 Total depth 48.28 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 12 gallons)

### GROUNDWATER SAMPLING DATA

Time/date purged 2:23 4-25-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)	TDS
2:38	10	22.5	4855	8.33	250	3814	
2:42	11	22.1	4839	8.03	259	3803	
2:44	12	22.0	4870	7.97	264	3826	

Actual purge volume 12 gal. Field measurements stabilized within ± 10%?

Time/date sampled 2:46 4-25-12 Purged/sampled by Angel N. Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft



**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 86/340-01 Date gauged 4-25-12  
 Site Bright Star Time gauged 9:50  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 52.43 Feet Height of fluid column 18.63 Feet  
 Total depth 71.11 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 12 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 9:59 4-25-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS DO (mg/L)
10:16	6	20.5	4560	4.82	323	3563
10:26	9	20.2	4605	5.45	323	3594
10:34	12	19.2	4649	6.06	312	3650

Actual purge volume 12 gal. Field measurements stabilized within ± 10%?

Time/date sampled 10:41 4-25-12 Purged/sampled by Angel N. Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 870/86/340.01 Date gauged 4-25-12  
 Site Bright Star Time gauged 11:40  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 45.90 Feet Height of fluid column -21.78 Feet  
 Total depth 67.68 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 14 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 11:43 4-25-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
11:58	10	20.7	7186	6.92	259	5880
12:01	12	20.5	7115	6.89	269	5814
12:07	14	20.8	7125	6.93	285	5810

Actual purge volume 14 gal. Field measurements stabilized within ± 10%?

Time/date sampled 12:10 4-25-12 Purged/sampled by Angel N. Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 74.01 Date gauged 5-3-12  
 Site Buena Vista II Time gauged 7:34  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 34.26 Feet Height of fluid column 11 Feet  
 Total depth 45.26 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 7 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 7:45 5-3-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
8:05	5	22.4	5308	8.52	190	4231
8:07	6	21.8	5325	8.20	209	4222
8:09	7	21.5	5330	8.05	218	4236

Actual purge volume 7 gal. Field measurements stabilized within ± 10%?

Time/date sampled 8:13 5-3-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.69 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 74-02 Date gauged 5-3-12  
 Site Buena Vista II Time gauged 7:08  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 14.34 Feet Height of fluid column 5.93 Feet  
 Total depth 20.27 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 4 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 7:11 5-3-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
7:15	2	19.3	3646	8.70	210	2810
7:17	3	19.7	3626	8.39	219	2780
7:20	4	19.6	3641	8.30	223	2787

Actual purge volume 4 gal Field measurements stabilized within ± 10%?

Time/date sampled 7:25 5-3-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 74-03 Date gauged 5-3-12  
 Site Buen Vista # Time gauged 6:33  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 13.97 Feet Height of fluid column -6.33 Feet  
 Total depth 20.30 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 4 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 6:45 5-3-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
6:49	2	20.5	7073	9.49	256	5760
6:52	3	20.2	6927	8.86	250	5649
6:54	4	20.0	6940	8.53	248	5640

Actual purge volume 4 gal. Field measurements stabilized within ± 10%?

Time/date sampled 6:56 5-3-12 Purged/sampled by Angel Niceto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 74-04 Date gauged 5-3-12  
 Site Buena Vista II Time gauged 9:07  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 47.12 Feet Height of fluid column 10.84 Feet  
 Total depth 57.96 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 7 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 9:15 5-3-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
9:26	5	21.4	3181	8.10	209	2396
9:29	6	20.9	3170	7.96	225	2400
9:31	7	21.0	3187	7.87	235	2410

Actual purge volume 7 gal. Field measurements stabilized within ± 10%?

Time/date sampled 9:34 5-3-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID 74-05 Date gauged 5-3-12  
 Site Buena Vista II Time gauged 8:33  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 40.08 Feet Height of fluid column 17.15 Feet  
 Total depth 57.23 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 11 gallons)

GROUNDWATER SAMPLING DATA

Time/date purged 8:36 5-3-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
8:49	9	21.9	3090	8.86	221	2320
8:52	10	22.0	3024	8.32	232	2270
8:54	11	21.8	3017	8.05	239	2265

Actual purge volume 11 gal. Field measurements stabilized within ± 10%?

Time/date sampled 8:59 5-3-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-01 Date gauged 5-9-12  
 Site \_\_\_\_\_ Time gauged 6:46  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 68.21 Feet Height of fluid column 8.08 Feet  
 Total depth 76.29 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 1.5 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 6:49 5-9-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)	TDS
<u>6:54</u>	<u>.5</u>	<u>23.4</u>	<u>2426</u>	<u>7.49</u>	<u>211</u>	<u>1775</u>	
<u>6:57</u>	<u>1</u>	<u>23.9</u>	<u>2420</u>	<u>7.76</u>	<u>214</u>	<u>1773</u>	
<u>6:59</u>	<u>1.5</u>	<u>24.1</u>	<u>2603</u>	<u>7.44</u>	<u>220</u>	<u>1920</u>	

Actual purge volume 1.5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 7:04 5-9-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft



**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-02 Date gauged 5-9-12  
 Site \_\_\_\_\_ Time gauged 7:46  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 63.44 Feet Height of fluid column 4.45 Feet  
 Total depth 67.89 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 1.5 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 7:47 5-9-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
<u>7:56</u>	<u>.5</u>	<u>22.7</u>	<u>2554</u>	<u>8.24</u>	<u>236</u>	<u>1885</u>
<u>7:52</u>	<u>1</u>	<u>23.1</u>	<u>2636</u>	<u>7.97</u>	<u>237</u>	<u>1934</u>
<u>7:55</u>	<u>1.5</u>		<u>2563</u>	<u>7.83</u>	<u>242</u>	<u>1869</u>

Actual purge volume 1.5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 8:01 5-9-12 Purged/sampled by Chad Muth River

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-03 Date gauged 5-9-12  
 Site \_\_\_\_\_ Time gauged 8:16  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 10.97 Feet Height of fluid column 3.71 Feet  
 Total depth 14.68 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 1.5 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 8:19 5-9-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
8:21	.5	18.6	6501	7.34	5	5280
8:23	1	18.9	6515	7.22	-0	5294
8:25	1.5	19.0	6497	7.20	526	5309

Actual purge volume 1.5 gal. Field measurements stabilized within ± 10%?   
 Time/date sampled 8:32 5-9-12 Purged/sampled by Angel Nieto Rivera  
 Sample method Bailer  
 Requested analyses \_\_\_\_\_  
 Comments/observations \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-04 Date gauged 5-9-12  
 Site \_\_\_\_\_ Time gauged 8:59  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 14.31 Feet Height of fluid column 3.93 Feet  
 Total depth 18.24 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 1.5 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 9:01 5-9-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (us/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
9:03	.5	17.2	3690	8.01	201	2838
9:05	1	17.1	3630	7.86	141	2788
9:07	1.5	16.9	3620	7.81	126	2776

Actual purge volume 1.5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 9:11 5-9-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-05 Date gauged 5-9-12  
 Site \_\_\_\_\_ Time gauged 10:31  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 14.23 Feet Height of fluid column 9.48 Feet  
 Total depth 23.71 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 2 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 10:41 5-9-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
10:43	.5	15.4	2633	8.03	245	2800
10:45	1	15.5	3719	7.87	247	2881
10:49	2	15.6	3756	7.77	250	2900

Actual purge volume 2 gal. Field measurements stabilized within ± 10%?

Time/date sampled 10:53 5-9-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-06 Date gauged 5-9-12  
 Site \_\_\_\_\_ Time gauged 9:32  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 82.15 Feet Height of fluid column 1.27 Feet  
 Total depth 83.42 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 1.5 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 9:35 5-9-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
<u>9:39</u>	<u>.5</u>	<u>23.1</u>	<u>2274</u>	<u>8.40</u>	<u>216</u>	<u>1656</u>
<u>9:43</u>	<u>1</u>	<u>22.2</u>	<u>2312</u>	<u>8.18</u>	<u>223</u>	<u>1688</u>
<u>9:47</u>	<u>1.5</u>	<u>23.2</u>	<u>2307</u>	<u>8.06</u>	<u>229</u>	<u>1680</u>

Actual purge volume 1.5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 9:58 5-9-12 Purged/sampled by Angel Niebo Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-07 Date gauged 5-9-12  
 Site \_\_\_\_\_ Time gauged 12:30  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 90.31 Feet Height of fluid column 10.48 Feet  
 Total depth 100.79 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 2 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 12:32 5-9-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
12:38	1	24.1	3217	8.60	245	2418
12:42	1.5	24.0	3195	8.22	253	2408
12:49	2	24.2	3215	7.93	257	2423

Actual purge volume 2 gal. Field measurements stabilized within ± 10%?

Time/date sampled 12:56 5-9-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-08 Date gauged 5-9-12  
 Site \_\_\_\_\_ Time gauged 11:14  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 50.29 Feet Height of fluid column 4.72 Feet  
 Total depth 55.01 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 1.5 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 11:16 5-9-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
<u>11:19</u>	<u>.5</u>	<u>21.2</u>	<u>5078</u>	<u>7.93</u>	<u>242</u>	<u>4014</u>
<u>11:24</u>	<u>1</u>	<u>20.7</u>	<u>5097</u>	<u>7.79</u>	<u>246</u>	<u>4039</u>
<u>11:30</u>	<u>1.5</u>	<u>20.9</u>	<u>5116</u>	<u>7.47</u>	<u>252</u>	<u>4048</u>

Actual purge volume 1.5 gal. Field measurements stabilized within ± 10%? \_\_\_\_\_

Time/date sampled 12:15 5-9-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations low water flow, had to leave bailer inside well to complete samples.

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-09 Date gauged 5-10-12  
 Site \_\_\_\_\_ Time gauged 6:54  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 53.41 Feet Height of fluid column 9.48 Feet  
 Total depth 62.89 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 1.6 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 6:57 5-10-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TPS DO (mg/L)
6:59	.5	22.0	2750	8.33	222	2031
7:02	1	22.2	2664	8.03	231	1974
7:05	1.6	22.3	3351	7.49	240	2526

Actual purge volume 1.6 gal. Field measurements stabilized within ± 10%?

Time/date sampled 7:10 5-10-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft



**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-10 Date gauged 5-10-12  
 Site \_\_\_\_\_ Time gauged 7:55  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 80.35 Feet Height of fluid column 14.33 Feet  
 Total depth 94.68 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 2.5 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 7:59 5-10-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	<sup>TDS</sup> DO (mg/L)
<u>8:07</u>	<u>1</u>	<u>20.9</u>	<u>2207</u>	<u>8.21</u>	<u>258</u>	<u>1615</u>
<u>8:11</u>	<u>2</u>	<u>20.5</u>	<u>2200</u>	<u>8.02</u>	<u>255</u>	<u>1608</u>
<u>8:13</u>	<u>2.5</u>	<u>21.1</u>	<u>2219</u>	<u>7.90</u>	<u>259</u>	<u>1613</u>

Actual purge volume 2.5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 8:15 5-10-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM

FLUID LEVEL DATA

Well ID DAD-11  
 Site \_\_\_\_\_  
 Date gauged 5-14-12  
 Time gauged 7:10  
 Depth to PSH \_\_\_\_\_ Feet  
 Well diameter 4 Inches  
 Depth to water 19.12 Feet  
 Height of fluid column 16.28 Feet  
 Total depth 35.40 Feet  
 Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 11 gallons)

GROUNDWATER SAMPLING DATA

Time/date purged 10:15 5-14-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
10:37	9	25.7	2578	8.59	201	1899
10:39	10	26.0	2585	7.92	212	1890
10:42	11	26.1	2548	7.77	217	1872

Actual purge volume 3 gal. Field measurements stabilized within ± 10%?

Time/date sampled 10:47 5-14-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-12 Date gauged 5-14-12  
 Site \_\_\_\_\_ Time gauged 9:06  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 48.53 Feet Height of fluid column 33.63 Feet  
 Total depth 82.16 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 6 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 9:08 5-14-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
9:21	4	21.9	4317	8.47	196	3378
9:27	5	22.0	4312	8.05	181	3350
9:31	6	21.8	4306	7.76	183	3359

Actual purge volume 6 gal. Field measurements stabilized within ± 10%?

Time/date sampled 9:37 5-14-12 Purged/sampled by Angel Nicto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-13 Date gauged 5-10-12  
 Site \_\_\_\_\_ Time gauged 12:53  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 83.60 Feet Height of fluid column 9.46 Feet  
 Total depth 93.06 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 2 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 12:58 5-10-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS DO (mg/L)
<u>1:06</u>	<u>.5</u>	<u>23.7</u>	<u>3243</u>	<u>7.44</u>	<u>270</u>	<u>2449</u>
<u>1:11</u>	<u>1.5</u>	<u>23.8</u>	<u>3231</u>	<u>7.49</u>	<u>275</u>	<u>2437</u>
<u>1:21</u>	<u>2</u>	<u>24.1</u>	<u>3220</u>	<u>7.42</u>	<u>268</u>	<u>2425</u>

Actual purge volume 2 gal. Field measurements stabilized within ± 10%?

Time/date sampled 1:35 5-10-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-14 Date gauged 5-14-12  
 Site \_\_\_\_\_ Time gauged 8:26  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 26.09 Feet Height of fluid column 16.49 Feet  
 Total depth 42.58 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 3 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 8:29 5-14-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
8:33	1	20.1	4939	9.45	177	3897
8:37	2	19.9	4954	8.56	186	3910
8:41	3	20.2	5056	8.18	191	4006

Actual purge volume 3 gal. Field measurements stabilized within ± 10%?

Time/date sampled 8:45 5-14-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-16 Date gauged 5-14-12  
 Site \_\_\_\_\_ Time gauged 11:09  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 17.65 Feet Height of fluid column 15.14 Feet  
 Total depth 32.79 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 3 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 11:11 5-14-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
11:16	1	18.4	3063	8.11	218	2315
11:19	2	17.9	3065	8.01	222	2316
11:21	3	18.0	3068	7.79	225	2321

Actual purge volume 3 gal. Field measurements stabilized within ± 10%?

Time/date sampled 11:25 5-14-12 Purged/sampled by Angel Nicto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-17 Date gauged 5-10-12  
 Site \_\_\_\_\_ Time gauged 11:32  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 21.00 Feet Height of fluid column 17.53 Feet  
 Total depth 38.53 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 3 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 11:37 5-10-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
11:40	1	19.3	2385	8.22	254	1751
11:44	2	19.6	2373	7.77	258	1742
11:50	3	19.7	2389	7.42	261	1754

Actual purge volume 3 gal. Field measurements stabilized within ± 10%?

Time/date sampled 11:56 5-10-12 Purged/sampled by Angel Niceto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-18 Date gauged 5-10-12  
 Site \_\_\_\_\_ Time gauged 10:51  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 22.20 Feet Height of fluid column 34.71 Feet  
 Total depth 56.91 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 6 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 10:53 5-10-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
<u>11:06</u>	<u>4</u>	<u>17.9</u>	<u>4161</u>	<u>7.77</u>	<u>257</u>	<u>3238</u>
<u>11:10</u>	<u>5</u>	<u>18.0</u>	<u>4152</u>	<u>7.28</u>	<u>262</u>	<u>3231</u>
<u>11:16</u>	<u>6</u>	<u>18.1</u>	<u>4162</u>	<u>7.23</u>	<u>258</u>	<u>3248</u>

Actual purge volume 6 gal. Field measurements stabilized within ± 10%?

Time/date sampled 11:21 5-10-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft



**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-19 Date gauged 5-10-12  
 Site \_\_\_\_\_ Time gauged 10:05  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 63.30 Feet Height of fluid column 35.92 Feet  
 Total depth 99.22 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 6 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 10:07 5-10-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
10:21	4	21.7	5157	7.40	271	4098
10:27	5	21.8	5169	7.27	274	4089
10:32	6	22.0	5180	7.07	267	4079

Actual purge volume 6 gal. Field measurements stabilized within ± 10%?

Time/date sampled 10:38 5-10-12 Purged/sampled by Angel Nieto Rivera  
 Sample method Bailer  
 Requested analyses \_\_\_\_\_  
 Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

# ATTACHMENT E MONITOR WELL SAMPLING FIELD FORM

## FLUID LEVEL DATA

Well ID DAD-20 Date gauged 5-8-12  
 Site \_\_\_\_\_ Time gauged 1:12  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water Dry Feet Height of fluid column Ø Feet  
 Total depth 50.77 Feet Volume in well Ø Gallons

(3 well volumes = Ø gallons)

## GROUNDWATER SAMPLING DATA

Time/date purged Ø Purge Method Ø

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)

Actual purge volume Ø gal. Field measurements stabilized within ± 10%? Ø

Time/date sampled Ø Purged/sampled by Angel Nieto Rivera

Sample method Ø

Requested analyses Used fishing kits to check if bailer is inside well

Comments/observations and did not get anything. Use new bailer and no water would come out. Dry well.

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID DAD-21 Date gauged 5-10-12  
 Site \_\_\_\_\_ Time gauged 7:22  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 53.63 Feet Height of fluid column 16.88 Feet  
 Total depth 70.51 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 3 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 8:57 5-10-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
9:03	1	21.0	2589	8.05	263	1916
9:06	2	21.3	2555	7.42	268	1885
9:10	3	21.5	2560	7.32	270	1891

Actual purge volume 3 gal. Field measurements stabilized within ± 10%?

Time/date sampled 9:13 5-10-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID D4D-22 Date gauged 5-10-12  
 Site \_\_\_\_\_ Time gauged 6:25  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 43.86 Feet Height of fluid column 6.06 Feet  
 Total depth 49.92 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 1 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 8:32 5-10-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
8:35	0.5	21.5	4439	7.47	265	3463
8:38	1	21.7	4475	7.81	260	3491
8:40	1.5	22.1	4522	7.93	258	3530

Actual purge volume 1.5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 8:44 5-10-12 Purged/sampled by Josef Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

# ATTACHMENT E MONITOR WELL SAMPLING FIELD FORM

## FLUID LEVEL DATA

Well ID 126-04 Date gauged 4-30-12  
 Site Del NoAc Time gauged 1:10  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 31.46 Feet Height of fluid column 6.49 Feet  
 Total depth 37.95 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 4 gallons)

## GROUNDWATER SAMPLING DATA

Time/date purged 1:13 4-30-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L) <span style="float: right;">TDS</span>
1:19	2	21.9	3654	8.35	231	2791
1:23	3	21.7	3613	8.04	242	2780
1:26	4	21.6	3705	7.89	252	2834

Actual purge volume 4 gal. Field measurements stabilized within ± 10%?

Time/date sampled 13:28 4-30-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

# ATTACHMENT E MONITOR WELL SAMPLING FIELD FORM

## FLUID LEVEL DATA

Well ID 126-05 Date gauged 4-30-12  
 Site Del Norte Time gauged 1:35  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 24.20 Feet Height of fluid column 10.95 Feet  
 Total depth 35.15 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 2 gallons)

## GROUNDWATER SAMPLING DATA

Time/date purged 1:36 4-30-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS DO (mg/L)
1:38	5	21.8	4245	8.68	203	3299
1:42	1	21.0	4257	8.41	210	3314
1:46	2	21.1	4261	8.35	215	3290

Actual purge volume 2 gal. Field measurements stabilized within ± 10%?

Time/date sampled 1:52 4-30-12 Purged/sampled by Angel Nieto Rivan

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 126-07 Date gauged 4-30-12  
 Site Del Norte Time gauged 10:59  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 31.84 Feet Height of fluid column 6.75 Feet  
 Total depth 38.59 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 1.1 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 11:01 4-30-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
11:02	0.5	22.4	3945	8.66	209	3003
11:05	1	21.8	3997	8.18	216	3082
11:06	1.5	21.5	4031	7.97	222	3105

Actual purge volume 1 gal. Field measurements stabilized within ± 10%?

Time/date sampled 11:10 4-30-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 126-09 Date gauged 4-30-12  
 Site Del Norte / Daybreak Time gauged 10:17  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 73.98 Feet Height of fluid column 7.76 Feet  
 Total depth 81.74 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 1.3 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 10:23 4-30-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)	TDS
10:26	.5	23.6	4698	9.12	247	3667	
10:29	1	23.1	4648	8.52	237	3630	
10:31	1.5	22.7	4736	8.30	232	3712	

Actual purge volume 1.5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 10:45 4-30-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations Low water flow, took a while to get three samples.

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft



**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 126-12 Date gauged 4-30-12  
 Site Del Norte Time gauged 2:06  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 20.22 Feet Height of fluid column 9.75 Feet  
 Total depth 29.97 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 6 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 2:09 4-30-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
2:20	<u>4</u>	22.2	3575	9.05	234	2720
2:22	<u>5</u>	20.7	3548	8.49	243	2698
2:26	<u>6.6</u>	20.4	3561	8.20	248	2729

Actual purge volume 6 gal. Field measurements stabilized within ± 10%?

Time/date sampled 2:33 4-30-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 126-13 Date gauged 4-30-12  
 Site Del Norte Time gauged 12:40  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 38.52 Feet Height of fluid column 20.80 Feet  
 Total depth 59.32 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 3.5 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 12:46 4-30-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
12:57	1.5	22.6	4599	8.46	246	3583
12:59	2.5	22.0	4587	7.80	249	3572
1:01	3.5	22.2	4600	7.42	252	3592

Actual purge volume 3.5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 1:03 4-30-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 624-01 Date gauged 4-30-12  
 Site Dominguez 1 Time gauged 8:41  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 26.02 Feet Height of fluid column 20.52 Feet  
 Total depth 46.54 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 13 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 8:45 4-30-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
9:02	11	19.8	6091	8.33	230	4907
9:05	12	19.7	6072	8.12	234	4893
9:07	13	19.5	6141	8.02	237	4960

Actual purge volume 13 gal. Field measurements stabilized within ± 10%?

Time/date sampled 9:09 4-30-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 624-02 Date gauged 4-30-12  
 Site Dominquez 1 Time gauged 8:06  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 17.99 Feet Height of fluid column 13.48 Feet  
 Total depth 31.47 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 8 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 8:10 4-30-12 Purge Method Boiler

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
8:20	6	18.7	5695	8.61	182	4571
8:23	7	18.8	5689	8.18	200	4567
8:25	8	18.9	5694	8.01	205	4571

Actual purge volume 8 gal. Field measurements stabilized within ± 10%?

Time/date sampled 8:28 4-30-12 Purged/sampled by Angel Nieto Rivera

Sample method Boiler

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

# ATTACHMENT E MONITOR WELL SAMPLING FIELD FORM

## FLUID LEVEL DATA

Well ID 624-04 Date gauged 4-30-12  
 Site Dominguez I Time gauged 7:03  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water Dry Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth 16.24 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = \_\_\_\_\_ gallons)

## GROUNDWATER SAMPLING DATA

Time/date purged \_\_\_\_\_ Purge Method \_\_\_\_\_

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)

Actual purge volume \_\_\_\_\_ gal. Field measurements stabilized within ± 10%? \_\_\_\_\_  
 Time/date sampled \_\_\_\_\_ Purged/sampled by \_\_\_\_\_  
 Sample method \_\_\_\_\_  
 Requested analyses No sample or purge, well is dry.  
 Comments/observations \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 624-05 Date gauged 4-30-12  
 Site Dominguez I Time gauged 7:15  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 15.90 Feet Height of fluid column 1.19 Feet  
 Total depth 17.09 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 1 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 7:20 4-30-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
7:21	0.5	17.6	2906	9.32	202	2176
	1					
	1.5					

Actual purge volume 1.5 gal Field measurements stabilized within ± 10%?

Time/date sampled 7:52 4-30-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations NOT enough water to purge only sample. Had to leave Bailer in on well to get enough water to fill 4 sample bottles.

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 1024-06 Date gauged 4-30-12  
 Site Dominguez Time gauged 9:20  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 51.83 Feet Height of fluid column 0.38 Feet  
 Total depth 52.21 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 1 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 9:24 4-30-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (us/cm)	pH	ORP (mV)	DO (mg/L)
9:25	0.5	21.3	5412	8.60	233	4278
	1.5					

Actual purge volume 1.5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 9:52 4-30-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations Not enough water to purge low water flow... Left bailer in for a while to get enough water for sample.

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID	<u>624-07</u>	Date gauged	<u>4-30-12</u>
Site	<u>Dominguez I</u>	Time gauged	<u>7:08</u>
Depth to PSH	_____ Feet	Well diameter	<u>4</u> Inches
Depth to water	<u>Dry</u> Feet	Height of fluid column	_____ Feet
Total depth	<u>55.52</u> Feet	Volume in well	_____ Gallons

(3 well volumes = \_\_\_\_\_ gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged \_\_\_\_\_ Purge Method \_\_\_\_\_

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)

Actual purge volume \_\_\_\_\_ gal.      Field measurements stabilized within ± 10%? \_\_\_\_\_

Time/date sampled \_\_\_\_\_ Purged/sampled by \_\_\_\_\_

Sample method \_\_\_\_\_

Requested analyses \_\_\_\_\_

Comments/observations Can't sample or purge since well is dry.

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft



# ATTACHMENT E MONITOR WELL SAMPLING FIELD FORM

## FLUID LEVEL DATA

Well ID 624-08 Date gauged 4-30-12  
 Site \_\_\_\_\_ Time gauged 7:10 a.m.  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water Dry Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth 19.26 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = \_\_\_\_\_ gallons)

## GROUNDWATER SAMPLING DATA

Time/date purged \_\_\_\_\_ Purge Method \_\_\_\_\_

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)

Actual purge volume \_\_\_\_\_ gal. Field measurements stabilized within ± 10%? \_\_\_\_\_

Time/date sampled \_\_\_\_\_ Purged/sampled by \_\_\_\_\_

Sample method \_\_\_\_\_

Requested analyses \_\_\_\_\_

Comments/observations Cannot purge or sample well, well is dry.

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 42-02 Date gauged 5-1-12  
 Site \_\_\_\_\_ Time gauged 10:55  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 25.46 Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth Pump Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 15 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 11:10:00 5-1-12 Purge Method well pump

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
11:24	5	21.5	3413	9.40	223	2590
11:31	10	21.1	3403	8.84	224	2597
11:42	15	20.8	3453	8.20	232	2632

Actual purge volume 15 gal. Field measurements stabilized within ± 10%?

Time/date sampled 11:49 5-1-12 Purged/sampled by Angel Nieto Rivera

Sample method well pump

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 42-03 Date gauged 5-1-12  
 Site Dominquez 2 Time gauged 6:50  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 81.57 Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth \_\_\_\_\_ Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 15 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 6:55 5-1-12 Purge Method Well pump

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)	TDS
7:13	5	24.4	5742	9.35	221	4599	
7:15	10	25.1	5735	9.46	207	4590	
7:17	15	25.4	5716	8.16	204	4549	

Actual purge volume 15 gal. Field measurements stabilized within ± 10%?

Time/date sampled 7:19 5-1-12 Purged/sampled by Angel Nieto Rivera

Sample method Well Pump

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 42-06 Date gauged 5-1-12  
 Site Dominquez 2 Time gauged 9:30  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 31.37 Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth \_\_\_\_\_ Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 15 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 9:45 5-1-12 Purge Method well pump

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
9:47	5	21.8	4905	8.79	181	3869
9:49	10	22.1	4980	8.54	183	3923
9:53	15	22.0	5022	8.32	178	3959

Actual purge volume 15 gal. Field measurements stabilized within ± 10%?

Time/date sampled 9:57 5-1-12 Purged/sampled by Angel Nieto Rivera

Sample method well pump

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

# ATTACHMENT E MONITOR WELL SAMPLING FIELD FORM

## FLUID LEVEL DATA

Well ID 42-07 Date gauged 5-1-12  
Site \_\_\_\_\_ Time gauged 8:06  
Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
Depth to water Dry Feet Height of fluid column \_\_\_\_\_ Feet  
Total depth Pump Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 0 gallons)

## GROUNDWATER SAMPLING DATA

Time/date purged 0 Purge Method 0

Time	Purge Volume (gal)	Temp (°C)	SpC ( $\mu$ s/cm)	pH	ORP (mV)	DO (mg/L)

Actual purge volume 0 gal. Field measurements stabilized within  $\pm$  10%? 0

Time/date sampled 0 Purged/sampled by Angel Nicko River

Sample method none - dry well

Requested analyses \_\_\_\_\_

Comments/observations well is dry cannot sample or purge.

Well Casing Volumes  
2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 42-08 Date gauged 5-1-12  
 Site Dominquez 2 Time gauged 10:08  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 27.51 Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth pump Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 15 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 10:13 5-1-12 Purge Method well pump

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS DO (mg/L)
10:16	5	21.7	2855	9.36	183	2130
10:19	10	21.7	2939	8.98	190	2197
<del>10:20</del> 10:33	15	22.2	3008	8.79	188	2246

Actual purge volume 15 gal. Field measurements stabilized within ± 10%?

Time/date sampled 10:38 5-1-12 Purged/sampled by Angel Nieto Rivera

Sample method well pump

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 42-09 Date gauged 5-1-12  
 Site Demingue 2 2 Time gauged 8:15  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 4696 Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth \_\_\_\_\_ Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 15 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 8:26 5-1-12 Purge Method well pump

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS	
						DO (mg/L)	
8:30	5	24.1	4693	8.35	127	3659	
8:35	10	26.8	4523	7.97	154	3501	
8:41	15	26.9	4484	7.84	151	3466	

Actual purge volume 15 gal. Field measurements stabilized within ± 10%?

Time/date sampled 8:46 5-1-12 Purged/sampled by Angel Nicto Rivera

Sample method well pump

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 42-10 Date gauged 5-1-12  
 Site Dominquez 2 Time gauged 13:31  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 111.87 Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth \_\_\_\_\_ Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 20 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 13:33 5-1-12 Purge Method well pump

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
13:37	5	28.0	2342	8.36	213	1696
13:39	10	27.6	2372	8.08	220	1717
13:44	15	27.3	2384	8.04	225	1735
13:47	20	27.6	2359	7.92	222	1713

Actual purge volume 20 gal. Field measurements stabilized within ± 10%?

Time/date sampled 13:50 5-1-12 Purged/sampled by Angel Nieto Rivera

Sample method well pump

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft



**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 42-11 Date gauged 5-1-12  
 Site Dominquez 2 Time gauged 13:53  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 122.09 Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth \_\_\_\_\_ Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 1500 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 13:54 5-1-12 Purge Method Well pump

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
13:57	5	28.4	1806	8.54	208	1276
13:59	10	28.5	1951	8.24	206	1385
14:03	15	29.1	2015	8.08	189	1433

Actual purge volume 15 gal. Field measurements stabilized within ± 10%?

Time/date sampled 14:06 5-1-12 Purged/sampled by Angel Mels River

Sample method Well pump

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 42-12 Date gauged 5-1-12  
 Site Dominguez 2 Time gauged 12:46  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 128.71 Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth \_\_\_\_\_ Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 25.5 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 12:54 5-1-12 Purge Method Well pump

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
12:58	5	29.1	2053	9.34	228	1463
1:01	10	29.3	2050	8.62	224	1465
1:06	15	29.1	2055	8.24	221	1472
1:09	20	29.3	2045	8.14	222	1459
1:13	25	29.2	2049	8.09	227	1463
1:17	25.5	29.4	2057	7.98	226	1473

Actual purge volume 25.5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 13:23 5-1-12 Purged/sampled by Angel Nieto Rivera

Sample method Well pump

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 42-13 Date gauged 5-1-12  
 Site Dominquez 2 Time gauged 7:35  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 54.96 Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth \_\_\_\_\_ Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 20 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 7:40 5-1-12 Purge Method Well Pump

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS DO (mg/L)
7:45	5	22.7	6175	8.10	529	4960
7:50	10	22.9	6115	8.06	535	4917
7:54	15	23.5	5900	7.94	54	4717
7:57	20	23.3	5802	7.83	85	4636

Actual purge volume 20 gal. Field measurements stabilized within ± 10%?

Time/date sampled 8:01 5-1-12 Purged/sampled by Angel Aceto Rivas

Sample method well Pump

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 177-07 Date gauged 4-24-12  
 Site Gonzalez Time gauged 9:57  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 16.31 Feet Height of fluid column 9.37 Feet  
 Total depth 25.68 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 6 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 10:00 4-26-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS DO (mg/L)
10:06	2	19.3	5947	8.63	205	4785
10:10	4	18.8	5897	8.25	203	4758
10:14	6	18.7	5879	8.01	206	4734

Actual purge volume 6 gal. Field measurements stabilized within ± 10%?

Time/date sampled 10:16 4-26-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 177-02 Date gauged 4-26-12  
 Site Gonzalez Time gauged 10:26  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 17.85 Feet Height of fluid column 7.64 Feet  
 Total depth 25.49 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 5 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 10:30 4-26-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TD <sub>S</sub> (mg/L)
10:36	3	18.3	5360	8.05	211	4276
10:39	4	18.7	5380	7.38	219	4293
10:49	5	18.2	5350	7.39	228	4272

Actual purge volume 5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 10:47 4-26-12 Purged/sampled by Angel N. Rivera

Sample method \_\_\_\_\_

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 177-03A Date gauged 4-26-12  
 Site Gonzalez Time gauged 7:19  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 1/4 Inches  
 Depth to water 18.58 Feet Height of fluid column 17.51 ~~18.58~~ Feet  
 Total depth 36.09 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 42 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 7:24 4-26-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (us/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
7:28	1	24.3	2677	8.32	197	1990
7:30	2	24.9	2650	7.92	143	1952
7:33	3	25.7	2636	7.42	91	1940

Actual purge volume 3 gal. Field measurements stabilized within ± 10%?

Time/date sampled 7:35 4-26-12 Purged/sampled by Angel Noctis Rivas

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 177-04 Date gauged 4-26-12  
 Site Gonzalez Time gauged 7:45  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 23.35 Feet Height of fluid column 22.96 Feet  
 Total depth 46.31 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 15 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 7:49 4-26-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS DO (mg/L)
7:59	12	20.1	5790	7.48	147	4643
8:04	13	20.2	5799	7.37	168	4650
8:08	15	20.3	5789	7.35	169	4644

Actual purge volume 15 gal. Field measurements stabilized within ± 10%?

Time/date sampled 8:11 4-26-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.65 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 177-05 Date gauged 4-26-12  
 Site Gonzalez Time gauged 6:44  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 36.07 Feet Height of fluid column 13.06 Feet  
 Total depth 49.13 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 8 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 6:47 4-26-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
6:54	4	21.0	5509	8.57	232	4393
6:59	6	20.2	5454	8.17	226	4355
7:04	8	20.1	5537	8.06	228	4418

Actual purge volume 8 gal. Field measurements stabilized within ± 10%?

Time/date sampled 7:05 4-26-12 Purged/sampled by Angel Nieto Zuer

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft



**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 177-06 Date gauged 4-26-12  
 Site Gonzalez Time gauged 6:38  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water Dry Feet Height of fluid column 0 Feet  
 Total depth 51.80 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 0 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged \_\_\_\_\_ Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)

Actual purge volume 0 gal. Field measurements stabilized within  $\pm 10\%$ ? \_\_\_\_\_  
 Time/date sampled \_\_\_\_\_ Purged/sampled by Not Sample  
 Sample method \_\_\_\_\_  
 Requested analyses Not enough water to purge or sample  
 Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 177-07R Date gauged 4-26-12  
 Site Gonzalez Time gauged 11:20  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 43.54 Feet Height of fluid column 10.69 Feet  
 Total depth 54.23 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 7 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 11:24 4-26-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)	TDS
<del>11:36</del> 11:36	5	20.6	5377	8.47	233	4270	
11:39	6	20.9	5360	7.99	238	4256	
11:41	7	20.2	5325	7.85	242	4241	

Actual purge volume 7 gal. Field measurements stabilized within ± 10%?

Time/date sampled 11:45 4-26-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 70-01 Date gauged 4-25-12  
 Site Mountain View Time gauged 12:39  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 33.10 Feet Height of fluid column 12.44 Feet  
 Total depth 45.54 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 8 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 12:45 4-25-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
<del>000</del> 12:56	4	22.2	4116	7.31	261	3173
1:05	6	21.8	4090	7.25	267	3152
1:15	8	21.5	4080	7.18	271	3142

Actual purge volume 8 gal. Field measurements stabilized within ± 10%?

Time/date sampled 13:18 4-25-12 Purged/sampled by Angel D. Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 70-02 Date gauged 4-25-12  
 Site Mountain View Time gauged 1:19  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 42.63 Feet Height of fluid column 7.01 Feet  
 Total depth 49.64 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 4 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 1:21 4-25-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)	TDS
1:26	1	23.5	4944	7.85	257	3842	
1:33	3	22.7	4952	7.93	247	3887	
1:36	4	22.5	4971	7.89	253	3896	

Actual purge volume 4 gal. Field measurements stabilized within ± 10%?

Time/date sampled 13:40 ~~1:21~~ 4-25-12 Purged/sampled by Angel A. Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 70-03 Date gauged 4-25-12  
 Site Mountain View Time gauged 10:57  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 52.89 Feet Height of fluid column 12.24 Feet  
 Total depth 65.13 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 8 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 11:01 4-25-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS DO (mg/L)
11:07	4	21.6	9301	6.54	284	7901
11:14	6	21.0	9711	6.18	279	8179
11:19	8	20.9	9611	6.53	276	8106

Actual purge volume 8 gal. Field measurements stabilized within ± 10%?

Time/date sampled 11:21 4-25-12 Purged/sampled by Angel Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 1167-01A Date gauged 5-2-12  
 Site River Valley Time gauged 10:07  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 16.29 Feet Height of fluid column -10.67 Feet  
 Total depth 26.96 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 2 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 10:12 5-2-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TPS (mg/L)
10:15	0.5	19.5	5093	8.86	229	4035
10:18	1	18.9	5060	8.42	239	4012
10:23	2	18.8	5051	8.24	208	4000

Actual purge volume 2 gal. Field measurements stabilized within ± 10%?   
 Time/date sampled 10:26 5-2-12 Purged/sampled by Angel Nieto Rivera  
 Sample method Bailer  
 Requested analyses \_\_\_\_\_  
 Comments/observations \_\_\_\_\_

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 167-02 Date gauged 5-2-12  
 Site \_\_\_\_\_ Time gauged ~~11:00~~ 11:45  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water Dry Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth 23.58 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 0 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 0 Purge Method 0

Time	Purge Volume (gal)	Temp (C)	SpC ( $\mu$ s/cm)	pH	ORP (mV)	DO (mg/L)

Actual purge volume 0 gal. Field measurements stabilized within  $\pm 10\%$ ? 0

Time/date sampled 0 Purged/sampled by Angel Mito Farias

Sample method 0

Requested analyses \_\_\_\_\_  
 Comments/observations Cannot purge or sample, well is dry.

**Well Casing Volumes**  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 167-03 Date gauged 5-2-12  
 Site River valley Time gauged 7:15  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 21.97 Feet Height of fluid column 19.99 Feet  
 Total depth 41.96 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 13 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 7:19 5-2-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
7:37	11	20.5	3590	8.55	170	2745
7:40	12	20.9	3572	8.14	191	2734
7:46	13	21.1	3575	8.11	205	2748

Actual purge volume 13 gal. Field measurements stabilized within ± 10%?

Time/date sampled 7:49 5-2-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft



**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 1167-04 Date gauged 5-2-12  
 Site River Valley Time gauged 7:56  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 25.05 Feet Height of fluid column 4.74 Feet  
 Total depth 29.79 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 1 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 7:59 5-2-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
8:01	0.5	19.9	7230	7.99	214	5934
8:06	1	20.2	7353	7.94	219	6043
	<del>1</del>					

Actual purge volume 1 gal. Field measurements stabilized within ± 10%?

Time/date sampled 8:55 5-2-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations Low water flow only purge 1 gallon.  
Not enough water to purge more gals. left bailer  
in to get sample

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 167-05 Date gauged 5-2-12  
 Site River Valley Time gauged 1:46  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 15.03 Feet Height of fluid column 7.08 Feet  
 Total depth 22.11 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 1.5 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 1:49 5-2-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS DO (mg/L)
<u>2:03</u>	<u>0.5</u>	<u>20.6</u>	<u>4843</u>	<u>8.87</u>	<u>227</u>	<u>3801</u>
<u>2:05</u>	<u>1</u>	<u>19.1</u>	<u>4884</u>	<u>8.48</u>	<u>224</u>	<u>3849</u>
<u>2:09</u>	<u>1.5</u>	<u>18.6</u>	<u>4872</u>	<u>8.30</u>	<u>222</u>	<u>3861</u>

Actual purge volume 1.5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 2:14:13 5-2-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 167-06 Date gauged 5-2-12  
 Site River Valley Time gauged 6:41  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 29.84 Feet Height of fluid column 8.05 Feet  
 Total depth 37.89 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 1.3 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 6:52 5-1-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
6:54	5	21.6	4420	200	8.62	3443
6:56	1	21.2	4402	208	8.18	3429
6:58	1.5	21.1	4403	215	8.00	3433

Actual purge volume 1.5 gal Field measurements stabilized within ± 10%?

Time/date sampled 7:00 5-1-12 Purged/sampled by Anzel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

# ATTACHMENT E MONITOR WELL SAMPLING FIELD FORM

## FLUID LEVEL DATA

Well ID 167-07 Date gauged 5-2-12  
 Site River valley Time gauged 9:11  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 15.84 Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth 29.33 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 2 gallons)

## GROUNDWATER SAMPLING DATA

Time/date purged 9:15 5-2-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µS/cm)	pH	ORP (mV)	TDS DO (mg/L)
9:26	1	20.8	2926	223	9.70	2196
9:32	1.5	20.3	2883	214	8.97	2158
9:47	2	19.9	2893	213	8.55	2172

Actual purge volume 2 gal. Field measurements stabilized within ± 10%?

Time/date sampled 9:58 5-2-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations low water flow, would not get full bailer had to leave bailer inside well to complete samples.

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 167-08 Date gauged 05-2-12  
 Site River Valley Time gauged 12:51  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 16.71 Feet Height of fluid column 17.07 Feet  
 Total depth 33.78 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 3 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 12:59 5-2-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	TDS (mg/L)
1:06	1	19.6	4513	9.11	256	3495
1:11	2	18.9	4505	8.10	234	3516
1:17	3	18.6	4494	8.32	222	3536

Actual purge volume 3 gal. Field measurements stabilized within ± 10%?

Time/date sampled 13:33 5-2-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 1107-09 Date gauged 5-2-12  
 Site River Valley Time gauged 11:09  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 15.12 Feet Height of fluid column 503 Feet  
 Total depth 20.15 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 1 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 11:15 5-2-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
11:17	0.5	19.0	5921	9.42	222	4742
11:19	1	17.7	6072	8.77	234	4889
11:22	1.5	18.1	6032	8.38	241	4875

Actual purge volume 1.5 gal Field measurements stabilized within ± 10%?

Time/date sampled 11:39 5-2-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 257-01 Date gauged 4-26-12  
 Site Sunset Time gauged 1:35  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 21.01 Feet Height of fluid column 5.06 Feet  
 Total depth 26.07 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 1 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 1:37 4-26-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
<u>1:38</u>	<u>.5</u>	<u>21.2</u>	<u>4698</u>	<u>8.68</u>	<u>254</u>	<u>3647</u>
<u>1:39</u>	<u>1</u>	<u>19.7</u>	<u>4613</u>	<u>8.36</u>	<u>242</u>	<u>3638</u>
<u>1:46</u>	<u>1.5</u>	<u>19.6</u>	<u>4603</u>	<u>8.23</u>	<u>239</u>	<u>3627</u>

Actual purge volume 1.5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 1:45 4-26-12 Purged/sampled by Angel Norte River

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

15-1

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 257-02 Date gauged 4-26-12  
 Site Sunset Time gauged 14:03  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 15.26 Feet Height of fluid column \_\_\_\_\_ Feet  
 Total depth 20.93 Feet Volume in well \_\_\_\_\_ Gallons

(3 well volumes = 1 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 14:06 4-26-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS DO (mg/L)
14:08	0.5	18.2	3119	8.94	227	2363
14:09	1	17.5	3211	8.44	240	2435
14:10	1.5	17.3	3201	8.11	243	2425

Actual purge volume 1.5 gal. Field measurements stabilized within ± 10%?

Time/date sampled 14:12 Purged/sampled by Angel Dick Rosen

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft



**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 257-03 Date gauged 4-26-12  
 Site Sunset Time gauged 14:32  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 2 Inches  
 Depth to water 11.55 Feet Height of fluid column 2.55 Feet  
 Total depth 14.10 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = .4 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 14:33 4-26-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	DO (mg/L)
14:34	.5	16.6	4017	8.28	247	3150
14:35	1	16.1	4809	8.05	254	3140
14:36	1.5	15.9	3996	7.88	251	3127

Actual purge volume 1.5 gal. Field measurements stabilized within ± 10%?   
 Time/date sampled 14:41 4-26-12 Purged/sampled by Angel Nieto Rivera  
 Sample method Bailer  
 Requested analyses \_\_\_\_\_  
 Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**ATTACHMENT E  
MONITOR WELL SAMPLING FIELD FORM**

**FLUID LEVEL DATA**

Well ID 257/260-01 Date gauged 4-26-12  
 Site Sunset Time gauged 14:54  
 Depth to PSH \_\_\_\_\_ Feet Well diameter 4 Inches  
 Depth to water 12.98 Feet Height of fluid column -7.38 Feet  
 Total depth 20.36 Feet Volume in well \_\_\_\_\_ Gallons  
 (3 well volumes = 4 gallons)

**GROUNDWATER SAMPLING DATA**

Time/date purged 15:01 4-26-12 Purge Method Bailer

Time	Purge Volume (gal)	Temp (°C)	SpC (µs/cm)	pH	ORP (mV)	TDS
						DO (mg/L)
15:04	2	16.9	3267	7.74	132	2150
15:06	3	16.5	3260	7.69	156	2349
15:08	4	16.1	3197	7.30	166	2420

Actual purge volume 4 gal. Field measurements stabilized within ± 10%?

Time/date sampled 15:10 4-26-12 Purged/sampled by Angel Nieto Rivera

Sample method Bailer

Requested analyses \_\_\_\_\_

Comments/observations \_\_\_\_\_

Well Casing Volumes  
 2" diameter = 0.17 gal/ft, 4" diameter = 0.66 gal/ft, 5" diameter = 1.02 gal/ft, 6" diameter = 1.50 gal/ft

**APPENDIX B**  
**ANALYTICAL LABORATORY REPORTS**  
**(Electronic Format – CD)**



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298  
 200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944  
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## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

John DeRuyter  
 Mountain View Dairy  
 13090 Stern Drive  
 P.O. Box 345  
 Mesquite, NM, 88048

Report Date: May 9, 2012

Work Order: 12042529



DP: 70  
 Project Location: 13090 Stern Dr., NM  
 Project Name: Mountain View Dairy

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
295387	70-01	water	2012-04-25	13:18	2012-04-25
295388	70-02	water	2012-04-25	13:40	2012-04-25
295389	70-03	water	2012-04-25	11:21	2012-04-25
295390	Lagoon	water	2012-04-25	13:50	2012-04-25

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 18 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

**Notes:**

*For inorganic analyses, the term MQL should actually read PQL.*

*Michael Abel*

---

Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

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## Case Narrative

Samples for project Mountain View Dairy were received by TraceAnalysis, Inc. on 2012-04-25 and assigned to work order 12042529. Samples for work order 12042529 were received intact at a temperature of 3.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	76906	2012-04-26 at 12:00	90644	2012-04-27 at 09:55
NO3 (IC)	E 300.0	76906	2012-04-26 at 12:00	90644	2012-04-27 at 09:55
TDS	SM 2540C	76972	2012-04-27 at 13:26	90726	2012-04-27 at 13:26
TDS	SM 2540C	77114	2012-05-02 at 14:56	90898	2012-05-02 at 14:56
TKN	E 351.3	77223	2012-05-08 at 10:00	91021	2012-05-08 at 17:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12042529 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 295387 - 70-01**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL  
 Prep Batch: 76906 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>659</b>	<b>659</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295387 - 70-01**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL  
 Prep Batch: 76906 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>21.7</b>	<b>21.7</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295387 - 70-01**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90726 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2490</b>	<b>2490</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295387 - 70-01**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91021 Date Analyzed: 2012-05-08 Analyzed By: AH  
 Prep Batch: 77223 Sample Preparation: 2012-05-08 Prepared By: AH



Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295388 - 70-02**

Laboratory: Lubbock  
 Analysis: Chloride (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 90644      Date Analyzed: 2012-04-27      Analyzed By: RL  
 Prep Batch: 76906      Sample Preparation: 2012-04-26      Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>749</b>	<b>749</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295388 - 70-02**

Laboratory: Lubbock  
 Analysis: NO3 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 90644      Date Analyzed: 2012-04-27      Analyzed By: RL  
 Prep Batch: 76906      Sample Preparation: 2012-04-26      Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>37.9</b>	<b>37.9</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295388 - 70-02**

Laboratory: El Paso  
 Analysis: TDS      Analytical Method: SM 2540C      Prep Method: N/A  
 QC Batch: 90726      Date Analyzed: 2012-04-27      Analyzed By: MD  
 Prep Batch: 76972      Sample Preparation: 2012-04-27      Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2260</b>	<b>2260</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295388 - 70-02**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91021 Date Analyzed: 2012-05-08 Analyzed By: AH  
 Prep Batch: 77223 Sample Preparation: 2012-05-08 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295389 - 70-03**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL  
 Prep Batch: 76906 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>2540</b>	<b>2540</b>	<41.8	mg/L	200	41.8	2.5	0.209

**Sample: 295389 - 70-03**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL  
 Prep Batch: 76906 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>53.1</b>	<b>53.1</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295389 - 70-03**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90898 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

*continued . . .*

*sample 295389 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>6550</b>	<b>6550</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295389 - 70-03**

Laboratory: Lubbock

Analysis: TKN

QC Batch: 91021

Prep Batch: 77223

Analytical Method: E 351.3

Date Analyzed: 2012-05-08

Sample Preparation: 2012-05-08

Prep Method: N/A

Analyzed By: AH

Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>5.60</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295390 - Lagoon**

Laboratory: Lubbock

Analysis: Chloride (IC)

QC Batch: 90644

Prep Batch: 76906

Analytical Method: E 300.0

Date Analyzed: 2012-04-27

Sample Preparation: 2012-04-26

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>1480</b>	<b>1480</b>	<41.8	mg/L	200	41.8	2.5	0.209

**Sample: 295390 - Lagoon**

Laboratory: Lubbock

Analysis: NO3 (IC)

QC Batch: 90644

Prep Batch: 76906

Analytical Method: E 300.0

Date Analyzed: 2012-04-27

Sample Preparation: 2012-04-26

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>0.224</b>	<b>0.224</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295390 - Lagoon**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90726 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>28600</b>	<b>28600</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295390 - Lagoon**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91021 Date Analyzed: 2012-05-08 Analyzed By: AH  
 Prep Batch: 77223 Sample Preparation: 2012-05-08 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>488</b>	<b>488</b>	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 90644  
Prep Batch: 76906Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

### Method Blank (1)

QC Batch: 90644  
Prep Batch: 76906Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

### Method Blank (1)

QC Batch: 90726  
Prep Batch: 76972Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-27Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

### Method Blank (1)

QC Batch: 90898  
Prep Batch: 77114Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

**Method Blank (1)**QC Batch: 91021  
Prep Batch: 77223Date Analyzed: 2012-05-08  
QC Preparation: 2012-05-08Analyzed By: AH  
Prepared By: AH

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

**Duplicate (1)** Duplicated Sample: 295649QC Batch: 90726  
Prep Batch: 76972Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-27Analyzed By: MD  
Prepared By: MD

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	3190	3500	mg/L	1	9	10

**Duplicate (1)** Duplicated Sample: 295940QC Batch: 90898  
Prep Batch: 77114Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02Analyzed By: MD  
Prepared By: MD

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	3800	3620	mg/L	1	5	10

# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 90644  
Prep Batch: 76906Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	26.2	mg/L	1	25.0	<0.209	105	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Chloride		2	26.0	mg/L	1	25.0	<0.209	104	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90644  
Prep Batch: 76906Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Nitrate-N		2	5.20	mg/L	1	5.00	<0.0228	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Nitrate-N		2	5.18	mg/L	1	5.00	<0.0228	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90726  
Prep Batch: 76972Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-27Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Total Dissolved Solids		1	1020	mg/L	1	1000	<5.00	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
Total Dissolved Solids		1	932	mg/L	1	1000	<5.00	93	90 - 110	9	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 90898  
Prep Batch: 77114

Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02

Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
Total Dissolved Solids		1	968	mg/L	1	1000	<5.00	97	90 - 110	4	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91021  
Prep Batch: 77223

Date Analyzed: 2012-05-08  
QC Preparation: 2012-05-08

Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	45.1	mg/L	1	50.0	<1.72	90	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
Total Kjeldahl Nitrogen - N		2	47.7	mg/L	1	50.0	<1.72	95	65.4 - 113	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Matrix Spike (MS-1) Spiked Sample: 295391

QC Batch: 90644  
Prep Batch: 76906

Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-26

Analyzed By: RL  
Prepared By: RL



Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	2870	mg/L	100	2080	681	105	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	2870	mg/L	100	2080	681	105	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295391

QC Batch: 90644  
Prep Batch: 76906

Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-26

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	458	mg/L	100	417	<2.28	110	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	457	mg/L	100	417	<2.28	110	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295395

QC Batch: 91021  
Prep Batch: 77223

Date Analyzed: 2012-05-08  
QC Preparation: 2012-05-08

Analyzed By: AH  
Prepared By: AH

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	326	mg/L	1	50.0	273	106	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	323	mg/L	1	50.0	273	100	29.2 - 129	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.3	105	90 - 110	2012-04-27

### Standard (CCV-1)

QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.18	104	90 - 110	2012-04-27

### Standard (CCV-2)

QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.2	105	90 - 110	2012-04-27

### Standard (CCV-2)

QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.24	105	90 - 110	2012-04-27

**Standard (ICV-1)**

QC Batch: 91021

Date Analyzed: 2012-05-08

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.56	91	85 - 115	2012-05-08

**Standard (CCV-1)**

QC Batch: 91021

Date Analyzed: 2012-05-08

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.48	90	85 - 115	2012-05-08

---

## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

---

# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.

Company Name: D&H Petroleum & Environmental Services  
 Address: (Street, City, Zip) 1221 Tower Trail Ln., El Paso, Texas 79907  
 Contact Person: Victor Ayala  
 Phone #: 915-859-8150  
 Cell #:   
 Fax #:   
 E-mail: vayala@dhpump.com

Project Name: John DeRuyter 575-233-3899  
Mountain View Dairy  
 Project Location (including state): Mountain View Dairy, 13090 Stern Drive, Mesquite, NM 88048  
 Sampler Signature: [Signature]

LAB #	Field Code	# Containers	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING			
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE	DATE	TIME
79587-1	70-01	1	250 mL	X				X				X		4-25-12	13:10
823	70-01	1	250 mL	X				X				X		4-25-12	13:18
89-1	70-02	1	250 mL	X				X				X		4-25-12	13:40
89-2	70-02	1	250 mL	X				X				X		4-25-12	13:40
89-3	70-03	1	250 mL	X				X				X		4-25-12	11:21
90-1	70 Lagoon	1	250 mL	X				X				X		4-25-12	11:21
90-2	70 Lagoon	1	250 mL	X				X				X		4-25-12	13:50
90-3	70 Lagoon	1	250 mL	X				X				X		4-25-12	13:50

Relinquished By: Angel A. Rivera Date: 4-25-12 Time: 15:40

Relinquished By: [Signature] Date: 4-25-12 Time: 15:40

Received By: [Signature] Date: 4-25-12 Time: 15:40

Received at Laboratory: [Signature] Date: 4-25-12 Time: 15:40

Lab Use Only  
 Initial: Y/N  
 Headspace: Y/N  
 Temp: 3/3 C/F  
 Log-in Review: JA

Remarks: TDS in EP

Dry Weight Basis Required 90%  
 TRRP Report Required 90%

ANALYSIS REQUEST

PAH 8270 (Low Level Analysis)

PAH 8270C

TX 1005 Extended (C35)

TPH 418.1 / TX1005

BTEX 8021B/602

MTBE 8021B/602

Total Metals Ag As Ba Cd Cr Pb Se Hg 8010B/200.7

Nitrates EPA 300

Total Ketohal Nitrogen SM 4500 NORG C

Chloride EPA 300.0

Total Dissolved Solids SM 2540 C MOD

Turn Around Time

Hold

12042529

6707 Aberdeen, Ste. 9  
Lubbock, TX 79424  
Tel (806) 794-1296  
Fax (806) 794-1298

# TraceAnalysis, Inc.


Company Name: D&H Petroleum & Environmental Services  
Address: (Street, City, Zip)  
1221 Tower Trail Ln., El Paso, Texas 79907  
Contact Person: Victor Ayala  
E-mail: [vayala@dhpump.com](mailto:vayala@dhpump.com)

Phone #: 915-889-8150

Cell #:

Fax #:

E-mail:

Invoice to (if different from above):  
Mountain View Dairy, P.O. Box 345, Mesquite, NM 88048  
Project #: John DeRuyter 575-233-3899  
Project Name: Mountain View Dairy  
Sampler Signature: 

Project Location (including state):  
Mountain View Dairy, 13090 Stern Drive, Mesquite, NM

LAB # (LAB USE ONLY)	Field Code	# Containers	Volume/Amount	MATRIX				PRESERVATIVE METHOD				Sampling		TIME	Turn Around Time	
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE			DATE
✓ 87-3	70-01	1	250 mL	X				X						4-25-12	13:10	
✓ 87-3	70-01	4	250 mL	X				X						4-25-12	13:10	
✓ 87-3	70-02	1	250 mL	X				X						4-25-12	13:40	
✓ 87-3	70-02	4	250 mL	X				X						4-25-12	13:40	
✓ 87-3	70-03	1	250 mL	X				X						4-25-12	11:21	
✓ 87-3	70-03	4	250 mL	X				X						4-25-12	11:21	
✓ 87-3	70 Lagoon	1	250 mL	X				X						4-25-12	13:50	
✓ 87-3	70 Lagoon	1	250 mL	X				X						4-25-12	13:50	

ANALYSIS REQUEST

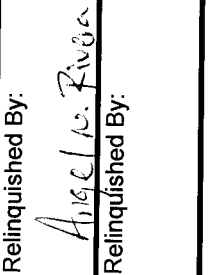
MTBE 8021B/602	
BTEX 8021B/602	
TPH 418.1 / TX1005	
TX 1005 Extended (C35)	
PAH 8270C	
PAH 8270 (Low Level Analysis)	
Total Metals Ag As BA Cd Cr Pb Se Hg 6010B/200.7	X
Nitrates EPA 300	X
Total Kjeldahl Nitrogen SM 4500 NORG C	X
Chloride EPA 300.0	X
Total Dissolved Solids SM 2540 C MOD	X

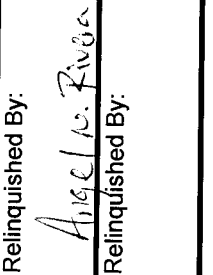
CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

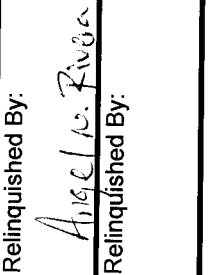
LAB Order ID # 12042529

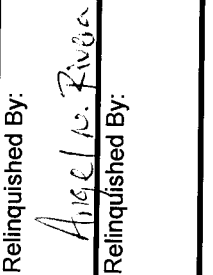
Page 1 of 1

Remarks: TOS wief  
 25.469 TSS64  
 9 sets  
 Dry Weight Basis Required  
 TRRP Report Required

Relinquished By:  Date: 4-25-12 15:40

Relinquished By:  Date: 4-26-12 8:33

Received By:  Date: 4-25-12 15:40

Received at Laboratory:  Date: 4-26-12 8:33

Lab Use Only  
 Intact Y/N  
 Headspace Y/N  
 Temp 3/3 C use  
 Log-in Review



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298  
200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944  
5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313  
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750  
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

Tim Hyde  
Bright Star Dairy  
13520 Stern Dr.  
P.O. Box 167  
Mesquite, NM, 88048

Report Date: May 9, 2012

Work Order: 12042530



DP: 340  
Project Location: 13520 Stern Dr, Mesquite, NM  
Project Name: Bright Star Dairy

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
295391	340-1	water	2012-04-25	14:16	2012-04-25
295392	340-2	water	2012-04-25	14:46	2012-04-25
295393	70/86/340	water	2012-04-25	12:10	2012-04-25
295394	86/340	water	2012-04-25	10:41	2012-04-25
295395	340 Lagoon	water	2012-04-25	15:01	2012-04-25

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 22 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

### Notes:

*For inorganic analyses, the term MQL should actually read PQL.*



*Michael Abel*

---

Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

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## Case Narrative

Samples for project Bright Star Dairy were received by TraceAnalysis, Inc. on 2012-04-25 and assigned to work order 12042530. Samples for work order 12042530 were received intact at a temperature of 3.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	76906	2012-04-26 at 12:00	90644	2012-04-27 at 09:55
Chloride (IC)	E 300.0	77016	2012-04-26 at 09:00	90788	2012-04-30 at 10:00
NO3 (IC)	E 300.0	76906	2012-04-26 at 12:00	90644	2012-04-27 at 09:55
NO3 (IC)	E 300.0	77016	2012-04-26 at 09:00	90788	2012-04-30 at 10:00
TDS	SM 2540C	76972	2012-04-27 at 13:26	90726	2012-04-27 at 13:26
TKN	E 351.3	77223	2012-05-08 at 10:00	91021	2012-05-08 at 17:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12042530 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 295391 - 340-1**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL  
 Prep Batch: 76906 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>681</b>	<b>681</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295391 - 340-1**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL  
 Prep Batch: 76906 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>26.3</b>	<b>26.3</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295391 - 340-1**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90726 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2540</b>	<b>2540</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295391 - 340-1**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91021 Date Analyzed: 2012-05-08 Analyzed By: AH  
 Prep Batch: 77223 Sample Preparation: 2012-05-08 Prepared By: AH

Report Date: May 9, 2012

Work Order: 12042530  
Bright Star Dairy

Page Number: 6 of 22  
13520 Stern Dr, Mesquite, NM

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>61.0</b>	<b>61.0</b>	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295392 - 340-2**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>727</b>	<b>727</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295392 - 340-2**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>69.8</b>	<b>69.8</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 295392 - 340-2**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90726 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2890</b>	<b>2890</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295392 - 340-2**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91021 Date Analyzed: 2012-05-08 Analyzed By: AH  
 Prep Batch: 77223 Sample Preparation: 2012-05-08 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>6.16</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295393 - 70/86/340**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Chloride		2	<b>1620</b>	<b>1620</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295393 - 70/86/340**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>11.8</b>	<b>11.8</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295393 - 70/86/340**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90726 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

*continued . . .*

*sample 295393 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>4280</b>	<b>4280</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295393 - 70/86/340**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91021 Date Analyzed: 2012-05-08 Analyzed By: AH  
 Prep Batch: 77223 Sample Preparation: 2012-05-08 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295394 - 86/340**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>641</b>	<b>641</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295394 - 86/340**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	12.1	12.1	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295394 - 86/340**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90726 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	2480	2480	<5.00	mg/L	1	5.00	5	5

**Sample: 295394 - 86/340**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91021 Date Analyzed: 2012-05-08 Analyzed By: AH  
 Prep Batch: 77223 Sample Preparation: 2012-05-08 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295395 - 340 Lagoon**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	1140	1140	<41.8	mg/L	200	41.8	2.5	0.209

**Sample: 295395 - 340 Lagoon**



Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>0.398</b>	<b>0.398</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295395 - 340 Lagoon**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90726 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>4650</b>	<b>4650</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295395 - 340 Lagoon**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91021 Date Analyzed: 2012-05-08 Analyzed By: AH  
 Prep Batch: 77223 Sample Preparation: 2012-05-08 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>273</b>	<b>273</b>	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 90644  
Prep Batch: 76906Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

### Method Blank (1)

QC Batch: 90644  
Prep Batch: 76906Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

### Method Blank (1)

QC Batch: 90726  
Prep Batch: 76972Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-27Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

### Method Blank (1)

QC Batch: 90788  
Prep Batch: 77016Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

**Method Blank (1)**QC Batch: 90788  
Prep Batch: 77016Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

**Method Blank (1)**QC Batch: 91021  
Prep Batch: 77223Date Analyzed: 2012-05-08  
QC Preparation: 2012-05-08Analyzed By: AH  
Prepared By: AH

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

**Duplicate (1)** Duplicated Sample: 295649QC Batch: 90726  
Prep Batch: 76972Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-27Analyzed By: MD  
Prepared By: MD

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	3190	3500	mg/L	1	9	10

# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 90644  
Prep Batch: 76906Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	26.2	mg/L	1	25.0	<0.209	105	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Chloride		2	26.0	mg/L	1	25.0	<0.209	104	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90644  
Prep Batch: 76906Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Nitrate-N		2	5.20	mg/L	1	5.00	<0.0228	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Nitrate-N		2	5.18	mg/L	1	5.00	<0.0228	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90726  
Prep Batch: 76972Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-27Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Total Dissolved Solids		1	1020	mg/L	1	1000	<5.00	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Dissolved Solids		1	932	mg/L	1	1000	<5.00	93	90 - 110	9	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 90788  
Prep Batch: 77016

Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit
			Result	Units					
Chloride		2	26.4	mg/L	1	25.0	<0.209	106	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	26.1	mg/L	1	25.0	<0.209	104	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 90788  
Prep Batch: 77016

Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	5.20	mg/L	1	5.00	<0.0228	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	5.12	mg/L	1	5.00	<0.0228	102	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91021  
Prep Batch: 77223

Date Analyzed: 2012-05-08  
QC Preparation: 2012-05-08

Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	45.1	mg/L	1	50.0	<1.72	90	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Kjeldahl Nitrogen - N		2	47.7	mg/L	1	50.0	<1.72	95	65.4 - 113	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295391

QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL  
Prep Batch: 76906 QC Preparation: 2012-04-26 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	2870	mg/L	100	2080	681	105	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Chloride		2	2870	mg/L	100	2080	681	105	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295391

QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL  
Prep Batch: 76906 QC Preparation: 2012-04-26 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	458	mg/L	100	417	<2.28	110	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Nitrate-N		2	457	mg/L	100	417	<2.28	110	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295654QC Batch: 90788  
Prep Batch: 77016Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	3160	mg/L	100	2080	1010	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	3190	mg/L	100	2080	1010	105	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295654QC Batch: 90788  
Prep Batch: 77016Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	454	mg/L	100	417	21.1	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	457	mg/L	100	417	21.1	104	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295395QC Batch: 91021  
Prep Batch: 77223Date Analyzed: 2012-05-08  
QC Preparation: 2012-05-08Analyzed By: AH  
Prepared By: AH

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	326	mg/L	1	50.0	273	106	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	323	mg/L	1	50.0	273	100	29.2 - 129	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.



## Calibration Standards

### Standard (CCV-1)

QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.3	105	90 - 110	2012-04-27

### Standard (CCV-1)

QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.18	104	90 - 110	2012-04-27

### Standard (CCV-2)

QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.2	105	90 - 110	2012-04-27

### Standard (CCV-2)

QC Batch: 90644 Date Analyzed: 2012-04-27 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.24	105	90 - 110	2012-04-27

**Standard (CCV-1)**

QC Batch: 90788

Date Analyzed: 2012-04-30

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.1	104	90 - 110	2012-04-30

**Standard (CCV-1)**

QC Batch: 90788

Date Analyzed: 2012-04-30

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.16	103	90 - 110	2012-04-30

**Standard (CCV-2)**

QC Batch: 90788

Date Analyzed: 2012-04-30

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.0	104	90 - 110	2012-04-30

**Standard (CCV-2)**

QC Batch: 90788

Date Analyzed: 2012-04-30

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.17	103	90 - 110	2012-04-30

**Standard (ICV-1)**

QC Batch: 91021

Date Analyzed: 2012-05-08

Analyzed By: AH

Report Date: May 9, 2012

Work Order: 12042530  
Bright Star Dairy

Page Number: 20 of 22  
13520 Stern Dr, Mesquite, NM

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Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.56	91	85 - 115	2012-05-08

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**Standard (CCV-1)**

QC Batch: 91021

Date Analyzed: 2012-05-08

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.48	90	85 - 115	2012-05-08

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## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

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# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.

**Company Name:** D&H Petroleum & Environmental Services  
**Address:** (Street, City, Zip) 1221 Tower Trail Ln., El Paso, Texas 79907  
**Contact Person:** Victor Ayala  
**Phone #:** 915-859-8150  
**Cell #:**  
**Fax #:**  
**E-mail:** vayala@dhpump.com  
**Project Name:** Bright Star Dairy  
**Project #:**  
**Project Location (including state):** Bright Star Dairy, 13520 Stern Drive, Mesquite, NM  
**Sampler Signature:** *[Signature]*  
**Invoice to (if different from above):** Bright Star Dairy, P.O. Box 167, Mesquite, NM 88048  
**Project Name:** Bright Star Dairy

LAB #	Field Code	# Containers	Volume/Amount	MATRIX				PRESERVATIVE METHOD				Sampling		Turn Around Time	Hold		
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE			DATE	TIME
25131-1	340-1	1	250 ml	X				X						4-25-12	14:16		
✓ 51-1	340-1	4	250 ml	X				X						4-25-12	14:16		
61-1	340-2	1	250 ml	X				X						4-25-12	14:46		
61-2	340-2	2	250 ml	X				X						4-25-12	14:46		
93-1	7088/340	4	250 ml	X				X						4-25-12	12:10		
93-2	7088/340	5	250 ml	X				X						4-25-12	12:10		
94-1	88/340	1	250 ml	X				X						4-25-12	10:41		
94-2	88/340	2	250 ml	X				X						4-25-12	10:41		
95-1	340 Lagoon	1	250 ml	X				X						4-25-12	15:01		
✓ 95-2	340 Lagoon	2	250 ml	X				X						4-25-12	15:01		

**ANALYSIS REQUEST**

TPH 418.1 / TX1005	
BTEX 8021B/602	
MTBE 8021B/602	
TX 1005 Extended (C35)	
PAH 8270C	
PAH 8270 (Low Level Analysis)	
Total Metals Ag As BA Cd Cr Pb Sb Hg BD10B/200.7	X
Nitrates EPA 300	X
Total Kjeldahl Nitrogen SM 4500 NORG C	X
Chloride EPA 300 D	X
Total Dissolved Solids SM 2540 C MOD	X

Remarks: TDS in E1

Lab Use Only  
 Intad Y/N  
 Headspace Y/N  
 Temp 33 C  
 Log-in Review Yes

Received By: *[Signature]* Date: 4-23-12 Time: 15:40  
 Relinquished By: Victor Ayala Date: 4-23-12 Time: 15:40  
 Received at Laboratory By: *[Signature]* Date: 4-25-12 Time: 15:40  
 Relinquished By: *[Signature]* Date: 4-25-12 Time: 15:40

Dry Weight Basis Required Yes  
 TRRP Report Required Yes

Company Name: D&H Petroleum & Environmental Services  
 Address: (Street, City, Zip) 1221 Tower Trail Ln., El Paso, Texas 79907  
 Contact Person: Victor Ayala  
 Phone #: 915-859-8150  
 Cell #:   
 Fax #:   
 E-mail: vayala@dhpump.com

Project Name: Bright Star Dairy  
 Project #: 88048  
 Invoice to (if different from above): Bright Star Dairy, P.O. Box 167, Mesquite, NM 88048  
 Project Location (including state): Bright Star Dairy, 13520 Stern Drive, Mesquite, NM  
 Sampler Signature: [Signature]

LAB #	Field Code	# Containers	Volume/Amount	MATRIX			PRESERVATIVE METHOD				SAMPLING		
				WATER	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE	DATE
295341-1	340-1	1	250ml	X			X					4-25-12	14:16
✓ 91-33	340-1	2	250ml	X			X					4-25-12	14:16
92-1	340-2	1	250ml	X			X					4-25-12	14:46
92-2	340-2	2	250ml	X			X					4-25-12	14:46
93-1	70/86/340	1	250ml	X			X					4-25-12	12:10
93-2	70/86/340	2	250ml	X			X					4-25-12	12:10
94-1	86/340	1	250ml	X			X					4-25-12	10:41
94-2	86/340	2	250ml	X			X					4-25-12	10:41
95-1	340 Lagoon	1	250ml	X			X					4-25-12	15:01
95-2	340 Lagoon	2	250ml	X			X					4-25-12	15:01

Relinquished By: [Signature] Date: 4-25-12 Time: 15:40

Relinquished By: [Signature] Date: 4-25-12 Time: 15:40

Received By: [Signature] Date: 4/25/12 Time: 15:40

Received at Laboratory By: [Signature] Date: 4/26/12 Time: 14:33

Lab Use Only  
 Intad Y / N  
 Headspace Y / N  
 Temp 13 C / 50 F  
 Log-in Review [Signature]

Remarks: TDS w/ EI  
TS: 40975864  
#12  
 Dry Weight Basis Required 9.26%  
 TRRP Report Required

**ANALYSIS REQUEST**

MTBE 8021B/602	
BTEX 8021B/602	
TPH 418.1 / TX1005	
TX 1005 Extended (C35)	
PAH 8270C	
PAH 8270 (Low Level Analysis)	
Total Metals Ag As BA Cd Cr Pb Se Hg 6010B/200.7	X
Nitrates EPA 300	X
Total Kjeldahl Nitrogen SM 4500 NORG C	X
Chloride EPA 300.0	X
Total Dissolved Solids SM 2540 C MOD	X



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## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Joe Gonzalez  
 Gonzalez Dairy  
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 P.O. Box 199  
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Report Date: May 10, 2012

Work Order: 12042632



DP: 177  
 Project Location: 14310 Stern Dr., Mesquite, NM  
 Project Name: Gonzalez Dairy Inc.

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
295649	177-01	water	2012-04-26	10:16	2012-04-26
295650	177-02	water	2012-04-26	10:47	2012-04-26
295651	177-03A	water	2012-04-26	07:35	2012-04-26
295652	177-04	water	2012-04-26	08:11	2012-04-26
295653	177-05	water	2012-04-26	07:05	2012-04-26
295654	177-07 R	water	2012-04-26	11:50	2012-04-26
295655	177-Lagoon 1	water	2012-04-26	09:37	2012-04-26
295656	177-Lagoon 2	water	2012-04-26	09:17	2012-04-26
295657	177-Lagoon 3	water	2012-04-26	08:54	2012-04-26

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 29 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

**Notes:**

*For inorganic analyses, the term MQL should actually read PQL.*



*Michael Abel*

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Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

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## Case Narrative

Samples for project Gonzalez Dairy Inc. were received by TraceAnalysis, Inc. on 2012-04-26 and assigned to work order 12042632. Samples for work order 12042632 were received intact at a temperature of 0.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77016	2012-04-26 at 09:00	90788	2012-04-30 at 10:00
Chloride (IC)	E 300.0	77018	2012-04-26 at 09:00	90789	2012-04-30 at 11:30
NO3 (IC)	E 300.0	77016	2012-04-26 at 09:00	90788	2012-04-30 at 10:00
NO3 (IC)	E 300.0	77018	2012-04-26 at 09:00	90789	2012-04-30 at 11:30
TDS	SM 2540C	76972	2012-04-27 at 13:26	90726	2012-04-27 at 13:26
TDS	SM 2540C	76972	2012-04-27 at 13:26	90727	2012-04-27 at 13:26
TKN	E 351.3	77244	2012-05-09 at 11:00	91054	2012-05-09 at 16:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12042632 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 295649 - 177-01**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>1460</b>	<b>1460</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295649 - 177-01**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>28.5</b>	<b>28.5</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295649 - 177-01**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90726 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>3500</b>	<b>3500</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295649 - 177-01**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91054 Date Analyzed: 2012-05-09 Analyzed By: AH  
 Prep Batch: 77244 Sample Preparation: 2012-05-09 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295650 - 177-02**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Chloride		2	<b>881</b>	<b>881</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295650 - 177-02**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>36.0</b>	<b>36.0</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295650 - 177-02**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90727 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2960</b>	<b>2960</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295650 - 177-02**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91054 Date Analyzed: 2012-05-09 Analyzed By: AH  
 Prep Batch: 77244 Sample Preparation: 2012-05-09 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295651 - 177-03A**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>378</b>	<b>378</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 295651 - 177-03A**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>1.16</b>	<b>1.16</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295651 - 177-03A**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90727 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

*continued . . .*

*sample 295651 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>1430</b>	<b>1430</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295651 - 177-03A**

Laboratory: Lubbock

Analysis: TKN

QC Batch: 91054

Prep Batch: 77244

Analytical Method: E 351.3

Date Analyzed: 2012-05-09

Sample Preparation: 2012-05-09

Prep Method: N/A

Analyzed By: AH

Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295652 - 177-04**

Laboratory: Lubbock

Analysis: Chloride (IC)

QC Batch: 90788

Prep Batch: 77016

Analytical Method: E 300.0

Date Analyzed: 2012-04-30

Sample Preparation: 2012-04-26

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>1050</b>	<b>1050</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295652 - 177-04**

Laboratory: Lubbock

Analysis: NO3 (IC)

QC Batch: 90788

Prep Batch: 77016

Analytical Method: E 300.0

Date Analyzed: 2012-04-30

Sample Preparation: 2012-04-26

Prep Method: N/A

Analyzed By: RL

Prepared By: RL



Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>21.7</b>	<b>21.7</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295652 - 177-04**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90727 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>3480</b>	<b>3480</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295652 - 177-04**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91054 Date Analyzed: 2012-05-09 Analyzed By: AH  
 Prep Batch: 77244 Sample Preparation: 2012-05-09 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295653 - 177-05**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>1090</b>	<b>1090</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295653 - 177-05**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	47.1	47.1	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295653 - 177-05**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90727 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	3440	3440	<5.00	mg/L	1	5.00	5	5

**Sample: 295653 - 177-05**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91054 Date Analyzed: 2012-05-09 Analyzed By: AH  
 Prep Batch: 77244 Sample Preparation: 2012-05-09 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	U	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295654 - 177-07 R**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

*continued ...*

sample 295654 continued ...

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>1010</b>	<b>1010</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295654 - 177-07 R**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77016 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>22.8</b>	<b>22.8</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295654 - 177-07 R**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90727 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2690</b>	<b>2690</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295654 - 177-07 R**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91054 Date Analyzed: 2012-05-09 Analyzed By: AH  
 Prep Batch: 77244 Sample Preparation: 2012-05-09 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295655 - 177-Lagoon 1**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77018 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>10400</b>	<b>10400</b>	<209	mg/L	1000	209	2.5	0.209

**Sample: 295655 - 177-Lagoon 1**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77018 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>1.17</b>	<b>1.17</b>	<0.228	mg/L	10	0.228	0.04	0.0228

**Sample: 295655 - 177-Lagoon 1**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90727 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>34000</b>	<b>34000</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295655 - 177-Lagoon 1**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91054 Date Analyzed: 2012-05-09 Analyzed By: AH  
 Prep Batch: 77244 Sample Preparation: 2012-05-09 Prepared By: AH

*continued ...*

sample 295655 continued ...

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N		2	61.5	61.5	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295656 - 177-Lagoon 2**

Laboratory: Lubbock  
 Analysis: Chloride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 90789                                  Date Analyzed: 2012-04-30                      Analyzed By: RL  
 Prep Batch: 77018                                  Sample Preparation: 2012-04-26                      Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	612	612	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295656 - 177-Lagoon 2**

Laboratory: Lubbock  
 Analysis: NO3 (IC)                                  Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 90789                                  Date Analyzed: 2012-04-30                      Analyzed By: RL  
 Prep Batch: 77018                                  Sample Preparation: 2012-04-26                      Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N	u	2	<0.114	<0.200	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295656 - 177-Lagoon 2**

Laboratory: El Paso  
 Analysis: TDS    Analytical Method: SM 2540C                      Prep Method: N/A  
 QC Batch: 90727                                  Date Analyzed: 2012-04-27                      Analyzed By: MD  
 Prep Batch: 76972                                  Sample Preparation: 2012-04-27                      Prepared By: MD

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>3380</b>	<b>3380</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295656 - 177-Lagoon 2**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91054 Date Analyzed: 2012-05-09 Analyzed By: AH  
 Prep Batch: 77244 Sample Preparation: 2012-05-09 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>372</b>	<b>372</b>	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295657 - 177-Lagoon 3**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77018 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>1200</b>	<b>1200</b>	<41.8	mg/L	200	41.8	2.5	0.209

**Sample: 295657 - 177-Lagoon 3**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77018 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N	u	2	<0.114	<0.200	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295657 - 177-Lagoon 3**

Laboratory: El Paso	Analytical Method: SM 2540C	Prep Method: N/A
Analysis: TDS	Date Analyzed: 2012-04-27	Analyzed By: MD
QC Batch: 90727	Sample Preparation: 2012-04-27	Prepared By: MD
Prep Batch: 76972		

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>5140</b>	<b>5140</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295657 - 177-Lagoon 3**

Laboratory: Lubbock	Analytical Method: E 351.3	Prep Method: N/A
Analysis: TKN	Date Analyzed: 2012-05-09	Analyzed By: AH
QC Batch: 91054	Sample Preparation: 2012-05-09	Prepared By: AH
Prep Batch: 77244		

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>185</b>	<b>185</b>	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 90726  
Prep Batch: 76972Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-27Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

### Method Blank (1)

QC Batch: 90727  
Prep Batch: 76972Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-27Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

### Method Blank (1)

QC Batch: 90788  
Prep Batch: 77016Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

### Method Blank (1)

QC Batch: 90788  
Prep Batch: 77016Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL



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Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

---

**Method Blank (1)**

QC Batch: 90789                      Date Analyzed: 2012-04-30                      Analyzed By: RL  
Prep Batch: 77018                      QC Preparation: 2012-04-26                      Prepared By: RL

---

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

---

**Method Blank (1)**

QC Batch: 90789                      Date Analyzed: 2012-04-30                      Analyzed By: RL  
Prep Batch: 77018                      QC Preparation: 2012-04-26                      Prepared By: RL

---

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

---

**Method Blank (1)**

QC Batch: 91054                      Date Analyzed: 2012-05-09                      Analyzed By: AH  
Prep Batch: 77244                      QC Preparation: 2012-05-09                      Prepared By: AH

---

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

---

**Duplicate (1)**    Duplicated Sample: 295649

QC Batch: 90726                      Date Analyzed: 2012-04-27                      Analyzed By: MD  
Prep Batch: 76972                      QC Preparation: 2012-04-27                      Prepared By: MD

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---

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	3190	3500	mg/L	1	9	10

---

**Duplicate (1)** Duplicated Sample: 295726

QC Batch: 90727  
Prep Batch: 76972

Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-27

Analyzed By: MD  
Prepared By: MD

---

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	3360	3400	mg/L	1	1	10

---

# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 90726  
Prep Batch: 76972Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-27Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Dissolved Solids		1	1020	mg/L	1	1000	<5.00	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Dissolved Solids		1	932	mg/L	1	1000	<5.00	93	90 - 110	9	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90727  
Prep Batch: 76972Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-27Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Dissolved Solids		1	964	mg/L	1	1000	<5.00	96	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Dissolved Solids		1	960	mg/L	1	1000	<5.00	96	90 - 110	0	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90788  
Prep Batch: 77016Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	26.4	mg/L	1	25.0	<0.209	106	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD		Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
	F	C									
Chloride		2	26.1	mg/L	1	25.0	<0.209	104	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 90788  
Prep Batch: 77016

Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26

Analyzed By: RL  
Prepared By: RL

Param	LCS		Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit
	F	C							
Nitrate-N		2	5.20	mg/L	1	5.00	<0.0228	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD		Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
	F	C									
Nitrate-N		2	5.12	mg/L	1	5.00	<0.0228	102	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 90789  
Prep Batch: 77018

Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26

Analyzed By: RL  
Prepared By: RL

Param	LCS		Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit
	F	C							
Chloride		2	26.0	mg/L	1	25.0	<0.209	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	LCSD		Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
	F	C									
Chloride		2	26.0	mg/L	1	25.0	<0.209	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 90789  
Prep Batch: 77018

Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	5.12	mg/L	1	5.00	<0.0228	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	5.17	mg/L	1	5.00	<0.0228	103	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 91054  
Prep Batch: 77244

Date Analyzed: 2012-05-09  
QC Preparation: 2012-05-09

Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	43.7	mg/L	1	50.0	<1.72	87	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	45.6	mg/L	1	50.0	<1.72	91	65.4 - 113	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1) Spiked Sample: 295654**

QC Batch: 90788  
Prep Batch: 77016

Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	3160	mg/L	100	2080	1010	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	3190	mg/L	100	2080	1010	105	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295654

QC Batch: 90788 Date Analyzed: 2012-04-30 Analyzed By: RL  
Prep Batch: 77016 QC Preparation: 2012-04-26 Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	454	mg/L	100	417	21.1	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	457	mg/L	100	417	21.1	104	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295662

QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
Prep Batch: 77018 QC Preparation: 2012-04-26 Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	3040	mg/L	100	2080	837	106	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	3050	mg/L	100	2080	837	106	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295662

QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
Prep Batch: 77018 QC Preparation: 2012-04-26 Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	430	mg/L	100	417	<2.28	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	433	mg/L	100	417	<2.28	104	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295658

QC Batch: 91054  
Prep Batch: 77244

Date Analyzed: 2012-05-09  
QC Preparation: 2012-05-09

Analyzed By: AH  
Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	57.4	mg/L	1	50.0	22.7	69	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Kjeldahl Nitrogen - N		2	56.3	mg/L	1	50.0	22.7	67	29.2 - 129	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 90788

Date Analyzed: 2012-04-30

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.1	104	90 - 110	2012-04-30

### Standard (CCV-1)

QC Batch: 90788

Date Analyzed: 2012-04-30

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.16	103	90 - 110	2012-04-30

### Standard (CCV-2)

QC Batch: 90788

Date Analyzed: 2012-04-30

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.0	104	90 - 110	2012-04-30

### Standard (CCV-2)

QC Batch: 90788

Date Analyzed: 2012-04-30

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.17	103	90 - 110	2012-04-30



**Standard (CCV-1)**

QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.0	104	90 - 110	2012-04-30

**Standard (CCV-1)**

QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.17	103	90 - 110	2012-04-30

**Standard (CCV-2)**

QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.3	105	90 - 110	2012-04-30

**Standard (CCV-2)**

QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.18	104	90 - 110	2012-04-30

**Standard (ICV-1)**

QC Batch: 91054 Date Analyzed: 2012-05-09 Analyzed By: AH

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Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.54	91	85 - 115	2012-05-09

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**Standard (CCV-1)**

QC Batch: 91054

Date Analyzed: 2012-05-09

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.79	96	85 - 115	2012-05-09

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## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

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# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.

# TraceAnalysis, Inc.

**Company Name:** D&H Petroleum & Environmental Services  
**Address:** (Street, City, Zip) 1221 Tower Trail Ln, El Paso TX 79907  
**Contact Person:** Victor Ayala  
**Phone #:** 915-859-8150  
**Cell #:**  
**Fax #:**  
**E-mail:** vajala@dhpump.com

**Project Name:** Joe Gonzalez\_575-233-4801  
**Project #:**  
**Project Location (including state):** Gonzalez Dairy, PO Box 199, Mesquite, NM 88048  
**Gonzalez Dairy, 14310 Stern Dr., Mesquite, NM**  
**Sampler Signature:** *[Signature]*

LAB # (LAB USE ONLY)	Field Code	# Containers	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING		TIME	Turn Around Time	Hold	
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE				DATE
2056A-1	177-01	1	250 mL	X				X						4-26-12	10:16		
49-3	177-01	2	250 mL	X				X						4-26-12	10:16	X	
50-1	177-02	1	250 mL	X				X						4-26-12	10:47	X	
50-3	177-02	2	250 mL	X				X						4-26-12	10:47	X	
51-1	177-03 A	1	250 mL	X				X						4-26-12	7:35	X	
51-3	177-03 A	2	250 mL	X				X						4-26-12	7:35	X	
52-1	177-04	1	250 mL	X				X						4-26-12	8:11	X	
52-3	177-04	2	250 mL	X				X						4-26-12	8:11	X	
53-1	177-05	1	250 mL	X				X						4-26-12	7:05	X	
53-3	177-05	2	250 mL	X				X						4-26-12	7:05	X	
477-06		1	250 mL	X				X								X	
177-06		1	250 mL	X				X								X	
205655-1	177-07 R	1	250 mL	X				X						4-26-12	11:50	X	
55-3	177-07 R	2	250 mL	X				X						4-26-12	11:50	X	
255-1	177 Lagoon 1	1	250 mL	X				X						4-26-12	9:37	X	
90-3	177 Lagoon 1	2	250 mL	X				X						4-26-12	9:37	X	

**ANALYSIS REQUEST**

TX 1005 Extended (C35)

TPH 418.1 / TX1005

BTEX 8021B/602

MTBE 8021B/602

PAH 8270C

PAH 8270 (Low Level Analysis)

Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7

Nitrates EPA 300

TKN SM 4500 NORG C

Chloride EPA 300

Total Dissolved Solids SM 2540 C MOD

**Lab Use Only**

Intact  Y / N

Headspace  Y / N

Temp  °C / °F

Log-in Review  Y / N

**Reinquisitioned By:** *[Signature]* Date: 4-26-12 Time: 15:52

**Received By:** *[Signature]* Date: 4-26-12 Time: 15:52

**Reinquisitioned By:** *[Signature]* Date: 4-26-12 Time: 15:52

**Received By:** *[Signature]* Date: 4-26-12 Time: 15:52

**Remarks:** *[Handwritten notes]*

**21**

**Company Name:** D&H Petroleum & Environmental Services  
**Address:** (Street, City, Zip) 1221 Tower Trail Ln, El Paso TX 79907  
**Contact Person:** Victor Ayala  
**Phone #:** 915-859-8150  
**Cell #:**  
**Fax #:**  
**E-mail:** vajala@dhpump.com  
**Project #:**  
**Project Name:** Joe Gonzalez 575-233-4801  
**Sampler Signature:** [Signature]  
**Project Location (including state):** Gonzalez Dairy, 14310 Stern Dr., Mesquite, NM

LAB # (LAB USE ONLY)	Field Code	# Containers	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING			
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE	DATE	TIME
57-1	177 Lagoon 2	1	250mL	X				X				X		4-26-12	8:00
57-2	177 Lagoon 2	4	250mL	X				X				X		4-26-12	9:17
57-1	177 Lagoon 3	1	250mL	X				X				X		4-26-12	8:34
57-2	177 Lagoon 3	4	250mL	X				X				X		4-26-12	8:34

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
[Signature]	4-26-12	15:52	[Signature]	4-26-12	15:52
[Signature]	4-26-12	11:05	[Signature]	4-27-12	9:15

ANALYSIS REQUEST	TPH 418.1 / TX1005	TX 1005 Extended (C35)	PAH 8270C	PAH 8270 (Low Level Analysis)	Total Metals Ag As BA Cd Cr Pb Se Hg 6010B/200.7	Nitrates EPA 300	TKN SM 4500 NORG C	Chloride EPA 300	Total Dissolved Solids SM 2540 C MOD	Turn Around Time	Hold
MTR 8021B/602											
BTEX 8021B/602											

**Lab Use Only**  
 Intact  Y  N  
 Headspace  Y  N  
 Temp     
 Log-in Review     
 Remarks: 1204263205 - EP. [Signature]  
 Dry Weight Basis Required  
 TRRP Report Required  
 6  
 SS. 469759 (66)



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298  
 200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944  
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## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Edward DeRuyter  
 Sunset Dairy  
 17900 Stern Drive  
 P.O. Box 10  
 Mesquite, NM, 88048

Report Date: May 10, 2012

Work Order: 12042633



DP: 257  
 Project Location: 17900 S. Stern Dr., Mesquite, NM  
 Project Name: Sunset Dairy

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
295658	257-01	water	2012-04-26	13:45	2012-04-26
295659	257-02	water	2012-04-26	14:12	2012-04-26
295660	257-03	water	2012-04-26	14:41	2012-04-26
295661	257/260-01	water	2012-04-26	15:10	2012-04-26
295662	257 Lagoon	water	2012-04-26	13:51	2012-04-26

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 21 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

**Notes:**

*For inorganic analyses, the term MQL should actually read PQL.*

*Michael Abel*

---

Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager



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## Case Narrative

Samples for project Sunset Dairy were received by TraceAnalysis, Inc. on 2012-04-26 and assigned to work order 12042633. Samples for work order 12042633 were received intact at a temperature of 0.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77018	2012-04-26 at 09:00	90789	2012-04-30 at 11:30
NO3 (IC)	E 300.0	77018	2012-04-26 at 09:00	90789	2012-04-30 at 11:30
TDS	SM 2540C	76972	2012-04-27 at 13:26	90727	2012-04-27 at 13:26
TDS	SM 2540C	77114	2012-05-02 at 14:56	90896	2012-05-02 at 14:56
TKN	E 351.3	77244	2012-05-09 at 11:00	91054	2012-05-09 at 16:00
TKN	E 351.3	77245	2012-05-09 at 11:00	91071	2012-05-09 at 16:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12042633 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 295658 - 257-01**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77018 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>680</b>	<b>680</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295658 - 257-01**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77018 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>23.7</b>	<b>23.7</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295658 - 257-01**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90727 Date Analyzed: 2012-04-27 Analyzed By: MD  
 Prep Batch: 76972 Sample Preparation: 2012-04-27 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2920</b>	<b>2920</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295658 - 257-01**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91054 Date Analyzed: 2012-05-09 Analyzed By: AH  
 Prep Batch: 77244 Sample Preparation: 2012-05-09 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>22.7</b>	<b>22.7</b>	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295659 - 257-02**

Laboratory: Lubbock  
 Analysis: Chloride (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 90789      Date Analyzed: 2012-04-30      Analyzed By: RL  
 Prep Batch: 77018      Sample Preparation: 2012-04-26      Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>505</b>	<b>505</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295659 - 257-02**

Laboratory: Lubbock  
 Analysis: NO3 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 90789      Date Analyzed: 2012-04-30      Analyzed By: RL  
 Prep Batch: 77018      Sample Preparation: 2012-04-26      Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>23.2</b>	<b>23.2</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295659 - 257-02**

Laboratory: El Paso  
 Analysis: TDS      Analytical Method: SM 2540C      Prep Method: N/A  
 QC Batch: 90896      Date Analyzed: 2012-05-02      Analyzed By: MD  
 Prep Batch: 77114      Sample Preparation: 2012-05-02      Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>1840</b>	<b>1840</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295659 - 257-02**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91071 Date Analyzed: 2012-05-09 Analyzed By: AH  
 Prep Batch: 77245 Sample Preparation: 2012-05-09 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>8.40</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295660 - 257-03**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77018 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>601</b>	<b>601</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295660 - 257-03**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77018 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>6.60</b>	<b>6.60</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295660 - 257-03**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90896 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

*continued . . .*

sample 295660 continued ...

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2330</b>	<b>2330</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295660 - 257-03**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91071 Date Analyzed: 2012-05-09 Analyzed By: AH  
 Prep Batch: 77245 Sample Preparation: 2012-05-09 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>4.20</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295661 - 257/260-01**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77018 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>575</b>	<b>575</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295661 - 257/260-01**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77018 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>6.83</b>	<b>6.83</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295661 - 257/260-01**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90896 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2660</b>	<b>2660</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295661 - 257/260-01**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91071 Date Analyzed: 2012-05-09 Analyzed By: AH  
 Prep Batch: 77245 Sample Preparation: 2012-05-09 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>2.80</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295662 - 257 Lagoon**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77018 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>837</b>	<b>837</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295662 - 257 Lagoon**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
 Prep Batch: 77018 Sample Preparation: 2012-04-26 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N	u	2	<0.114	<0.200	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295662 - 257 Lagoon**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90896 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>5180</b>	<b>5180</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295662 - 257 Lagoon**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91071 Date Analyzed: 2012-05-09 Analyzed By: AH  
 Prep Batch: 77245 Sample Preparation: 2012-05-09 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>224</b>	<b>224</b>	<1.72	mg/L	1	1.72	10	1.72



## Method Blanks

### Method Blank (1)

QC Batch: 90727  
Prep Batch: 76972Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-27Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

### Method Blank (1)

QC Batch: 90789  
Prep Batch: 77018Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

### Method Blank (1)

QC Batch: 90789  
Prep Batch: 77018Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

### Method Blank (1)

QC Batch: 90896  
Prep Batch: 77114Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

**Method Blank (1)**

QC Batch: 91054                      Date Analyzed: 2012-05-09                      Analyzed By: AH  
 Prep Batch: 77244                      QC Preparation: 2012-05-09                      Prepared By: AH

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

**Method Blank (1)**

QC Batch: 91071                      Date Analyzed: 2012-05-09                      Analyzed By: AH  
 Prep Batch: 77245                      QC Preparation: 2012-05-09                      Prepared By: AH

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

**Duplicate (1)**    Duplicated Sample: 295726

QC Batch: 90727                      Date Analyzed: 2012-04-27                      Analyzed By: MD  
 Prep Batch: 76972                      QC Preparation: 2012-04-27                      Prepared By: MD

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	3360	3400	mg/L	1	1	10

**Duplicate (1)**    Duplicated Sample: 295872

QC Batch: 90896                      Date Analyzed: 2012-05-02                      Analyzed By: MD  
 Prep Batch: 77114                      QC Preparation: 2012-05-02                      Prepared By: MD

Report Date: May 10, 2012

Work Order: 12042633  
Sunset Dairy

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17900 S. Stern Dr., Mesquite, NM

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Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	2320	2270	mg/L	1	2	10

---

# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 90727  
Prep Batch: 76972

Date Analyzed: 2012-04-27  
QC Preparation: 2012-04-27

Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Dissolved Solids		1	964	mg/L	1	1000	<5.00	96	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Dissolved Solids		1	960	mg/L	1	1000	<5.00	96	90 - 110	0	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90789  
Prep Batch: 77018

Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	26.0	mg/L	1	25.0	<0.209	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		2	26.0	mg/L	1	25.0	<0.209	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90789  
Prep Batch: 77018

Date Analyzed: 2012-04-30  
QC Preparation: 2012-04-26

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	5.12	mg/L	1	5.00	<0.0228	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	5.17	mg/L	1	5.00	<0.0228	103	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 90896  
Prep Batch: 77114

Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02

Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110	0	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91054  
Prep Batch: 77244

Date Analyzed: 2012-05-09  
QC Preparation: 2012-05-09

Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	43.7	mg/L	1	50.0	<1.72	87	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	45.6	mg/L	1	50.0	<1.72	91	65.4 - 113	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91071  
Prep Batch: 77245

Date Analyzed: 2012-05-09  
QC Preparation: 2012-05-09

Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	44.2	mg/L	1	50.0	<1.72	88	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Kjeldahl Nitrogen - N		2	45.5	mg/L	1	50.0	<1.72	91	65.4 - 113	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295662

QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
Prep Batch: 77018 QC Preparation: 2012-04-26 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	3040	mg/L	100	2080	837	106	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Chloride		2	3050	mg/L	100	2080	837	106	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295662

QC Batch: 90789 Date Analyzed: 2012-04-30 Analyzed By: RL  
Prep Batch: 77018 QC Preparation: 2012-04-26 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	430	mg/L	100	417	<2.28	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Nitrate-N		2	433	mg/L	100	417	<2.28	104	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295658

QC Batch: 91054 Date Analyzed: 2012-05-09 Analyzed By: AH  
Prep Batch: 77244 QC Preparation: 2012-05-09 Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	57.4	mg/L	1	50.0	22.7	69	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit
Total Kjeldahl Nitrogen - N		2	56.3	mg/L	1	50.0	22.7	29.2 - 129	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295867

QC Batch: 91071 Date Analyzed: 2012-05-09 Analyzed By: AH  
Prep Batch: 77245 QC Preparation: 2012-05-09 Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	56.7	mg/L	1	50.0	2.24	109	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit
Total Kjeldahl Nitrogen - N		2	57.5	mg/L	1	50.0	2.24	29.2 - 129	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 90789

Date Analyzed: 2012-04-30

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.0	104	90 - 110	2012-04-30

### Standard (CCV-1)

QC Batch: 90789

Date Analyzed: 2012-04-30

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.17	103	90 - 110	2012-04-30

### Standard (CCV-2)

QC Batch: 90789

Date Analyzed: 2012-04-30

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.3	105	90 - 110	2012-04-30

### Standard (CCV-2)

QC Batch: 90789

Date Analyzed: 2012-04-30

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.18	104	90 - 110	2012-04-30



**Standard (ICV-1)**

QC Batch: 91054 Date Analyzed: 2012-05-09 Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.54	91	85 - 115	2012-05-09

**Standard (CCV-1)**

QC Batch: 91054 Date Analyzed: 2012-05-09 Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.79	96	85 - 115	2012-05-09

**Standard (ICV-1)**

QC Batch: 91071 Date Analyzed: 2012-05-09 Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.56	91	85 - 115	2012-05-09

**Standard (CCV-1)**

QC Batch: 91071 Date Analyzed: 2012-05-09 Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.96	99	85 - 115	2012-05-09

---

## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

---

# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.

Company Name: D&H Petroleum & Environmental Services  
 Address: (Street, City, Zip) 1221 Tower Trail Ln, El Paso TX 79907  
 Contact Person: Victor Ayala  
 Phone #: 915-859-8150  
 Cell #:   
 Fax #:   
 E-mail: vajala@dhpump.com  
 Project Name: Ed DeRuyter 575-233-2029  
 Project #:   
 Project Location (including state): Sunset Dairy, PO Box 10, Mesquite, NM 88048  
 Sampler Signature: *[Signature]*  
 Project Location (including state): Sunset Dairy, 1790

LAB # (LAB USE ONLY)	Field Code	# Containers	Volume/Amount	MATRIX			PRESERVATIVE METHOD					SAMPLING		TIME	Turn Around Time		
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE			DATE	TIME
257-01		1	250mL	X						X					4-26-12	13:45	
257-01		4	250mL	X						X					4-26-12	13:45	
257-02		1	250mL	X						X					4-26-12	14:12	
257-02		4	250mL	X						X					4-26-12	14:12	
257-03		1	250mL	X						X					4-26-12	14:41	
257-03		4	250mL	X						X					4-26-12	14:41	
257/260-01		1	250mL	X						X					4-26-12	15:10	
257/260-01		4	250mL	X						X					4-26-12	15:10	
257 Lagoon		1	250mL	X						X					4-26-12	13:51	
257 Lagoon		4	250mL	X						X					4-26-12	13:51	

ANALYSIS REQUEST

TPH 418.1 / TX1005	
BTEX 8021B/602	
MTBE 8021B/602	
PAH 8270C	
PAH 8270 (Low Level Analysis)	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
Nitrates EPA 300	X
TKN SM 4500 NORG C	X
Chloride EPA 300	X
Total Dissolved Solids SM 2540 C MOD	X

Lab Use Only: Intact  / N   
 Headspace Y / N  /   
 Temp  /   
 Log-in Review  /

Relinquished By: *[Signature]* Date: 4-26-12 Time: 15:52  
 Relinquished By: *[Signature]* Date: 4-26-12 Time: 16:25

Received By: *[Signature]* Date: 4-26-12 Time: 15:52  
 Received at Laboratory By: *[Signature]* Date: 4-27-12 Time: 9:15

Remarks: *[Handwritten notes]*

Dry Weight Basis Required   
 TRRP Report Required



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298  
200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944  
5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313  
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750  
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

Linda Armstrong  
Del Norte Dairy, LLC  
12560 Stern Drive  
P. O. Box 10  
Mesquite, NM, 88048

Report Date: May 15, 2012

Work Order: 12043020



DP: 126  
Project Location: Del Norte Dairy, 12560 Stern Dr., Mesquite, NM  
Project Name: Daybreak Dairy

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
295868	126-4	water	2012-04-30	13:28	2012-04-30
295869	126-5	water	2012-04-30	13:52	2012-04-30
295870	126-7	water	2012-04-30	11:10	2012-04-30
295871	126-9	water	2012-04-30	10:45	2012-04-30
295872	126-12	water	2012-04-30	14:33	2012-04-30
295873	126-13	water	2012-04-30	13:03	2012-04-30
295874	126 Lagoon	water	2012-04-30	11:27	2012-04-30

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 29 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

### Notes:

*For inorganic analyses, the term MQL should actually read PQL.*

*Michael Abel*

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Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

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## Case Narrative

Samples for project Daybreak Dairy were received by TraceAnalysis, Inc. on 2012-04-30 and assigned to work order 12043020. Samples for work order 12043020 were received intact at a temperature of 2 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77055	2012-05-01 at 12:00	90823	2012-05-02 at 09:00
Chloride (IC)	E 300.0	77057	2012-05-01 at 12:00	90824	2012-05-02 at 09:00
Chloride (IC)	E 300.0	77058	2012-05-01 at 12:00	90825	2012-05-03 at 09:00
NO3 (IC)	E 300.0	77055	2012-05-01 at 12:00	90823	2012-05-02 at 09:00
NO3 (IC)	E 300.0	77057	2012-05-01 at 12:00	90824	2012-05-02 at 09:00
NO3 (IC)	E 300.0	77058	2012-05-01 at 12:00	90825	2012-05-03 at 09:00
TDS	SM 2540C	77114	2012-05-02 at 14:56	90896	2012-05-02 at 14:56
TDS	SM 2540C	77114	2012-05-02 at 14:56	90898	2012-05-02 at 14:56
TKN	E 351.3	77372	2012-05-14 at 13:30	91206	2012-05-14 at 16:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12043020 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 295868 - 126-4**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90824 Date Analyzed: 2012-05-02 Analyzed By: RL  
 Prep Batch: 77057 Sample Preparation: 2012-05-01 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>539</b>	<b>539</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295868 - 126-4**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90824 Date Analyzed: 2012-05-02 Analyzed By: RL  
 Prep Batch: 77057 Sample Preparation: 2012-05-01 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>15.7</b>	<b>15.7</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 295868 - 126-4**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90896 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2310</b>	<b>2310</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295868 - 126-4**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91206 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77372 Sample Preparation: 2012-05-14 Prepared By: AH

Report Date: May 15, 2012

Work Order: 12043020  
Daybreak Dairy

Page Number: 7 of 29  
Del Norte Dairy, 12560 Stern Dr., Mesquite, NM

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295869 - 126-5**

Laboratory: Lubbock  
 Analysis: Chloride (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 90824      Date Analyzed: 2012-05-02      Analyzed By: RL  
 Prep Batch: 77057      Sample Preparation: 2012-05-01      Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>530</b>	<b>530</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295869 - 126-5**

Laboratory: Lubbock  
 Analysis: NO3 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 90824      Date Analyzed: 2012-05-02      Analyzed By: RL  
 Prep Batch: 77057      Sample Preparation: 2012-05-01      Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>28.6</b>	<b>28.6</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 295869 - 126-5**

Laboratory: El Paso  
 Analysis: TDS      Analytical Method: SM 2540C      Prep Method: N/A  
 QC Batch: 90896      Date Analyzed: 2012-05-02      Analyzed By: MD  
 Prep Batch: 77114      Sample Preparation: 2012-05-02      Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2840</b>	<b>2840</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295869 - 126-5**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91206 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77372 Sample Preparation: 2012-05-14 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>2.38</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295870 - 126-7**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90825 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77058 Sample Preparation: 2012-05-01 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>605</b>	<b>605</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295870 - 126-7**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90825 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77058 Sample Preparation: 2012-05-01 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>18.8</b>	<b>18.8</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 295870 - 126-7**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90896 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

*continued . . .*

*sample 295870 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2710</b>	<b>2710</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295870 - 126-7**

Laboratory: Lubbock

Analysis: TKN

QC Batch: 91206

Prep Batch: 77372

Analytical Method: E 351.3

Date Analyzed: 2012-05-14

Sample Preparation: 2012-05-14

Prep Method: N/A

Analyzed By: AH

Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295871 - 126-9**

Laboratory: Lubbock

Analysis: Chloride (IC)

QC Batch: 90825

Prep Batch: 77058

Analytical Method: E 300.0

Date Analyzed: 2012-05-03

Sample Preparation: 2012-05-01

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>978</b>	<b>978</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295871 - 126-9**

Laboratory: Lubbock

Analysis: NO3 (IC)

QC Batch: 90825

Prep Batch: 77058

Analytical Method: E 300.0

Date Analyzed: 2012-05-03

Sample Preparation: 2012-05-01

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>2.28</b>	<b>2.28</b>	<0.0228	mg/L	1	0.0228	0.04	0.0228

**Sample: 295871 - 126-9**

Laboratory: El Paso  
 Analysis: TDS  
 QC Batch: 90896  
 Prep Batch: 77114

Analytical Method: SM 2540C  
 Date Analyzed: 2012-05-02  
 Sample Preparation: 2012-05-02

Prep Method: N/A  
 Analyzed By: MD  
 Prepared By: MD

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2900</b>	<b>2900</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295871 - 126-9**

Laboratory: Lubbock  
 Analysis: TKN  
 QC Batch: 91206  
 Prep Batch: 77372

Analytical Method: E 351.3  
 Date Analyzed: 2012-05-14  
 Sample Preparation: 2012-05-14

Prep Method: N/A  
 Analyzed By: AH  
 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>5.04</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295872 - 126-12**

Laboratory: Lubbock  
 Analysis: Chloride (IC)  
 QC Batch: 90825  
 Prep Batch: 77058

Analytical Method: E 300.0  
 Date Analyzed: 2012-05-03  
 Sample Preparation: 2012-05-01

Prep Method: N/A  
 Analyzed By: RL  
 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>401</b>	<b>401</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295872 - 126-12**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90825 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77058 Sample Preparation: 2012-05-01 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>12.9</b>	<b>12.9</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 295872 - 126-12**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90896 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2270</b>	<b>2270</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295872 - 126-12**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91206 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77372 Sample Preparation: 2012-05-14 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>1.96</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295873 - 126-13**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90823 Date Analyzed: 2012-05-02 Analyzed By: RL  
 Prep Batch: 77055 Sample Preparation: 2012-05-01 Prepared By: RL

*continued ...*

sample 295873 continued ...

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>784</b>	<b>784</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295873 - 126-13**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90823 Date Analyzed: 2012-05-02 Analyzed By: RL  
 Prep Batch: 77055 Sample Preparation: 2012-05-01 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>43.8</b>	<b>43.8</b>	<0.0228	mg/L	1	0.0228	0.04	0.0228

**Sample: 295873 - 126-13**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90898 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>3120</b>	<b>3120</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295873 - 126-13**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91206 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77372 Sample Preparation: 2012-05-14 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72



**Sample: 295874 - 126 Lagoon**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90823 Date Analyzed: 2012-05-02 Analyzed By: RL  
 Prep Batch: 77055 Sample Preparation: 2012-05-01 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>1230</b>	<b>1230</b>	<41.8	mg/L	200	41.8	2.5	0.209

**Sample: 295874 - 126 Lagoon**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90823 Date Analyzed: 2012-05-02 Analyzed By: RL  
 Prep Batch: 77055 Sample Preparation: 2012-05-01 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N	u	2	<0.114	<0.200	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295874 - 126 Lagoon**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90898 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>6180</b>	<b>6180</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295874 - 126 Lagoon**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91206 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77372 Sample Preparation: 2012-05-14 Prepared By: AH

*continued ...*

*sample 295874 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
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Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>598</b>	<b>598</b>	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 90823  
Prep Batch: 77055Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-01Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

### Method Blank (1)

QC Batch: 90823  
Prep Batch: 77055Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-01Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

### Method Blank (1)

QC Batch: 90824  
Prep Batch: 77057Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-01Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	0.229	mg/L	0.209

### Method Blank (1)

QC Batch: 90824  
Prep Batch: 77057Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-01Analyzed By: RL  
Prepared By: RL

---

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

---

**Method Blank (1)**QC Batch: 90825  
Prep Batch: 77058Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-01Analyzed By: RL  
Prepared By: RL

---

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	0.413	mg/L	0.209

---

**Method Blank (1)**QC Batch: 90825  
Prep Batch: 77058Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-01Analyzed By: RL  
Prepared By: RL

---

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

---

**Method Blank (1)**QC Batch: 90896  
Prep Batch: 77114Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02Analyzed By: MD  
Prepared By: MD

---

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

---

**Method Blank (1)**QC Batch: 90898  
Prep Batch: 77114Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02Analyzed By: MD  
Prepared By: MD

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Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

**Method Blank (1)**

QC Batch: 91206  
Prep Batch: 77372

Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14

Analyzed By: AH  
Prepared By: AH

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

**Duplicate (1)** Duplicated Sample: 295872

QC Batch: 90896  
Prep Batch: 77114

Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02

Analyzed By: MD  
Prepared By: MD

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	2320	2270	mg/L	1	2	10

**Duplicate (1)** Duplicated Sample: 295940

QC Batch: 90898  
Prep Batch: 77114

Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02

Analyzed By: MD  
Prepared By: MD

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	3800	3620	mg/L	1	5	10

# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 90823  
Prep Batch: 77055

Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-01

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	25.8	mg/L	1	25.0	<0.209	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Chloride		2	25.7	mg/L	1	25.0	<0.209	103	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90823  
Prep Batch: 77055

Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-01

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Nitrate-N		2	5.12	mg/L	1	5.00	<0.0228	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Nitrate-N		2	5.10	mg/L	1	5.00	<0.0228	102	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90824  
Prep Batch: 77057

Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-01

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	25.8	mg/L	1	25.0	<0.209	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	25.9	mg/L	1	25.0	<0.209	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 90824  
Prep Batch: 77057

Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-01

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	5.07	mg/L	1	5.00	<0.0228	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	5.02	mg/L	1	5.00	<0.0228	100	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 90825  
Prep Batch: 77058

Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-01

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	26.0	mg/L	1	25.0	<0.209	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	26.2	mg/L	1	25.0	<0.209	105	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 90825  
Prep Batch: 77058

Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-01

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	5.04	mg/L	1	5.00	<0.0228	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Nitrate-N		2	5.21	mg/L	1	5.00	<0.0228	104	90 - 110	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 90896  
Prep Batch: 77114

Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02

Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110	0	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 90898  
Prep Batch: 77114

Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02

Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Dissolved Solids		1	968	mg/L	1	1000	<5.00	97	90 - 110	4	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.



**Laboratory Control Spike (LCS-1)**QC Batch: 91206  
Prep Batch: 77372Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	45.9	mg/L	1	50.0	<1.72	92	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Kjeldahl Nitrogen - N		2	38.4	mg/L	1	50.0	<1.72	77	65.4 - 113	18	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295855QC Batch: 90823  
Prep Batch: 77055Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-01Analyzed By: RL  
Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	275	mg/L	10	208	58.6	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		2	279	mg/L	10	208	58.6	106	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295855QC Batch: 90823  
Prep Batch: 77055Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-01Analyzed By: RL  
Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	45.1	mg/L	10	42.0	3.32	99	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate-N		2	46.2	mg/L	10	42.0	3.32	102	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295869

QC Batch: 90824  
Prep Batch: 77057

Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-01

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	2700	mg/L	100	2080	530	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		2	2680	mg/L	100	2080	530	103	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295869

QC Batch: 90824  
Prep Batch: 77057

Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-01

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	458	mg/L	100	417	28.6	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate-N		2	448	mg/L	100	417	28.6	100	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295872

QC Batch: 90825  
Prep Batch: 77058

Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-01

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	2560	mg/L	100	2080	401	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	2560	mg/L	100	2080	401	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295872

QC Batch: 90825  
Prep Batch: 77058

Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-01

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	425	mg/L	100	417	12.9	99	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	418	mg/L	100	417	12.9	97	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295877

QC Batch: 91206  
Prep Batch: 77372

Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14

Analyzed By: AH  
Prepared By: AH

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	46.5	mg/L	1	50.0	2.1	89	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	45.9	mg/L	1	50.0	2.1	88	29.2 - 129	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 90823

Date Analyzed: 2012-05-02

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.5	102	90 - 110	2012-05-02

### Standard (CCV-1)

QC Batch: 90823

Date Analyzed: 2012-05-02

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.07	101	90 - 110	2012-05-02

### Standard (CCV-2)

QC Batch: 90823

Date Analyzed: 2012-05-02

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.7	103	90 - 110	2012-05-02

### Standard (CCV-2)

QC Batch: 90823

Date Analyzed: 2012-05-02

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.11	102	90 - 110	2012-05-02

**Standard (CCV-1)**

QC Batch: 90824 Date Analyzed: 2012-05-02 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.7	103	90 - 110	2012-05-02

**Standard (CCV-1)**

QC Batch: 90824 Date Analyzed: 2012-05-02 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.11	102	90 - 110	2012-05-02

**Standard (CCV-2)**

QC Batch: 90824 Date Analyzed: 2012-05-02 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.9	104	90 - 110	2012-05-02

**Standard (CCV-2)**

QC Batch: 90824 Date Analyzed: 2012-05-02 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.09	102	90 - 110	2012-05-02

**Standard (CCV-1)**

QC Batch: 90825 Date Analyzed: 2012-05-03 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.9	104	90 - 110	2012-05-03

**Standard (CCV-1)**

QC Batch: 90825

Date Analyzed: 2012-05-03

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.09	102	90 - 110	2012-05-03

**Standard (CCV-2)**

QC Batch: 90825

Date Analyzed: 2012-05-03

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.3	101	90 - 110	2012-05-03

**Standard (CCV-2)**

QC Batch: 90825

Date Analyzed: 2012-05-03

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	4.94	99	90 - 110	2012-05-03

**Standard (ICV-1)**

QC Batch: 91206

Date Analyzed: 2012-05-14

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.51	90	85 - 115	2012-05-14

**Standard (CCV-1)**

QC Batch: 91206

Date Analyzed: 2012-05-14

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	5.24	105	85 - 115	2012-05-14

---

## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass



---

# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.

6707 Aberdeen, S.W. V  
Lubbock, TX 79424  
Tel (806) 794-1286  
Fax (806) 794-1296

# TraceAnalysis, Inc.

**Company Name:** D&H Petroleum & Environmental Services  
**Address:** (Street, City, Zip)  
 1221 Tower Trail Ln., El Paso, Texas 79907  
**Contact Person:** Victor Ayala  
**Phone #:** 915-859-8150  
**Cell #:**  
**Fax #:**  
**E-mail:** vayasla@dhpump.com

**Project #:** Linda Armstrong 575-233-3620  
**Project Name:** Daybreak Dairy  
**Sampler Signature:** *Linda Armstrong*

**Project Location (including state):**  
 Del Norte Dairy, 12560 Stern Drive, Mesquite, NM

LAB # (LAB USE ONLY)	Field Code	# Containers	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING		Turn Around Time	
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE		DATE
2058	126-4	1	250 mL	X				X					4-30-12	13:28	
2059	126-4	2	250 mL	X				X					4-30-12	13:28	
2060	126-5	1	250 mL	X				X					4-30-12	13:52	
2061	126-5	2	250 mL	X				X					4-30-12	13:52	
2062	126-7	1	250 mL	X				X					4-30-12	11:10	
2063	126-7	2	250 mL	X				X					4-30-12	11:10	
2064	126-9	1	250 mL	X				X					4-30-12	10:45	
2065	126-9	2	250 mL	X				X					4-30-12	10:45	
2066	126-12	1	250 mL	X				X					4-30-12	14:33	
2067	126-12	2	250 mL	X				X					4-30-12	14:33	
2068	126-13	1	250 mL	X				X					4-30-12	13:03	
2069	126-13	2	250 mL	X				X					4-30-12	13:03	
2070	126 Lagoon	1	250 mL	X				X					4-30-12	11:27	
2071	126 Lagoon	2	250 mL	X				X					4-30-12	11:27	

Page 1 of 1  
**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**  
 LAB Order ID # 12043020

**ANALYSIS REQUEST**

MTBE 80219/602	
BTEX 80219/602	
TPH 418.1 / TX1005	
TX 1005 Extended (C35)	
PAH 8270C	
PAH 8270 (Low Level Analytes)	
Total Metals Ag As BA Cd Cr Pb Se Hg 6010B/200.7	X
Nitrate EPA 300	X
Total Kjeldahl Nitrogen SM 4500 NORG C	X
Chloride EPA 300.0	X
Total Dissolved Solids SM 2540 C MOD	X

**Reinquired By:** Date: 4-30-12 Time: 15:10  
**Received By:** Date: 4-30-12 Time: 15:10  
**Reinquired By:** Date: 4/20/12 Time: 16:20  
**Received at Laboratory By:** Date: 4/20/12 Time: 15:10  
**Lab Use Only:** Intact  Dil   
 Headspace  Y.L.N.   
 Temp  21.2 C   
 Log-in Review  m.f.l.  
 Remarks: TDS is 60  
 Dry Weight Basis Required  
 TRRP Report Required  
 75820

# TraceAnalysis, Inc.

155 McCutcheon, Ste. H El Paso, TX 79932  
Tel (915) 585-3443  
Fax (915) 585-4944

Company Name: D&H Petroleum & Environmental Services  
Address: (Street, City, Zip) 1221 Tower Trail Ln., El Paso, Texas 79907  
Contact Person: Victor Ayala  
Phone #: 915-859-8150  
Cell #:   
Fax #:   
E-mail: vayala@dhpump.com

LAB Order ID # 12043020

Project Name: Daybreak Dairy  
Project Location (including state): Del Norte Dairy, P.O. Box 10, Mesquite, NM 88048  
Sampler Signature: [Signature]

LAB # (LAB USE ONLY)	Field Code	# Containers	Volume/Amount	MATRIX			PRESERVATIVE METHOD					SAMPLING		TIME	
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE		DATE
126-4		1	250 mL	X				X			X			4-30-12	13:28
126-4		2	250 mL	X				X			X			4-30-12	13:28
126-5		1	250 mL	X				X			X			4-30-12	13:52
126-5		2	250 mL	X				X			X			4-30-12	13:52
126-7		1	250 mL	X				X			X			4-30-12	11:10
126-7		1	250 mL	X				X			X			4-30-12	11:10
126-9		1	250 mL	X				X			X			4-30-12	10:45
126-9		2	250 mL	X				X			X			4-30-12	10:45
126-12		1	250 mL	X				X			X			4-30-12	14:33
126-12		2	250 mL	X				X			X			4-30-12	14:33
126-13		1	250 mL	X				X			X			4-30-12	13:03
126-13		2	250 mL	X				X			X			4-30-12	13:03
126 Lagoon		1	250 mL	X				X			X			4-30-12	11:27
126 Lagoon		2	250 mL	X				X			X			4-30-12	11:27

Relinquished By: [Signature] Date: 4-30-12 Time: 15:10

Relinquished By: [Signature] Date: 4/30/12 Time: 9:15

Received By: [Signature] Date: 4/30/12 Time: 15:10

Received at Laboratory By: [Signature] Date: 5/1/12 Time: 9:15

LAB USE ONLY	Field Code	# Containers	Volume/Amount	MATRIX	PRESERVATIVE METHOD	SAMPLING	TIME	ANALYSIS REQUEST
								TPH 418.1 / TX1005
								BTEX 8021B/602
								TX 1005 Extended (C35)
								PAH 8270C
								PAH 8270 (Low Level Analysis)
								Total Metals Ag As BA Cd Cr Pb Se Hg 6010B/200.7
								Nitrates EPA 300
								Total Kjeldahl Nitrogen SM 4500 NORG C
								Chloride EPA 300.0
								Total Dissolved Solids SM 2540 C MOD
								Turn Around Time
								Hold

Remarks: TDS w/EP  
25.46975869  
By HZ  
Dry Weight Basis Required  
TRRP Report Required

7 sets



6701 Aberdeen Avenue, Suite 9      Lubbock, Texas 79424      800-378-1296      806-794-1296      FAX 806-794-1298  
 200 East Sunset Road, Suite E      El Paso, Texas 79922      915-585-3443      FAX 915-585-4944  
 5002 Basin Street, Suite A1      Midland, Texas 79703      432-689-6301      FAX 432-689-6313  
 (BioAquatic) 2501 Mayes Rd., Suite 100      Carrollton, Texas 75006      972-242-7750  
 E-Mail: lab@traceanalysis.com      WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Isaac Dominguez  
 Dominguez Dairy #1  
 13950 Stern Drive  
 P.O. Box 21  
 Mesquite, NM, 88048

Report Date: May 15, 2012

Work Order: 12043021



DP:  
 Project Location: 13950 Stern Dr., Mesquite, NM  
 Project Name: Dominguez Dairy #1  
 Project Number:

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
295875	624-01	water	2012-04-30	09:09	2012-04-30
295876	624-02	water	2012-04-30	08:28	2012-04-30
295877	624-05	water	2012-04-30	07:52	2012-04-30
295878	624-06	water	2012-04-30	09:52	2012-04-30
295879	624 Lagoon	water	2012-04-30	09:47	2012-04-30

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 21 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

**Notes:**

*For inorganic analyses, the term MQL should actually read PQL.*

*Michael Abel*

---

Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

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## Case Narrative

Samples for project Dominguez Dairy #1 were received by TraceAnalysis, Inc. on 2012-04-30 and assigned to work order 12043021. Samples for work order 12043021 were received intact at a temperature of 2 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77170	2012-05-02 at 12:00	90963	2012-05-03 at 09:00
NO3 (IC)	E 300.0	77170	2012-05-02 at 12:00	90963	2012-05-03 at 09:00
TDS	SM 2540C	77114	2012-05-02 at 14:56	90898	2012-05-02 at 14:56
TDS	SM 2540C	77347	2012-05-10 at 15:30	91172	2012-05-10 at 15:30
TKN	E 351.3	77372	2012-05-14 at 13:30	91206	2012-05-14 at 16:00
TKN	E 351.3	77373	2012-05-14 at 16:05	91207	2012-05-14 at 18:06

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12043021 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 295875 - 624-01**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77170 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Chloride		2	<b>1400</b>	<b>1400</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295875 - 624-01**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77170 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>8.69</b>	<b>8.69</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295875 - 624-01**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90898 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>4180</b>	<b>4180</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295875 - 624-01**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91206 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77372 Sample Preparation: 2012-05-14 Prepared By: AH



Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>36.4</b>	<b>36.4</b>	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295876 - 624-02**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77170 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>1160</b>	<b>1160</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295876 - 624-02**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77170 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>16.4</b>	<b>16.4</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295876 - 624-02**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90898 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>3650</b>	<b>3650</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295876 - 624-02**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91206 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77372 Sample Preparation: 2012-05-14 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>4.06</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295877 - 624-05**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77170 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>346</b>	<b>346</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 295877 - 624-05**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77170 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>3.70</b>	<b>3.70</b>	<0.0228	mg/L	1	0.0228	0.04	0.0228

**Sample: 295877 - 624-05**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90898 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

*continued . . .*

*sample 295877 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>1710</b>	<b>1710</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295877 - 624-05**

Laboratory: Lubbock

Analysis: TKN

QC Batch: 91206

Prep Batch: 77372

Analytical Method: E 351.3

Date Analyzed: 2012-05-14

Sample Preparation: 2012-05-14

Prep Method: N/A

Analyzed By: AH

Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>2.10</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295878 - 624-06**

Laboratory: Lubbock

Analysis: Chloride (IC)

QC Batch: 90963

Prep Batch: 77170

Analytical Method: E 300.0

Date Analyzed: 2012-05-03

Sample Preparation: 2012-05-02

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>1010</b>	<b>1010</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295878 - 624-06**

Laboratory: Lubbock

Analysis: NO3 (IC)

QC Batch: 90963

Prep Batch: 77170

Analytical Method: E 300.0

Date Analyzed: 2012-05-03

Sample Preparation: 2012-05-02

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>31.1</b>	<b>31.1</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295878 - 624-06**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90898 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>3300</b>	<b>3300</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295878 - 624-06**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91207 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77373 Sample Preparation: 2012-05-14 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>8.40</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295879 - 624 Lagoon**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77170 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>8440</b>	<b>8440</b>	<209	mg/L	1000	209	2.5	0.209

**Sample: 295879 - 624 Lagoon**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77170 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
			Result	Result	Result					
Nitrate-N	u	2	<0.228	<0.400	<0.228	mg/L	10	0.228	0.04	0.0228

**Sample: 295879 - 624 Lagoon**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91172 Date Analyzed: 2012-05-10 Analyzed By: MD  
 Prep Batch: 77347 Sample Preparation: 2012-05-10 Prepared By: MD

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
			Result	Result	Result					
Total Dissolved Solids		1	<b>38400</b>	<b>38400</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295879 - 624 Lagoon**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91207 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77373 Sample Preparation: 2012-05-14 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
			Result	Result	Result					
Total Kjeldahl Nitrogen - N		2	<b>122</b>	<b>122</b>	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 90898  
Prep Batch: 77114Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

### Method Blank (1)

QC Batch: 90963  
Prep Batch: 77170Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

### Method Blank (1)

QC Batch: 90963  
Prep Batch: 77170Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

### Method Blank (1)

QC Batch: 91172  
Prep Batch: 77347Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-10Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

**Method Blank (1)**

QC Batch: 91206                      Date Analyzed: 2012-05-14                      Analyzed By: AH  
Prep Batch: 77372                      QC Preparation: 2012-05-14                      Prepared By: AH

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

**Method Blank (1)**

QC Batch: 91207                      Date Analyzed: 2012-05-14                      Analyzed By: AH  
Prep Batch: 77373                      QC Preparation: 2012-05-14                      Prepared By: AH

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

**Duplicate (1)**    Duplicated Sample: 295940

QC Batch: 90898                      Date Analyzed: 2012-05-02                      Analyzed By: MD  
Prep Batch: 77114                      QC Preparation: 2012-05-02                      Prepared By: MD

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	3800	3620	mg/L	1	5	10

**Duplicate (1)**    Duplicated Sample: 296895

QC Batch: 91172                      Date Analyzed: 2012-05-10                      Analyzed By: MD  
Prep Batch: 77347                      QC Preparation: 2012-05-10                      Prepared By: MD

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13950 Stern Dr., Mesquite, NM

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Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	43400	43600	mg/L	1	0	10

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# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 90898  
Prep Batch: 77114Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Dissolved Solids		1	968	mg/L	1	1000	<5.00	97	90 - 110	4	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90963  
Prep Batch: 77170Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	26.1	mg/L	1	25.0	<0.209	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		2	26.1	mg/L	1	25.0	<0.209	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90963  
Prep Batch: 77170Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	5.19	mg/L	1	5.00	<0.0228	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	5.13	mg/L	1	5.00	<0.0228	103	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91172  
Prep Batch: 77347

Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-10

Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Dissolved Solids		1	953	mg/L	1	1000	<5.00	95	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Dissolved Solids		1	967	mg/L	1	1000	<5.00	97	90 - 110	1	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91206  
Prep Batch: 77372

Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14

Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	45.9	mg/L	1	50.0	<1.72	92	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	38.4	mg/L	1	50.0	<1.72	77	65.4 - 113	18	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91207  
Prep Batch: 77373

Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14

Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	51.2	mg/L	1	50.0	<1.72	102	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	47.9	mg/L	1	50.0	<1.72	96	65.4 - 113	7	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295942

QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
Prep Batch: 77170 QC Preparation: 2012-05-02 Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	2420	mg/L	100	2080	246	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	2410	mg/L	100	2080	246	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295942

QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
Prep Batch: 77170 QC Preparation: 2012-05-02 Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	459	mg/L	100	417	31.8	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	452	mg/L	100	417	31.8	101	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295877

QC Batch: 91206  
Prep Batch: 77372

Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14

Analyzed By: AH  
Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	46.5	mg/L	1	50.0	2.1	89	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Kjeldahl Nitrogen - N		2	45.9	mg/L	1	50.0	2.1	88	29.2 - 129	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295913

QC Batch: 91207  
Prep Batch: 77373

Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14

Analyzed By: AH  
Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	91.7	mg/L	1	50.0	56.3	71	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Kjeldahl Nitrogen - N		2	86.8	mg/L	1	50.0	56.3	61	29.2 - 129	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 90963

Date Analyzed: 2012-05-03

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.7	103	90 - 110	2012-05-03

### Standard (CCV-1)

QC Batch: 90963

Date Analyzed: 2012-05-03

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.04	101	90 - 110	2012-05-03

### Standard (CCV-2)

QC Batch: 90963

Date Analyzed: 2012-05-03

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.8	103	90 - 110	2012-05-03

### Standard (CCV-2)

QC Batch: 90963

Date Analyzed: 2012-05-03

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.10	102	90 - 110	2012-05-03

**Standard (ICV-1)**

QC Batch: 91206 Date Analyzed: 2012-05-14 Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.51	90	85 - 115	2012-05-14

**Standard (CCV-1)**

QC Batch: 91206 Date Analyzed: 2012-05-14 Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	5.24	105	85 - 115	2012-05-14

**Standard (ICV-1)**

QC Batch: 91207 Date Analyzed: 2012-05-14 Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.70	94	85 - 115	2012-05-14

**Standard (CCV-1)**

QC Batch: 91207 Date Analyzed: 2012-05-14 Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	5.04	101	85 - 115	2012-05-14

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## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

---

# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.



Project Name: Isaac Dominguez 575-649-7040  
Project #: \_\_\_\_\_  
Project Location (including state): Dominguez Dairy #1  
Dominguez Dairy #1, 13950 Stern Dr., Mesquite, NM  
Sampler Signature: *Isaac Dominguez*

Company Name: \_\_\_\_\_ Phone #: 915-859-8150  
D&H Petroleum & Environmental Services  
Address: (Street, City, Zip) \_\_\_\_\_ Cell #: \_\_\_\_\_  
1221 Tower Trail Ln, El Paso TX 79907 Fax #: \_\_\_\_\_  
Contact Person: \_\_\_\_\_ E-mail: [vajala@dhpump.com](mailto:vajala@dhpump.com)  
Victor Ayala  
Invoice to (if different from above): \_\_\_\_\_  
Dominguez Dairy #1, PO Box 21, Mesquite, NM 88048  
Project #: \_\_\_\_\_  
Project Location (including state): Dominguez Dairy #1  
Dominguez Dairy #1, 13950 Stern Dr., Mesquite, NM  
Sampler Signature: *Isaac Dominguez*

LAB # (LAB USE ONLY)	Field Code	# Containers	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING		TIME	Turn Around Time	
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE			DATE
295875-1	624-01	1	250ml	X				X						4-30-12	9:09	
↓-23	624-01	1	250ml	X				X						4-30-12	9:09	
76-1	624-02	1	250ml	X				X						4-30-12	8:28	
↓-23	624-02	1	250ml	X				X						4-30-12	8:28	
624-04		1		X				X								
624-04		1		X				X								
77-1	624-05	1	250ml	X				X						4-30-12	7:52	
↓-23	624-05	1	250ml	X				X						4-30-12	7:52	
78-1	624-06	1	250ml	X				X						4-30-12	9:52	
↓-23	624-06	1	250ml	X				X						4-30-12	9:52	
624-07		1		X				X								
624-07		1		X				X								
624-08		1		X				X								
624-08		1		X				X								
79-1	624 Lagoon	1	250ml	X				X						4-30-12	9:47	
↓-23	624 Lagoon	1	250ml	X				X						4-30-12	9:47	

ANALYSIS REQUEST

MTBE 8021B/602	
BTEX 8021B/602	
TPH 418.1 / TX1005	
TX 1005 Extended (C35)	
PAH 8270C	
PAH 8270 (Low Level Analysis)	
Total Metals Ag As BA Cd Cr Pb Se Hg 6010B/200.7	X
Nitrates EPA 300	X
TKN SM 4500 NORG C	X
Chloride EPA 300	X
Total Dissolved Solids SM 2540 C MOD	X

Remarks: TDS in EP  
285-4695864  
Dry Weight Basis Required  
TRRP Report Required

Lab Use Only  
Initialed Y/N  
Headspace Y/N  
Temp 2/2 C  
Log-in Review

Received By: *[Signature]* Date: 4/30/12 Time: 15:10  
Received at Laboratory By: *[Signature]* Date: 5/1/12 Time: 9:15

Relinquished By: *[Signature]* Date: 4/30/12 Time: 16:30  
Relinquished By: *[Signature]* Date: 4/30/12 Time: 15:10

5 sets



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 200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944  
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 E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Isaac Dominguez  
 Dominguez Dairy #2  
 13600 Stern Drive  
 P. O. Box 21  
 Mesquite, NM, 88048

Report Date: May 15, 2012

Work Order: 12050124



DP: 42  
 Project Location: 13600 Stern Drive, Mesquite, NM  
 Project Name: Dominguez Dairy #2

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
295939	42-2	water	2012-05-01	11:49	2012-05-01
295940	42-3	water	2012-05-01	07:19	2012-05-01
295941	42-6	water	2012-05-01	09:57	2012-05-01
295942	42-8	water	2012-05-01	10:38	2012-05-01
295943	42-9	water	2012-05-01	08:46	2012-05-01
295944	42-10	water	2012-05-01	13:50	2012-05-01
295945	42-11	water	2012-05-01	14:06	2012-05-01
295946	42-12	water	2012-05-01	13:23	2012-05-01
295947	42-13	water	2012-05-01	08:01	2012-05-01
295948	42-Lagoon	water	2012-05-01	09:10	2012-05-01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 31 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

### Notes:

*For inorganic analyses, the term MQL should actually read PQL.*

*Michael Abel*

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Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

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## Case Narrative

Samples for project Dominguez Dairy #2 were received by TraceAnalysis, Inc. on 2012-05-01 and assigned to work order 12050124. Samples for work order 12050124 were received intact at a temperature of 0.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77170	2012-05-02 at 12:00	90963	2012-05-03 at 09:00
Chloride (IC)	E 300.0	77171	2012-05-02 at 12:00	90964	2012-05-03 at 09:00
NO3 (IC)	E 300.0	77170	2012-05-02 at 12:00	90963	2012-05-03 at 09:00
NO3 (IC)	E 300.0	77171	2012-05-02 at 12:00	90964	2012-05-03 at 09:00
NO3 (IC)	E 300.0	77183	2012-05-03 at 10:00	90975	2012-05-04 at 09:00
TDS	SM 2540C	77114	2012-05-02 at 14:56	90898	2012-05-02 at 14:56
TDS	SM 2540C	77268	2012-05-08 at 14:10	91074	2012-05-08 at 14:10
TKN	E 351.3	77380	2012-05-14 at 18:00	91211	2012-05-14 at 20:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12050124 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 295939 - 42-2**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77170 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>431</b>	<b>431</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295939 - 42-2**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77170 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>22.5</b>	<b>22.5</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295939 - 42-2**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 90898 Date Analyzed: 2012-05-02 Analyzed By: MD  
 Prep Batch: 77114 Sample Preparation: 2012-05-02 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2210</b>	<b>2210</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295939 - 42-2**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91211 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77380 Sample Preparation: 2012-05-14 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295940 - 42-3**

Laboratory: Lubbock  
 Analysis: Chloride (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 90963      Date Analyzed: 2012-05-03      Analyzed By: RL  
 Prep Batch: 77170      Sample Preparation: 2012-05-02      Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>1030</b>	<b>1030</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295940 - 42-3**

Laboratory: Lubbock  
 Analysis: NO3 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 90963      Date Analyzed: 2012-05-03      Analyzed By: RL  
 Prep Batch: 77170      Sample Preparation: 2012-05-02      Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>51.5</b>	<b>51.5</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 295940 - 42-3**

Laboratory: El Paso  
 Analysis: TDS      Analytical Method: SM 2540C      Prep Method: N/A  
 QC Batch: 90898      Date Analyzed: 2012-05-02      Analyzed By: MD  
 Prep Batch: 77114      Sample Preparation: 2012-05-02      Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>3620</b>	<b>3620</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295940 - 42-3**



Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91211 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77380 Sample Preparation: 2012-05-14 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295941 - 42-6**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77170 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Chloride		2	<b>720</b>	<b>720</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295941 - 42-6**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90963 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77170 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>87.0</b>	<b>87.0</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 295941 - 42-6**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91074 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

*continued . . .*

*sample 295941 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2920</b>	<b>2920</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295941 - 42-6**

Laboratory: Lubbock  
 Analysis: TKN  
 QC Batch: 91211  
 Prep Batch: 77380

Analytical Method: E 351.3  
 Date Analyzed: 2012-05-14  
 Sample Preparation: 2012-05-14

Prep Method: N/A  
 Analyzed By: AH  
 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>1.96</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295942 - 42-8**

Laboratory: Lubbock  
 Analysis: Chloride (IC)  
 QC Batch: 90963  
 Prep Batch: 77170

Analytical Method: E 300.0  
 Date Analyzed: 2012-05-03  
 Sample Preparation: 2012-05-02

Prep Method: N/A  
 Analyzed By: RL  
 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride	J	2	<b>246</b>	<250	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295942 - 42-8**

Laboratory: Lubbock  
 Analysis: NO3 (IC)  
 QC Batch: 90963  
 Prep Batch: 77170

Analytical Method: E 300.0  
 Date Analyzed: 2012-05-03  
 Sample Preparation: 2012-05-02

Prep Method: N/A  
 Analyzed By: RL  
 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>36.0</b>	<b>36.0</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295942 - 42-8**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91074 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>1700</b>	<b>1700</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295942 - 42-8**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91211 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77380 Sample Preparation: 2012-05-14 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295943 - 42-9**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90964 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77171 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>542</b>	<b>542</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295943 - 42-9**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90964 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77171 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	50.3	50.3	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295943 - 42-9**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91074 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	2820	2820	<5.00	mg/L	1	5.00	5	5

**Sample: 295943 - 42-9**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91211 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77380 Sample Preparation: 2012-05-14 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	U	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295944 - 42-10**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90964 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77171 Sample Preparation: 2012-05-02 Prepared By: RL

*continued ...*

sample 295944 continued ...

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>363</b>	<b>363</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 295944 - 42-10**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90975 Date Analyzed: 2012-05-04 Analyzed By: RL  
 Prep Batch: 77183 Sample Preparation: 2012-05-03 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>0.236</b>	<b>0.236</b>	<0.0228	mg/L	1	0.0228	0.04	0.0228

**Sample: 295944 - 42-10**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91074 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>1260</b>	<b>1260</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295944 - 42-10**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91211 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77380 Sample Preparation: 2012-05-14 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295945 - 42-11**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90964 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77171 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>274</b>	<b>274</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 295945 - 42-11**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90964 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77171 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>1.24</b>	<b>1.24</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295945 - 42-11**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91074 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>1160</b>	<b>1160</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295945 - 42-11**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91211 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77380 Sample Preparation: 2012-05-14 Prepared By: AH

*continued ...*

sample 295945 continued ...

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295946 - 42-12**

Laboratory: Lubbock  
 Analysis: Chloride (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 90964      Date Analyzed: 2012-05-03      Analyzed By: RL  
 Prep Batch: 77171      Sample Preparation: 2012-05-02      Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>282</b>	<b>282</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 295946 - 42-12**

Laboratory: Lubbock  
 Analysis: NO3 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 90964      Date Analyzed: 2012-05-03      Analyzed By: RL  
 Prep Batch: 77171      Sample Preparation: 2012-05-02      Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>0.750</b>	<b>0.750</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295946 - 42-12**

Laboratory: El Paso  
 Analysis: TDS      Analytical Method: SM 2540C      Prep Method: N/A  
 QC Batch: 91074      Date Analyzed: 2012-05-08      Analyzed By: MD  
 Prep Batch: 77268      Sample Preparation: 2012-05-08      Prepared By: MD

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	1180	1180	<5.00	mg/L	1	5.00	5	5

**Sample: 295946 - 42-12**

Laboratory: Lubbock

Analysis: TKN

QC Batch: 91211

Prep Batch: 77380

Analytical Method: E 351.3

Date Analyzed: 2012-05-14

Sample Preparation: 2012-05-14

Prep Method: N/A

Analyzed By: AH

Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N		2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295947 - 42-13**

Laboratory: Lubbock

Analysis: Chloride (IC)

QC Batch: 90964

Prep Batch: 77171

Analytical Method: E 300.0

Date Analyzed: 2012-05-03

Sample Preparation: 2012-05-02

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	902	902	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 295947 - 42-13**

Laboratory: Lubbock

Analysis: NO3 (IC)

QC Batch: 90964

Prep Batch: 77171

Analytical Method: E 300.0

Date Analyzed: 2012-05-03

Sample Preparation: 2012-05-02

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	81.5	81.5	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 295947 - 42-13**



Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91074 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	3550	3550	<5.00	mg/L	1	5.00	5	5

**Sample: 295947 - 42-13**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91211 Date Analyzed: 2012-05-14 Analyzed By: AH  
 Prep Batch: 77380 Sample Preparation: 2012-05-14 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N		2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 295948 - 42-Lagoon**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90964 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77171 Sample Preparation: 2012-05-02 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	951	951	<41.8	mg/L	200	41.8	2.5	0.209

**Sample: 295948 - 42-Lagoon**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90964 Date Analyzed: 2012-05-03 Analyzed By: RL  
 Prep Batch: 77171 Sample Preparation: 2012-05-02 Prepared By: RL

*continued ...*

*sample 295948 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N	u	2	<0.114	<0.200	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 295948 - 42-Lagoon**

Laboratory: El Paso  
 Analysis: TDS  
 QC Batch: 91074  
 Prep Batch: 77268

Analytical Method: SM 2540C  
 Date Analyzed: 2012-05-08  
 Sample Preparation: 2012-05-08

Prep Method: N/A  
 Analyzed By: MD  
 Prepared By: MD

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>4550</b>	<b>4550</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 295948 - 42-Lagoon**

Laboratory: Lubbock  
 Analysis: TKN  
 QC Batch: 91211  
 Prep Batch: 77380

Analytical Method: E 351.3  
 Date Analyzed: 2012-05-14  
 Sample Preparation: 2012-05-14

Prep Method: N/A  
 Analyzed By: AH  
 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 90898  
Prep Batch: 77114Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

### Method Blank (1)

QC Batch: 90963  
Prep Batch: 77170Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

### Method Blank (1)

QC Batch: 90963  
Prep Batch: 77170Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

### Method Blank (1)

QC Batch: 90964  
Prep Batch: 77171Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02Analyzed By: RL  
Prepared By: RL

---

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

---

**Method Blank (1)**QC Batch: 90964  
Prep Batch: 77171Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02Analyzed By: RL  
Prepared By: RL

---

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

---

**Method Blank (1)**QC Batch: 90975  
Prep Batch: 77183Date Analyzed: 2012-05-04  
QC Preparation: 2012-05-03Analyzed By: RL  
Prepared By: RL

---

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

---

**Method Blank (1)**QC Batch: 91074  
Prep Batch: 77268Date Analyzed: 2012-05-08  
QC Preparation: 2012-05-08Analyzed By: MD  
Prepared By: MD

---

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

---

**Method Blank (1)**QC Batch: 91211  
Prep Batch: 77380Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14Analyzed By: AH  
Prepared By: AH

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

**Duplicate (1)** Duplicated Sample: 295940

QC Batch: 90898                                      Date Analyzed: 2012-05-02                                      Analyzed By: MD  
 Prep Batch: 77114                                      QC Preparation: 2012-05-02                                      Prepared By: MD

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	3800	3620	mg/L	1	5	10

**Duplicate (1)** Duplicated Sample: 295948

QC Batch: 91074                                      Date Analyzed: 2012-05-08                                      Analyzed By: MD  
 Prep Batch: 77268                                      QC Preparation: 2012-05-08                                      Prepared By: MD

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	4360	4550	mg/L	1	4	10

# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 90898  
Prep Batch: 77114Date Analyzed: 2012-05-02  
QC Preparation: 2012-05-02Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Dissolved Solids		1	968	mg/L	1	1000	<5.00	97	90 - 110	4	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90963  
Prep Batch: 77170Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	26.1	mg/L	1	25.0	<0.209	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		2	26.1	mg/L	1	25.0	<0.209	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90963  
Prep Batch: 77170Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	5.19	mg/L	1	5.00	<0.0228	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	5.13	mg/L	1	5.00	<0.0228	103	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 90964 Date Analyzed: 2012-05-03 Analyzed By: RL  
Prep Batch: 77171 QC Preparation: 2012-05-02 Prepared By: RL

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	25.9	mg/L	1	25.0	<0.209	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	26.1	mg/L	1	25.0	<0.209	104	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 90964 Date Analyzed: 2012-05-03 Analyzed By: RL  
Prep Batch: 77171 QC Preparation: 2012-05-02 Prepared By: RL

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	5.18	mg/L	1	5.00	<0.0228	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	5.17	mg/L	1	5.00	<0.0228	103	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 90975 Date Analyzed: 2012-05-04 Analyzed By: RL  
Prep Batch: 77183 QC Preparation: 2012-05-03 Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	5.10	mg/L	1	5.00	<0.0228	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Nitrate-N		2	5.03	mg/L	1	5.00	<0.0228	101	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 91074  
Prep Batch: 77268

Date Analyzed: 2012-05-08  
QC Preparation: 2012-05-08

Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Dissolved Solids		1	979	mg/L	1	1000	<5.00	98	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Dissolved Solids		1	980	mg/L	1	1000	<5.00	98	90 - 110	0	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 91211  
Prep Batch: 77380

Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14

Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	49.0	mg/L	1	50.0	<1.72	98	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Kjeldahl Nitrogen - N		2	50.7	mg/L	1	50.0	<1.72	101	65.4 - 113	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.



**Matrix Spike (MS-1)** Spiked Sample: 295942QC Batch: 90963  
Prep Batch: 77170Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02Analyzed By: RL  
Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	2420	mg/L	100	2080	246	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	2410	mg/L	100	2080	246	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295942QC Batch: 90963  
Prep Batch: 77170Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02Analyzed By: RL  
Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	459	mg/L	100	417	31.8	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	452	mg/L	100	417	31.8	101	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295948QC Batch: 90964  
Prep Batch: 77171Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02Analyzed By: RL  
Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	5130	mg/L	200	4170	951	100	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	5190	mg/L	200	4170	951	102	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295948

QC Batch: 90964  
Prep Batch: 77171

Date Analyzed: 2012-05-03  
QC Preparation: 2012-05-02

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	863	mg/L	200	833	<4.56	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate-N		2	825	mg/L	200	833	<4.56	99	90 - 110	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296135

QC Batch: 90975  
Prep Batch: 77183

Date Analyzed: 2012-05-04  
QC Preparation: 2012-05-03

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	433	mg/L	100	417	3.71	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate-N		2	431	mg/L	100	417	3.71	102	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 295948

QC Batch: 91211  
Prep Batch: 77380

Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14

Analyzed By: AH  
Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	51.1	mg/L	1	50.0	<1.72	102	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

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Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Kjeldahl Nitrogen - N		2	52.1	mg/L	1	50.0	<1.72	104	29.2 - 129	2	20

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Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 90963

Date Analyzed: 2012-05-03

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.7	103	90 - 110	2012-05-03

### Standard (CCV-1)

QC Batch: 90963

Date Analyzed: 2012-05-03

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.04	101	90 - 110	2012-05-03

### Standard (CCV-2)

QC Batch: 90963

Date Analyzed: 2012-05-03

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.8	103	90 - 110	2012-05-03

### Standard (CCV-2)

QC Batch: 90963

Date Analyzed: 2012-05-03

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.10	102	90 - 110	2012-05-03

**Standard (CCV-1)**

QC Batch: 90964 Date Analyzed: 2012-05-03 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.8	103	90 - 110	2012-05-03

**Standard (CCV-1)**

QC Batch: 90964 Date Analyzed: 2012-05-03 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.10	102	90 - 110	2012-05-03

**Standard (CCV-2)**

QC Batch: 90964 Date Analyzed: 2012-05-03 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.0	104	90 - 110	2012-05-03

**Standard (CCV-2)**

QC Batch: 90964 Date Analyzed: 2012-05-03 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.11	102	90 - 110	2012-05-03

**Standard (CCV-1)**

QC Batch: 90975 Date Analyzed: 2012-05-04 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.08	102	90 - 110	2012-05-04

**Standard (CCV-2)**

QC Batch: 90975

Date Analyzed: 2012-05-04

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.10	102	90 - 110	2012-05-04

**Standard (ICV-1)**

QC Batch: 91211

Date Analyzed: 2012-05-14

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.40	88	85 - 115	2012-05-14

**Standard (CCV-1)**

QC Batch: 91211

Date Analyzed: 2012-05-14

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.70	94	85 - 115	2012-05-14

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## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

---

# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.



6701 Aberdeen, Ste. 9  
Lubbock, TX 79424  
Tel (806) 794-1296  
Fax (806) 794-1298

# TraceAnalysis, Inc.

155 McCutcheon, Ste. H El  
Paso, TX 79932  
Tel (915) 585-3443  
Fax (915) 585-4944

Page 1 of 2  
CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: \_\_\_\_\_

Phone #: 915-859-8150

LAB Order ID # 12050124

D&H Petroleum & Environmental Services

Cell #: \_\_\_\_\_

Address: (Street, City, Zip)

Fax #: \_\_\_\_\_  
E-mail: [vayala@dhpump.com](mailto:vayala@dhpump.com)

1221 Tower Trail Ln., El Paso, Texas 79907

Contact Person: \_\_\_\_\_

Victor Ayala

Invoice to (if different from above): \_\_\_\_\_

Dominguez Dairy #2, P.O. Box 21, Mesquite, NM 88048

Isaac Dominguez 575-649-7040

Project #:

Project Name:

Dominguez Dairy #2

Project Location (including state): \_\_\_\_\_

Sampler Signature: \_\_\_\_\_

Dominguez Dairy #2, 13600 Stern Drive, Mesquite, NM

LAB # (LAB USE ONLY)	Field Code	# Containers	Volume/Amount	MATRIX				PRESERVATIVE METHOD				SAMPLING			
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE	DATE	TIME
42-2		1	250 mL	X				X				X		5-1-12	11:49
42-2		2	250 mL	X				X				X		5-1-12	11:49
42-3		1	250 mL	X				X				X		5-1-12	7:19
42-3		2	250 mL	X				X				X		5-1-12	7:19
42-6		1	250 mL	X				X				X		5-1-12	9:57
42-6		2	250 mL	X				X				X		5-1-12	9:57
42-7		1		X				X				X			
42-7		2		X				X				X			
42-8		1	250 mL	X				X				X		5-1-12	16:38
42-8		2	250 mL	X				X				X		5-1-12	16:38
42-9		1	250 mL	X				X				X		5-1-12	8:46
42-9		2	250 mL	X				X				X		5-1-12	8:46
42-10		1	250 mL	X				X				X		5-1-12	13:50
42-10		2	250 mL	X				X				X		5-1-12	13:50
42-11		1	250 mL	X				X				X		5-1-12	14:06
42-11		2	250 mL	X				X				X		5-1-12	14:06

Relinquished By:	Date:	Time:	Received By:	Date:	Time:	Lab Use Only	Remarks:
Angel Mel R...	5-1-12	14:38	[Signature]	5-1-12	14:38	Intact <input checked="" type="checkbox"/> / N	PAH 8270 (Low Level Analysis) PAH 8270C TX 1005 Extended (C35) TPH 418.1 / TX1005 BTEX 8021B/602 MTBE 8021B/602
Victor Ayala	5-1-12	16:30	[Signature]	5-1-12	9:00	Headspace <input type="checkbox"/> / N Temp <input type="checkbox"/> / C Log-in Review <input type="checkbox"/> / L	Total Metals Ag As BA Cd Cr Pb Se Hg 6010B/200.7 Nitrates EPA 300 Total Kjeldahl Nitrogen SM 4500 NORG C Chloride EPA 300.0 Total Dissolved Solids SM 2540 C MOD

Remarks: [Handwritten notes and signatures]

Lab Use Only: Intact  / N  
Headspace  / N  
Temp  / C  
Log-in Review  / L

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Date: 5-1





6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298  
 200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944  
 5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313  
 (BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750  
 E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

George Segura  
 Big Sky Dairy  
 17800 Stern Drive  
 P.O. Box 10  
 Mesquite, NM, 88048

Report Date: May 16, 2012

Work Order: 12050326



DP: 833  
 Project Location: 17800 Stern Drive, Mesquite, NM 88048  
 Project Name: Big Sky Dairy

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
296336	833-4	water	2012-05-03	13:29	2012-05-03
296337	833-5	water	2012-05-03	11:49	2012-05-03
296338	833-6	water	2012-05-03	10:25	2012-05-03
296339	833-8	water	2012-05-03	11:12	2012-05-03

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 18 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

### Notes:

*For inorganic analyses, the term MQL should actually read PQL.*

*Michael Abel*

---

Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

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## Case Narrative

Samples for project Big Sky Dairy were received by TraceAnalysis, Inc. on 2012-05-03 and assigned to work order 12050326. Samples for work order 12050326 were received intact at a temperature of 4.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77184	2012-05-04 at 10:00	90977	2012-05-05 at 12:00
NO3 (IC)	E 300.0	77184	2012-05-04 at 10:00	90977	2012-05-05 at 12:00
TDS	SM 2540C	77268	2012-05-08 at 14:10	91075	2012-05-08 at 14:10
TKN	E 351.3	77407	2012-05-15 at 14:00	91242	2012-05-15 at 16:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12050326 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 296336 - 833-4**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>623</b>	<b>623</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296336 - 833-4**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>24.1</b>	<b>24.1</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296336 - 833-4**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91075 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2920</b>	<b>2920</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296336 - 833-4**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91242 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77407 Sample Preparation: 2012-05-15 Prepared By: AH

Report Date: May 16, 2012

Work Order: 12050326  
Big Sky Dairy

Page Number: 6 of 18  
17800 Stern Drive, Mesquite, NM 88048

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296337 - 833-5**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>1030</b>	<b>1030</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296337 - 833-5**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>12.8</b>	<b>12.8</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296337 - 833-5**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91075 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2790</b>	<b>2790</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296337 - 833-5**



Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91242 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77407 Sample Preparation: 2012-05-15 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296338 - 833-6**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>702</b>	<b>702</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296338 - 833-6**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>20.7</b>	<b>20.7</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296338 - 833-6**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91075 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

*continued . . .*

*sample 296338 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2560</b>	<b>2560</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296338 - 833-6**

Laboratory: Lubbock

Analysis: TKN

QC Batch: 91242

Prep Batch: 77407

Analytical Method: E 351.3

Date Analyzed: 2012-05-15

Sample Preparation: 2012-05-15

Prep Method: N/A

Analyzed By: AH

Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296339 - 833-8**

Laboratory: Lubbock

Analysis: Chloride (IC)

QC Batch: 90977

Prep Batch: 77184

Analytical Method: E 300.0

Date Analyzed: 2012-05-05

Sample Preparation: 2012-05-04

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>927</b>	<b>927</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296339 - 833-8**

Laboratory: Lubbock

Analysis: NO3 (IC)

QC Batch: 90977

Prep Batch: 77184

Analytical Method: E 300.0

Date Analyzed: 2012-05-05

Sample Preparation: 2012-05-04

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>61.4</b>	<b>61.4</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 296339 - 833-8**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91075 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>3040</b>	<b>3040</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296339 - 833-8**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91242 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77407 Sample Preparation: 2012-05-15 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 90977  
Prep Batch: 77184Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	0.428	mg/L	0.209

### Method Blank (1)

QC Batch: 90977  
Prep Batch: 77184Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	0.0797	mg/L	0.0228

### Method Blank (1)

QC Batch: 91075  
Prep Batch: 77268Date Analyzed: 2012-05-08  
QC Preparation: 2012-05-08Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

### Method Blank (1)

QC Batch: 91242  
Prep Batch: 77407Date Analyzed: 2012-05-15  
QC Preparation: 2012-05-15Analyzed By: AH  
Prepared By: AH

Report Date: May 16, 2012

Work Order: 12050326  
Big Sky Dairy

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17800 Stern Drive, Mesquite, NM 88048

---

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

---

**Duplicate (1)** Duplicated Sample: 296339

QC Batch: 91075  
Prep Batch: 77268

Date Analyzed: 2012-05-08  
QC Preparation: 2012-05-08

Analyzed By: MD  
Prepared By: MD

---

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	3290	3040	mg/L	1	8	10

---

# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 90977  
Prep Batch: 77184Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	25.8	mg/L	1	25.0	<0.209	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	25.9	mg/L	1	25.0	<0.209	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90977  
Prep Batch: 77184Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	5.05	mg/L	1	5.00	<0.0228	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	5.05	mg/L	1	5.00	<0.0228	101	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 91075  
Prep Batch: 77268Date Analyzed: 2012-05-08  
QC Preparation: 2012-05-08Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Dissolved Solids		1	942	mg/L	1	1000	<5.00	94	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.



Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	447	mg/L	100	417	16	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Nitrate-N		2	441	mg/L	100	417	16	102	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296345

QC Batch: 91242  
Prep Batch: 77407

Date Analyzed: 2012-05-15  
QC Preparation: 2012-05-15

Analyzed By: AH  
Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	182	mg/L	1	50.0	124	116	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Kjeldahl Nitrogen - N		2	179	mg/L	1	50.0	124	110	29.2 - 129	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.



## Calibration Standards

### Standard (CCV-1)

QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.7	103	90 - 110	2012-05-05

### Standard (CCV-1)

QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.01	100	90 - 110	2012-05-05

### Standard (CCV-2)

QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.0	104	90 - 110	2012-05-05

### Standard (CCV-2)

QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.02	100	90 - 110	2012-05-05

**Standard (ICV-1)**

QC Batch: 91242

Date Analyzed: 2012-05-15

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.62	92	85 - 115	2012-05-15

**Standard (CCV-1)**

QC Batch: 91242

Date Analyzed: 2012-05-15

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	5.24	105	85 - 115	2012-05-15

---

## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

---

# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.

6701 Aberdeen, Ste. 9  
Lubbock, TX 79424  
Tel (806) 794-1296  
Fax (806) 794-1298

# 10050324 TraceAnalysis, Inc.

Company Name:

D&H Petroleum & Environmental Services

Address: (Street, City, Zip)

1221 Tower Trail Ln., El Paso, Texas 79907

Contact Person:

Victor Ayala

Phone #: 915-859-8150

Cell #:

Fax #:

E-mail: [vayala@dhpump.com](mailto:vayala@dhpump.com)

155 McCutcheon, Ste. H El  
Paso, TX 79932  
Tel (915) 585-3443  
Fax (915) 585-4944

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

LAB Order ID # 17050326

Project #:

George Segura 575-233-3620

Project Name:

Big Sky Dairy

Sampler Signature: *Angel Nicho Favea*

Project Location (including state):

Big Sky Dairy, 17800 Stern Drive, Mesquite, NM

Invoice to (if different from above):

Big Sky Dairy, P.O. Box 10, Mesquite, NM 88048

Project #:

George Segura 575-233-3620

Project Name:

Big Sky Dairy

Sampler Signature: *Angel Nicho Favea*

Project Location (including state):

Big Sky Dairy, 17800 Stern Drive, Mesquite, NM

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Big Sky Dairy, P.O. Box 10, Mesquite, NM 88048

Project #:

George Segura 575-233-3620

Project Name:

Big Sky Dairy

Sampler Signature: *Angel Nicho Favea*

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George Segura 575-233-3620

Project Name:

Big Sky Dairy

Sampler Signature: *Angel Nicho Favea*

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Big Sky Dairy, 17800 Stern Drive, Mesquite, NM

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Big Sky Dairy, P.O. Box 10, Mesquite, NM 88048

Project #:

George Segura 575-233-3620

Project Name:

Big Sky Dairy

Sampler Signature: *Angel Nicho Favea*

Project Location (including state):

Big Sky Dairy, 17800 Stern Drive, Mesquite, NM

Invoice to (if different from above):

Big Sky Dairy, P.O. Box 10, Mesquite, NM 88048

LAB #	(LAB USE ONLY)	Field Code	# Containers	Volume/Amount	MATRIX	PRESERVATIVE METHOD					DATE	SAMPLING TIME	
833-1			1		WATER	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE		
833-1			2		SLUDGE								
833-2			1		AIR								
833-2			2		SOIL								
833-3			1		WATER								
833-3			2										
833-4			1	250mL								5-3-12	13:29
833-4			2	250mL								5-3-12	13:29
833-5			1	250mL								5-3-12	11:49
833-5			2	250mL								5-3-12	11:49
833-6			1	250mL								5-3-12	10:25
833-6			2	250mL								5-3-12	10:25
833-7			1										
833-7			2										
833-8			1	250mL								5-3-12	11:12
833-8			2	250mL								5-3-12	11:12

LAB Order ID #	17050326
----------------	----------

ANALYSIS REQUEST	PAH 8270C	PAH 8270 (Low Level Analysis)	Total Metals Ag As BA Cd Cr Pb Se Hg 6010B/200.7	Nitrates EPA 300	Total Kjeldahl Nitrogen SM 4500 NORG C	Chloride EPA 300.0	Total Dissolved Solids SM 2540 C MOD
MTBE 8021B/602							
BTEX 8021B/602							
TPH 418.1 / TX1005							
TX 1005 Extended (C35)							
Hold							
Turn Around Time							

Remarks:  
 IRA: 369 TDS done in EP-  
 SS: 46975873  
 Dry Weight Basis Required  
 TRRP Report Required

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Angel Nicho Favea	5-3-12	14:30	AM Adl	5/3/12	14:32
AM Adl	5/3/12	16:25	Angel Nicho Favea	5-4-12	8:20

Lab Use Only	Intact (Y/N)	Headspace Y/N	Temp Y/N	Log-in Review Y/N
(Y)	(Y)	(Y)	(Y)	(Y)



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298  
 200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944  
 5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313  
 (BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750  
 E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Fernie Franco  
 Buena Vista Dairy #2  
 16910 Stern Drive  
 P.O. Box 346  
 Mesquite, NM, 88048

Report Date: May 17, 2012

Work Order: 12050328



DP: 74  
 Project Location: 16910 Stern Drive, Mesquite, NM  
 Project Name: Buena Vista Dairy #2

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
296340	74-1	water	2012-05-03	08:13	2012-05-03
296341	74-2	water	2012-05-03	07:25	2012-05-03
296342	74-3	water	2012-05-03	06:56	2012-05-03
296343	74-4	water	2012-05-03	09:34	2012-05-03
296344	74-5	water	2012-05-03	08:59	2012-05-03
296345	74 Lagoon	water	2012-05-03	08:24	2012-05-03

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 25 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

**Notes:**

*For inorganic analyses, the term MQL should actually read PQL.*

*Michael Abel*

---

Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

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## Case Narrative

Samples for project Buena Vista Dairy #2 were received by TraceAnalysis, Inc. on 2012-05-03 and assigned to work order 12050328. Samples for work order 12050328 were received intact at a temperature of 4.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77184	2012-05-04 at 10:00	90977	2012-05-05 at 12:00
Chloride (IC)	E 300.0	77185	2012-05-04 at 10:00	90978	2012-05-05 at 12:00
NO3 (IC)	E 300.0	77184	2012-05-04 at 10:00	90977	2012-05-05 at 12:00
NO3 (IC)	E 300.0	77185	2012-05-04 at 10:00	90978	2012-05-05 at 12:00
TDS	SM 2540C	77268	2012-05-08 at 14:10	91075	2012-05-08 at 14:10
TDS	SM 2540C	77312	2012-05-09 at 16:00	91132	2012-05-11 at 14:48
TKN	E 351.3	77407	2012-05-15 at 14:00	91242	2012-05-15 at 16:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12050328 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 296340 - 74-1**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>778</b>	<b>778</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296340 - 74-1**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>65.3</b>	<b>65.3</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 296340 - 74-1**

Laboratory: Lubbock  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91132 Date Analyzed: 2012-05-11 Analyzed By: RL  
 Prep Batch: 77312 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		2	<b>3265</b>	<b>3265</b>	<5.000	mg/L	1	5.000	10	5

**Sample: 296340 - 74-1**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91242 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77407 Sample Preparation: 2012-05-15 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296341 - 74-2**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>495</b>	<b>495</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296341 - 74-2**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>16.4</b>	<b>16.4</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296341 - 74-2**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91075 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>1980</b>	<b>1980</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296341 - 74-2**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91242 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77407 Sample Preparation: 2012-05-15 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296342 - 74-3**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90978 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77185 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>1330</b>	<b>1330</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296342 - 74-3**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90978 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77185 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>9.92</b>	<b>9.92</b>	<0.342	mg/L	15	0.342	0.04	0.0228

**Sample: 296342 - 74-3**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91075 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

*continued . . .*

*sample 296342 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>3920</b>	<b>3920</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296342 - 74-3**

Laboratory: Lubbock  
 Analysis: TKN  
 QC Batch: 91242  
 Prep Batch: 77407

Analytical Method: E 351.3  
 Date Analyzed: 2012-05-15  
 Sample Preparation: 2012-05-15

Prep Method: N/A  
 Analyzed By: AH  
 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296343 - 74-4**

Laboratory: Lubbock  
 Analysis: Chloride (IC)  
 QC Batch: 90978  
 Prep Batch: 77185

Analytical Method: E 300.0  
 Date Analyzed: 2012-05-05  
 Sample Preparation: 2012-05-04

Prep Method: N/A  
 Analyzed By: RL  
 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>436</b>	<b>436</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296343 - 74-4**

Laboratory: Lubbock  
 Analysis: NO3 (IC)  
 QC Batch: 90978  
 Prep Batch: 77185

Analytical Method: E 300.0  
 Date Analyzed: 2012-05-05  
 Sample Preparation: 2012-05-04

Prep Method: N/A  
 Analyzed By: RL  
 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>33.6</b>	<b>33.6</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296343 - 74-4**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91075 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>1800</b>	<b>1800</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296343 - 74-4**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91242 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77407 Sample Preparation: 2012-05-15 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296344 - 74-5**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90978 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77185 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>421</b>	<b>421</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296344 - 74-5**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90978 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77185 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	18.0	18.0	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296344 - 74-5**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91075 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	1900	1900	<5.00	mg/L	1	5.00	5	5

**Sample: 296344 - 74-5**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91242 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77407 Sample Preparation: 2012-05-15 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	U	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296345 - 74 Lagoon**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90978 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77185 Sample Preparation: 2012-05-04 Prepared By: RL

*continued ...*



*sample 296345 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	417	417	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296345 - 74 Lagoon**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90978 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77185 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N	u	2	<0.114	<0.200	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296345 - 74 Lagoon**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91075 Date Analyzed: 2012-05-08 Analyzed By: MD  
 Prep Batch: 77268 Sample Preparation: 2012-05-08 Prepared By: MD

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	3270	3270	<5.00	mg/L	1	5.00	5	5

**Sample: 296345 - 74 Lagoon**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91242 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77407 Sample Preparation: 2012-05-15 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N		2	124	124	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 90977  
Prep Batch: 77184Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	0.428	mg/L	0.209

### Method Blank (1)

QC Batch: 90977  
Prep Batch: 77184Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	0.0797	mg/L	0.0228

### Method Blank (1)

QC Batch: 90978  
Prep Batch: 77185Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	0.312	mg/L	0.209

### Method Blank (1)

QC Batch: 90978  
Prep Batch: 77185Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

---

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	0.129	mg/L	0.0228

---

**Method Blank (1)**

QC Batch: 91075                      Date Analyzed: 2012-05-08                      Analyzed By: MD  
Prep Batch: 77268                      QC Preparation: 2012-05-08                      Prepared By: MD

---

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

---

**Method Blank (1)**

QC Batch: 91132                      Date Analyzed: 2012-05-11                      Analyzed By: RL  
Prep Batch: 77312                      QC Preparation: 2012-05-09                      Prepared By: RL

---

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		2	<5.000	mg/L	5

---

**Method Blank (1)**

QC Batch: 91242                      Date Analyzed: 2012-05-15                      Analyzed By: AH  
Prep Batch: 77407                      QC Preparation: 2012-05-15                      Prepared By: AH

---

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

---

**Duplicate (1)**    Duplicated Sample: 296339

QC Batch: 91075                      Date Analyzed: 2012-05-08                      Analyzed By: MD  
Prep Batch: 77268                      QC Preparation: 2012-05-08                      Prepared By: MD

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Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	3290	3040	mg/L	1	8	10

---

**Duplicate (1)** Duplicated Sample: 296685

QC Batch: 91132  
Prep Batch: 77312

Date Analyzed: 2012-05-11  
QC Preparation: 2012-05-09

Analyzed By: RL  
Prepared By: RL

---

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		2	2262	2240	mg/L	1	1	10

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# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 90977  
Prep Batch: 77184Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	25.8	mg/L	1	25.0	<0.209	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Chloride		2	25.9	mg/L	1	25.0	<0.209	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90977  
Prep Batch: 77184Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Nitrate-N		2	5.05	mg/L	1	5.00	<0.0228	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Nitrate-N		2	5.05	mg/L	1	5.00	<0.0228	101	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90978  
Prep Batch: 77185Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	25.8	mg/L	1	25.0	<0.209	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	26.5	mg/L	1	25.0	<0.209	106	90 - 110	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 90978  
Prep Batch: 77185

Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	5.10	mg/L	1	5.00	<0.0228	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	5.05	mg/L	1	5.00	<0.0228	101	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91075  
Prep Batch: 77268

Date Analyzed: 2012-05-08  
QC Preparation: 2012-05-08

Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit
			Result	Units					
Total Dissolved Solids		1	942	mg/L	1	1000	<5.00	94	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Dissolved Solids		1	903	mg/L	1	1000	<5.00	90	90 - 110	4	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91132  
Prep Batch: 77312

Date Analyzed: 2012-05-11  
QC Preparation: 2012-05-09

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Dissolved Solids		2	1000	mg/L	1	1000	<5.00	100	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Dissolved Solids		2	978	mg/L	1	1000	<5.00	98	90 - 110	2	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 91242  
Prep Batch: 77407

Date Analyzed: 2012-05-15  
QC Preparation: 2012-05-15

Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	50.4	mg/L	1	50.0	<1.72	101	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Kjeldahl Nitrogen - N		2	45.4	mg/L	1	50.0	<1.72	91	65.4 - 113	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296341

QC Batch: 90977  
Prep Batch: 77184

Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	2680	mg/L	100	2080	495	105	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Chloride		2	2710	mg/L	100	2080	495	106	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296341

QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
Prep Batch: 77184 QC Preparation: 2012-05-04 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	447	mg/L	100	417	16	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate-N		2	441	mg/L	100	417	16	102	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296345

QC Batch: 90978 Date Analyzed: 2012-05-05 Analyzed By: RL  
Prep Batch: 77185 QC Preparation: 2012-05-04 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	2520	mg/L	100	2080	417	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		2	2540	mg/L	100	2080	417	102	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296345

QC Batch: 90978 Date Analyzed: 2012-05-05 Analyzed By: RL  
Prep Batch: 77185 QC Preparation: 2012-05-04 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	416	mg/L	100	417	<2.28	100	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate-N		2	419	mg/L	100	417	<2.28	100	90 - 110	1	20



Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296345

QC Batch: 91242  
 Prep Batch: 77407

Date Analyzed: 2012-05-15  
 QC Preparation: 2012-05-15

Analyzed By: AH  
 Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	182	mg/L	1	50.0	124	116	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Kjeldahl Nitrogen - N		2	179	mg/L	1	50.0	124	110	29.2 - 129	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 90977

Date Analyzed: 2012-05-05

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.7	103	90 - 110	2012-05-05

### Standard (CCV-1)

QC Batch: 90977

Date Analyzed: 2012-05-05

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.01	100	90 - 110	2012-05-05

### Standard (CCV-2)

QC Batch: 90977

Date Analyzed: 2012-05-05

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.0	104	90 - 110	2012-05-05

### Standard (CCV-2)

QC Batch: 90977

Date Analyzed: 2012-05-05

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.02	100	90 - 110	2012-05-05

**Standard (CCV-1)**

QC Batch: 90978

Date Analyzed: 2012-05-05

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.0	104	90 - 110	2012-05-05

**Standard (CCV-1)**

QC Batch: 90978

Date Analyzed: 2012-05-05

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.02	100	90 - 110	2012-05-05

**Standard (CCV-2)**

QC Batch: 90978

Date Analyzed: 2012-05-05

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.9	104	90 - 110	2012-05-05

**Standard (CCV-2)**

QC Batch: 90978

Date Analyzed: 2012-05-05

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.09	102	90 - 110	2012-05-05

**Standard (ICV-1)**

QC Batch: 91242

Date Analyzed: 2012-05-15

Analyzed By: AH

Report Date: May 17, 2012

Work Order: 12050328  
Buena Vista Dairy #2

Page Number: 23 of 25  
16910 Stern Drive, Mesquite, NM

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Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.62	92	85 - 115	2012-05-15

---

**Standard (CCV-1)**

QC Batch: 91242

Date Analyzed: 2012-05-15

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	5.24	105	85 - 115	2012-05-15

---

---

## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

---

# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.

6701 Aberdeen, Ste. 9  
Lubbock, TX 79424  
Tel (806) 794-1296  
Fax (806) 794-1298

# TraceAnalysis, Inc.

155 McCutcheon, Ste. H  
Paso, TX 79932  
Tel (915) 585-3443  
Fax (915) 585-4944

Page 1 of 1  
CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: D&H Petroleum & Environmental Services

Phone #: 915-859-8150

Cell #:

Address: (Street, City, Zip)

1221 Tower Trail Ln., El Paso, Texas 79907

Fax #:

E-mail: vayala@dhpump.com

Contact Person: Victor Ayala

Invoice to (if different from above):

Buena Vista Dairy #2, P.O. Box 346, Mesquite, NM 88048

Project Name: Buena Vista Dairy #2

Sampler Signature: [Signature]

Project Location (including state): Buena Vista Dairy #2, 16910 Stern Drive, Mesquite, NM

Project #: 74-1

Volume/Amount: 250ml

# Containers: 1

Field Code: 74-1

Matrix: WATER

Preservative Method: H2SO4

Sampling Date: 5-3-12

Sampling Time: 8:13

Turn Around Time: Hold

Analysis Request: Total Metals Ag As BA Cd Cr Pb Se Hg 6010B/200.7

PAH 8270C

TX 1005 Extended (C35)

TPH 418.1 / TX1005

BTEX 8021B/602

MTBE 8021B/602

Chloride EPA 300.0

Total Kjeldahl Nitrogen SM 4500 NORG C

Nitrates EPA 300

Total Dissolved Solids SM 2540 C MOD

PAH 8270C

TX 1005 Extended (C35)

TPH 418.1 / TX1005

BTEX 8021B/602

MTBE 8021B/602

Chloride EPA 300.0

Total Kjeldahl Nitrogen SM 4500 NORG C

Nitrates EPA 300

Total Dissolved Solids SM 2540 C MOD

PAH 8270C

TX 1005 Extended (C35)

TPH 418.1 / TX1005

BTEX 8021B/602

MTBE 8021B/602

Chloride EPA 300.0

Total Kjeldahl Nitrogen SM 4500 NORG C

Relinquished By: Angel N. Rivera Date: 5-3-12 Time: 14:30  
Received By: [Signature] Date: 5/3/12 Time: 17:32  
Relinquished By: [Signature] Date: 5/3/12 Time: 16:25  
Received At Laboratory By: [Signature] Date: 5/3/12 Time: 17:32

Lab Use Only  
Intact Y/N  
Headspace Y/N  
Temp 4/43  
Log-in Review JA

Remarks:  
IR2: 3.54 TPs done in ESR -  
IR 1 LS: 40975870  
IR 1 LS: 40975870  
Dry Weight Basis Required  
TRRP Report Required

68-13



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298  
 200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944  
 5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313  
 (BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750  
 E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Bruce Bonestroo  
 River Valley Dairy, LLC  
 1400 La Chuga Rd., Mesquite  
 P.O. Box 1929  
 Anthony, NM, 88021

Report Date: May 17, 2012

Work Order: 12050237



DP: 167  
 Project Location: 1400 La Chuga Rd., Mesquite, NM  
 Project Name: River Valley Dairy, LLC

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
296133	167-01A	water	2012-05-02	10:26	2012-05-02
296134	167-03	water	2012-05-02	07:49	2012-05-02
296135	167-05	water	2012-05-02	14:13	2012-05-02
296136	167-06	water	2012-05-02	07:00	2012-05-02
296137	167-07	water	2012-05-02	09:58	2012-05-02
296138	167-08	water	2012-05-02	13:33	2012-05-02
296139	167-09	water	2012-05-02	11:39	2012-05-02
296140	167 Lagoon	water	2012-05-02	10:55	2012-05-02
296141	167-04	water	2012-05-02	08:55	2012-05-02

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 29 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

**Notes:**  
 For inorganic analyses, the term MQL should actually read PQL.



*Michael Abel*

---

Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

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## Case Narrative

Samples for project River Valley Dairy, LLC were received by TraceAnalysis, Inc. on 2012-05-02 and assigned to work order 12050237. Samples for work order 12050237 were received intact at a temperature of 1.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77183	2012-05-03 at 10:00	90975	2012-05-04 at 09:00
Chloride (IC)	E 300.0	77184	2012-05-04 at 10:00	90977	2012-05-05 at 12:00
NO3 (IC)	E 300.0	77183	2012-05-03 at 10:00	90975	2012-05-04 at 09:00
NO3 (IC)	E 300.0	77184	2012-05-04 at 10:00	90977	2012-05-05 at 12:00
TDS	SM 2540C	77435	2012-05-14 at 15:31	91276	2012-05-14 at 15:31
TKN	E 351.3	77389	2012-05-15 at 09:00	91224	2012-05-15 at 13:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12050237 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 296133 - 167-01A**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90975 Date Analyzed: 2012-05-04 Analyzed By: RL  
 Prep Batch: 77183 Sample Preparation: 2012-05-03 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>781</b>	<b>781</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296133 - 167-01A**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90975 Date Analyzed: 2012-05-04 Analyzed By: RL  
 Prep Batch: 77183 Sample Preparation: 2012-05-03 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>2.55</b>	<b>2.55</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296133 - 167-01A**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91276 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids	1	1	<b>3180</b>	<b>3180</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296133 - 167-01A**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91224 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77389 Sample Preparation: 2012-05-15 Prepared By: AH

Report Date: May 17, 2012

Work Order: 12050237  
River Valley Dairy, LLC

Page Number: 7 of 29  
1400 La Chuga Rd., Mesquite, NM

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>1.82</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296134 - 167-03**

Laboratory: Lubbock  
 Analysis: Chloride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 90975                              Date Analyzed: 2012-05-04                      Analyzed By: RL  
 Prep Batch: 77183                              Sample Preparation: 2012-05-03                      Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>499</b>	<b>499</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296134 - 167-03**

Laboratory: Lubbock  
 Analysis: NO3 (IC)                              Analytical Method: E 300.0                              Prep Method: N/A  
 QC Batch: 90975                              Date Analyzed: 2012-05-04                              Analyzed By: RL  
 Prep Batch: 77183                              Sample Preparation: 2012-05-03                              Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>17.5</b>	<b>17.5</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296134 - 167-03**

Laboratory: El Paso  
 Analysis: TDS                                      Analytical Method: SM 2540C                              Prep Method: N/A  
 QC Batch: 91276                              Date Analyzed: 2012-05-14                              Analyzed By: MD  
 Prep Batch: 77435                              Sample Preparation: 2012-05-14                              Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		2	<b>2220</b>	<b>2220</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296134 - 167-03**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91224 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77389 Sample Preparation: 2012-05-15 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296135 - 167-05**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90975 Date Analyzed: 2012-05-04 Analyzed By: RL  
 Prep Batch: 77183 Sample Preparation: 2012-05-03 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Chloride		2	<b>777</b>	<b>777</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296135 - 167-05**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90975 Date Analyzed: 2012-05-04 Analyzed By: RL  
 Prep Batch: 77183 Sample Preparation: 2012-05-03 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>3.50</b>	<b>3.50</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296135 - 167-05**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91276 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

*continued . . .*

*sample 296135 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids	<sup>3</sup>	<sub>1</sub>	<b>3180</b>	<b>3180</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296135 - 167-05**

Laboratory: Lubbock  
 Analysis: TKN  
 QC Batch: 91224  
 Prep Batch: 77389

Analytical Method: E 351.3  
 Date Analyzed: 2012-05-15  
 Sample Preparation: 2012-05-15

Prep Method: N/A  
 Analyzed By: AH  
 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	<sub>J</sub>	<sub>2</sub>	<b>2.24</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296136 - 167-06**

Laboratory: Lubbock  
 Analysis: Chloride (IC)  
 QC Batch: 90975  
 Prep Batch: 77183

Analytical Method: E 300.0  
 Date Analyzed: 2012-05-04  
 Sample Preparation: 2012-05-03

Prep Method: N/A  
 Analyzed By: RL  
 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		<sub>2</sub>	<b>688</b>	<b>688</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296136 - 167-06**

Laboratory: Lubbock  
 Analysis: NO3 (IC)  
 QC Batch: 90975  
 Prep Batch: 77183

Analytical Method: E 300.0  
 Date Analyzed: 2012-05-04  
 Sample Preparation: 2012-05-03

Prep Method: N/A  
 Analyzed By: RL  
 Prepared By: RL



Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>27.2</b>	<b>27.2</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296136 - 167-06**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91276 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids	4	1	<b>2480</b>	<b>2480</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296136 - 167-06**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91224 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77389 Sample Preparation: 2012-05-15 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296137 - 167-07**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90975 Date Analyzed: 2012-05-04 Analyzed By: RL  
 Prep Batch: 77183 Sample Preparation: 2012-05-03 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>367</b>	<b>367</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 296137 - 167-07**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90975 Date Analyzed: 2012-05-04 Analyzed By: RL  
 Prep Batch: 77183 Sample Preparation: 2012-05-03 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N	J	2	<b>0.0285</b>	<0.0400	<0.0228	mg/L	1	0.0228	0.04	0.0228

**Sample: 296137 - 167-07**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91276 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids	5	1	<b>1890</b>	<b>1890</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296137 - 167-07**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91224 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77389 Sample Preparation: 2012-05-15 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	U	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296138 - 167-08**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

*continued ...*

sample 296138 continued ...

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>744</b>	<b>744</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296138 - 167-08**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>0.399</b>	<b>0.399</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296138 - 167-08**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91276 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids	6	1	<b>2580</b>	<b>2580</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296138 - 167-08**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91224 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77389 Sample Preparation: 2012-05-15 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296139 - 167-09**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>1070</b>	<b>1070</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296139 - 167-09**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>14.5</b>	<b>14.5</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296139 - 167-09**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91276 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids	7	1	<b>4000</b>	<b>4000</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296139 - 167-09**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91224 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77389 Sample Preparation: 2012-05-15 Prepared By: AH

*continued ...*

sample 296139 continued ...

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296140 - 167 Lagoon**

Laboratory: Lubbock  
 Analysis: Chloride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 90977                                  Date Analyzed: 2012-05-05                      Analyzed By: RL  
 Prep Batch: 77184                                  Sample Preparation: 2012-05-04                      Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	458	458	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296140 - 167 Lagoon**

Laboratory: Lubbock  
 Analysis: NO3 (IC)                                  Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 90977                                  Date Analyzed: 2012-05-05                      Analyzed By: RL  
 Prep Batch: 77184                                  Sample Preparation: 2012-05-04                      Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N	u	2	<0.114	<0.200	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296140 - 167 Lagoon**

Laboratory: El Paso  
 Analysis: TDS    Analytical Method: SM 2540C                      Prep Method: N/A  
 QC Batch: 91276                                  Date Analyzed: 2012-05-14                      Analyzed By: MD  
 Prep Batch: 77435                                  Sample Preparation: 2012-05-14                      Prepared By: MD

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids	8	1	<b>2610</b>	<b>2610</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296140 - 167 Lagoon**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91224 Date Analyzed: 2012-05-15 Analyzed By: AH  
 Prep Batch: 77389 Sample Preparation: 2012-05-15 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>88.9</b>	<b>88.9</b>	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296141 - 167-04**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>1050</b>	<b>1050</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296141 - 167-04**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL  
 Prep Batch: 77184 Sample Preparation: 2012-05-04 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>18.6</b>	<b>18.6</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296141 - 167-04**

Laboratory: El Paso	Analytical Method: SM 2540C	Prep Method: N/A
Analysis: TDS	Date Analyzed: 2012-05-14	Analyzed By: MD
QC Batch: 91276	Sample Preparation: 2012-05-14	Prepared By: MD
Prep Batch: 77435		

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Dissolved Solids	9	1	<b>4020</b>	<b>4020</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296141 - 167-04**

Laboratory: Lubbock	Analytical Method: E 351.3	Prep Method: N/A
Analysis: TKN	Date Analyzed: 2012-05-15	Analyzed By: AH
QC Batch: 91224	Sample Preparation: 2012-05-15	Prepared By: AH
Prep Batch: 77389		

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>13.6</b>	<b>13.6</b>	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 90975  
Prep Batch: 77183Date Analyzed: 2012-05-04  
QC Preparation: 2012-05-03Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	0.523	mg/L	0.209

### Method Blank (1)

QC Batch: 90975  
Prep Batch: 77183Date Analyzed: 2012-05-04  
QC Preparation: 2012-05-03Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

### Method Blank (1)

QC Batch: 90977  
Prep Batch: 77184Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	0.428	mg/L	0.209

### Method Blank (1)

QC Batch: 90977  
Prep Batch: 77184Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL





# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 90975  
Prep Batch: 77183Date Analyzed: 2012-05-04  
QC Preparation: 2012-05-03Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	26.1	mg/L	1	25.0	<0.209	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Chloride		2	26.9	mg/L	1	25.0	<0.209	108	90 - 110	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90975  
Prep Batch: 77183Date Analyzed: 2012-05-04  
QC Preparation: 2012-05-03Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Nitrate-N		2	5.10	mg/L	1	5.00	<0.0228	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Nitrate-N		2	5.03	mg/L	1	5.00	<0.0228	101	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 90977  
Prep Batch: 77184Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	25.8	mg/L	1	25.0	<0.209	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.



Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Dissolved Solids		1	955	mg/L	1	1000	<5.00	96	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit
Total Dissolved Solids		1	915	mg/L	1	1000	<5.00	92	90 - 110	4

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296135

QC Batch: 90975  
Prep Batch: 77183

Date Analyzed: 2012-05-04  
QC Preparation: 2012-05-03

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	3010	mg/L	100	2080	777	107	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit
Chloride		2	3000	mg/L	100	2080	777	107	90 - 110	0

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296135

QC Batch: 90975  
Prep Batch: 77183

Date Analyzed: 2012-05-04  
QC Preparation: 2012-05-03

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	433	mg/L	100	417	3.71	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit
Nitrate-N		2	431	mg/L	100	417	3.71	102	90 - 110	0

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296341QC Batch: 90977  
Prep Batch: 77184Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	2680	mg/L	100	2080	495	105	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	2710	mg/L	100	2080	495	106	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296341QC Batch: 90977  
Prep Batch: 77184Date Analyzed: 2012-05-05  
QC Preparation: 2012-05-04Analyzed By: RL  
Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	447	mg/L	100	417	16	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	441	mg/L	100	417	16	102	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296141QC Batch: 91224  
Prep Batch: 77389Date Analyzed: 2012-05-15  
QC Preparation: 2012-05-15Analyzed By: AH  
Prepared By: AH

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	44.5	mg/L	1	50.0	13.6	62	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	52.1	mg/L	1	50.0	13.6	77	29.2 - 129	16	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 90975

Date Analyzed: 2012-05-04

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.1	104	90 - 110	2012-05-04

### Standard (CCV-1)

QC Batch: 90975

Date Analyzed: 2012-05-04

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.08	102	90 - 110	2012-05-04

### Standard (CCV-2)

QC Batch: 90975

Date Analyzed: 2012-05-04

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.0	104	90 - 110	2012-05-04

### Standard (CCV-2)

QC Batch: 90975

Date Analyzed: 2012-05-04

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.10	102	90 - 110	2012-05-04

**Standard (CCV-1)**

QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.7	103	90 - 110	2012-05-05

**Standard (CCV-1)**

QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.01	100	90 - 110	2012-05-05

**Standard (CCV-2)**

QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.0	104	90 - 110	2012-05-05

**Standard (CCV-2)**

QC Batch: 90977 Date Analyzed: 2012-05-05 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.02	100	90 - 110	2012-05-05

**Standard (ICV-1)**

QC Batch: 91224 Date Analyzed: 2012-05-15 Analyzed By: AH



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Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.90	98	85 - 115	2012-05-15

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**Standard (CCV-1)**

QC Batch: 91224

Date Analyzed: 2012-05-15

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.70	94	85 - 115	2012-05-15

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## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Result Comments

- 1 special comment: Sample ran out of hod time.
- 2 special comment: Sample ran out of hod time.
- 3 special comment: Sample ran out of hod time.
- 4 special comment: Sample ran out of hod time.
- 5 special comment: Sample ran out of hod time.
- 6 special comment: Sample ran out of hod time.
- 7 special comment: Sample ran out of hod time.

- 8 special comment: Sample ran out of hod time.
- 9 special comment: Sample ran out of hod time.

## **Attachments**

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.

6701 Aberdeen, Ste. 9  
 Lubbock, TX 79424  
 Tel (806) 794-1296  
 Fax (806) 794-1298

# TraceAnalysis, Inc.

Company Name: D&H Petroleum & Environmental Services  
 Address: (Street, City, Zip)  
 1221 Tower Trail Ln, El Paso TX 79907  
 Contact Person: Victor Ayala  
 Invoice to (if different from above):  
 River Valley Dairy, PO Box 1929, Anthony, NM 88021  
 Project #: 12050237

Phone #: 915-859-8150  
 Cell #:   
 Fax #:   
 E-mail: vajala@dhpump.com

155 McCutcheon, Ste. H El Paso, TX 79932  
 Tel (915) 585-3443  
 Fax (915) 585-4944

Project Name: Bruce Bonestroo 575-233-2061  
 River Valley Dairy, LLC  
 Sampler Signature: *[Signature]*

Project Location (including state):  
 River Valley Dairy, 1400 La Chuga Rd., Mesquite, NM

LAB #	(LAB USE ONLY)	Field Code	# Containers	Volume/Amount	MATRIX			PRESERVATIVE METHOD				SAMPLING		Turn Around Time	Hold		
					WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE			NONE	DATE
167-01			1	250 mL	X			X				X					
167-01			2	250 mL	X			X				X					
326-1	32-1	167-01A	1	250 mL	X			X				X					
↓-23		167-01A	2	250 mL	X			X				X					
167-02			1	250 mL	X			X				X					
167-02			2	250 mL	X			X				X					
34-1			1	250 mL	X			X				X					
↓-23		167-03	2	250 mL	X			X				X					
35-1		167-05	1	250 mL	X			X				X					
↓-23		167-05	2	250 mL	X			X				X					
36-1		167-06	1	250 mL	X			X				X					
↓-23		167-06	2	250 mL	X			X				X					
37-1		167-07	1	250 mL	X			X				X					
↓-23		167-07	2	250 mL	X			X				X					
38-1		167-08	1	250 mL	X			X				X					
↓-23		167-08	2	250 mL	X			X				X					

Relinquished By: \_\_\_\_\_ Date: 5-2-12 Time: 14:57  
 Received at Laboratory By: *[Signature]* Date: 5/2/12 Time: 14:57  
 Relinquished By: *[Signature]* Date: 5/3/12 Time: 8:2

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST  
 LAB Order ID # 12050237  
 Page 1 of 2

ANALYSIS REQUEST

TX 1005 Extended (C35)	
PAH 8270C	
PAH 8270 (Low Level Analysis)	
Total Metals Ag As BA Cd Cr Pb Se Hg 6010B/200.7	
Nitrates EPA 300	X
TKN SM 4500 NORG C	X
Chloride EPA 300	X
Total Dissolved Solids SM 2540 C MOD	X

Remarks: 1R2.3.3/13.2  
 85: 46975871  
 9587  
 Dry Weight Basis Required  
 TRRP Report Required

6701 Aberdeen, Ste. 9  
Lubbock, TX 79424  
Tel (806) 794-1296  
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# TraceAnalysis, Inc.

155 McCutcheon, Ste. H E1  
Paso, TX 79932  
Tel (915) 585-3443  
Fax (915) 585-4944

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 12050237

Company Name: D&H Petroleum & Environmental Services  
Phone #: 915-859-8150

Address: (Street, City, Zip)  
1221 Tower Trail Ln, El Paso TX 79907  
Cell #: \_\_\_\_\_

Contact Person: Victor Ayala  
E-mail: vaijala@dhpump.com

Project #: \_\_\_\_\_  
Project Name: Bruce Bonestroo 575-233-2061  
River Valley Dairy, LLC

Project Location (including state):  
River Valley Dairy, 1400 La Chuga Rd., Mesquite, NM  
Sampler Signature: *[Signature]*

LAB # (LAB USE ONLY)	Field Code	# Containers	Volume/Amount	MATRIX			PRESERVATIVE METHOD					SAMPLING		TIME	Turn Around Time	Hold	
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE				DATE
296-157-167-09		1	250mL	X				X	X	X	X	X	5-2-12	11:39			
↓-2.3 167-09		2	250mL	X				X	X	X	X	X	5-2-12	11:39			
40-1 167 Lagoon		1	250mL	X				X	X	X	X	X	5-2-12	10:55			
↓-2.3 167 Lagoon		2	250mL	X				X	X	X	X	X	5-2-12	10:55			
41-1 167-04		1	250mL	X				X	X	X	X	X	5-2-12	8:55			
↓-2.3 167-04		2	250mL	X				X	X	X	X	X	5-2-12	8:55			

### ANALYSIS REQUEST

MTBE 8021B/602	
BTEX 8021B/602	
TPH 418.1 / TX1005	
TX 1005 Extended (C35)	
PAH 8270C	
PAH 8270 (Low Level Analysis)	
Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	
Nitrates EPA 300	X
TKN SM 4500 NORG C	X
Chloride EPA 300	X
Total Dissolved Solids SM 2540 C MOD	X

Relinquished By: *[Signature]* Date: 5-2-12 Time: 14:57

Received By: *[Signature]* Date: 5/2/12 Time: 14:57

Relinquished By: *[Signature]* Date: 5-2-12 Time: 14:57

Received at Laboratory By: *[Signature]* Date: 5.3.12 Time: 8:20

Lab Use Only  
Intact  N  
Headspace  Y  N  
Temp 11 °C  
Log-in Review  No

Remarks: 102-33/24 DS w/ EP  
LS: 40975811  
[Signature]  
Dry Weight Basis Required  
TRRP Report Required



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298  
 200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944  
 5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313  
 (BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750  
 E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Jerry Settles  
 Del Oro Dairy, LLC.  
 1025 East O'Hara  
 P.O. Box 1846  
 Anthony, NM, 88021

Report Date: May 18, 2012

Work Order: 12050849



DP: 692  
 Project Location: 1025 East OHara, Anthony, NM  
 Project Name: Del Oro Dairy

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
296716	692-01	water	2012-05-08	12:01	2012-05-08
296717	692-02	water	2012-05-08	11:11	2012-05-08
296718	692-04	water	2012-05-08	10:34	2012-05-08
296719	692-06	water	2012-05-08	08:19	2012-05-08
296720	692-07	water	2012-05-08	09:07	2012-05-08
296721	692-08	water	2012-05-08	09:55	2012-05-08

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 20 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

**Notes:**

*For inorganic analyses, the term MQL should actually read PQL.*

*Michael Abel*

---

Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager



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## Case Narrative

Samples for project Del Oro Dairy were received by TraceAnalysis, Inc. on 2012-05-08 and assigned to work order 12050849. Samples for work order 12050849 were received intact at a temperature of 3.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77264	2012-05-09 at 11:00	91070	2012-05-10 at 11:51
NO3 (IC)	E 300.0	77264	2012-05-09 at 11:00	91070	2012-05-10 at 11:51
TDS	SM 2540C	77435	2012-05-14 at 15:31	91277	2012-05-14 at 15:31
TKN	E 351.3	77491	2012-05-18 at 11:00	91339	2012-05-18 at 13:29

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12050849 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 296716 - 692-01**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77264 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>1060</b>	<b>1060</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296716 - 692-01**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77264 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>163</b>	<b>163</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 296716 - 692-01**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91277 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>4820</b>	<b>4820</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296716 - 692-01**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91339 Date Analyzed: 2012-05-18 Analyzed By: AH  
 Prep Batch: 77491 Sample Preparation: 2012-05-18 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296717 - 692-02**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77264 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>339</b>	<b>339</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 296717 - 692-02**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77264 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>1.75</b>	<b>1.75</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296717 - 692-02**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91277 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>1350</b>	<b>1350</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296717 - 692-02**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91339 Date Analyzed: 2012-05-18 Analyzed By: AH  
 Prep Batch: 77491 Sample Preparation: 2012-05-18 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296718 - 692-04**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77264 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>652</b>	<b>652</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296718 - 692-04**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77264 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>39.6</b>	<b>39.6</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296718 - 692-04**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91277 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

*continued . . .*

*sample 296718 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2490</b>	<b>2490</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296718 - 692-04**

Laboratory: Lubbock

Analysis: TKN

QC Batch: 91339

Prep Batch: 77491

Analytical Method: E 351.3

Date Analyzed: 2012-05-18

Sample Preparation: 2012-05-18

Prep Method: N/A

Analyzed By: AH

Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296719 - 692-06**

Laboratory: Lubbock

Analysis: Chloride (IC)

QC Batch: 91070

Prep Batch: 77264

Analytical Method: E 300.0

Date Analyzed: 2012-05-10

Sample Preparation: 2012-05-09

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>397</b>	<b>397</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 296719 - 692-06**

Laboratory: Lubbock

Analysis: NO3 (IC)

QC Batch: 91070

Prep Batch: 77264

Analytical Method: E 300.0

Date Analyzed: 2012-05-10

Sample Preparation: 2012-05-09

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>2.62</b>	<b>2.62</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296719 - 692-06**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91277 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>1620</b>	<b>1620</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296719 - 692-06**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91339 Date Analyzed: 2012-05-18 Analyzed By: AH  
 Prep Batch: 77491 Sample Preparation: 2012-05-18 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296720 - 692-07**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77264 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>530</b>	<b>530</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 296720 - 692-07**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77264 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>3.55</b>	<b>3.55</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296720 - 692-07**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91277 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>1780</b>	<b>1780</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296720 - 692-07**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91339 Date Analyzed: 2012-05-18 Analyzed By: AH  
 Prep Batch: 77491 Sample Preparation: 2012-05-18 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	U	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296721 - 692-08**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77264 Sample Preparation: 2012-05-09 Prepared By: RL

*continued ...*



*sample 296721 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>364</b>	<b>364</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 296721 - 692-08**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77264 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>1.84</b>	<b>1.84</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296721 - 692-08**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91277 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>1560</b>	<b>1560</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296721 - 692-08**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91339 Date Analyzed: 2012-05-18 Analyzed By: AH  
 Prep Batch: 77491 Sample Preparation: 2012-05-18 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 91070  
Prep Batch: 77264Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

### Method Blank (1)

QC Batch: 91070  
Prep Batch: 77264Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

### Method Blank (1)

QC Batch: 91277  
Prep Batch: 77435Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

### Method Blank (1)

QC Batch: 91339  
Prep Batch: 77491Date Analyzed: 2012-05-18  
QC Preparation: 2012-05-18Analyzed By: AH  
Prepared By: AH

Report Date: May 18, 2012

Work Order: 12050849  
Del Oro Dairy

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1025 East OHara, Anthony, NM

---

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

---

**Duplicate (1)** Duplicated Sample: 296721

QC Batch: 91277

Date Analyzed: 2012-05-14

Analyzed By: MD

Prep Batch: 77435

QC Preparation: 2012-05-14

Prepared By: MD

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	1500	1560	mg/L	1	4	10

---

# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 91070  
Prep Batch: 77264Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	26.4	mg/L	1	25.0	<0.209	106	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Chloride		2	26.3	mg/L	1	25.0	<0.209	105	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 91070  
Prep Batch: 77264Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Nitrate-N		2	5.11	mg/L	1	5.00	<0.0228	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Nitrate-N		2	5.15	mg/L	1	5.00	<0.0228	103	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 91277  
Prep Batch: 77435Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Total Dissolved Solids		1	1030	mg/L	1	1000	<5.00	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.



Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	216	mg/L	50	208	<1.14	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Nitrate-N		2	213	mg/L	50	208	<1.14	102	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296721

QC Batch: 91339  
Prep Batch: 77491

Date Analyzed: 2012-05-18  
QC Preparation: 2012-05-18

Analyzed By: AH  
Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	40.9	mg/L	1	50.0	<1.72	82	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Kjeldahl Nitrogen - N		2	42.7	mg/L	1	50.0	<1.72	85	29.2 - 129	4	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.5	106	90 - 110	2012-05-10

### Standard (CCV-1)

QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.19	104	90 - 110	2012-05-10

### Standard (CCV-2)

QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.6	102	90 - 110	2012-05-10

### Standard (CCV-2)

QC Batch: 91070 Date Analyzed: 2012-05-10 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.01	100	90 - 110	2012-05-10

**Standard (ICV-1)**

QC Batch: 91339

Date Analyzed: 2012-05-18

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.62	92	85 - 115	2012-05-18

**Standard (CCV-1)**

QC Batch: 91339

Date Analyzed: 2012-05-18

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	5.24	105	85 - 115	2012-05-18



---

## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

---

# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.

12050849

6701 Aberdeen, Ste. 9  
 Lubbock, TX 79424  
 Tel (806) 794-1296  
 Fax (806) 794-1298

# TraceAnalysis, Inc.

Company Name: 12050849 Phone #: 915-859-8150  
 D&H Petroleum & Environmental Services Cell #: 915-859-8150  
 Address: (Street, City, Zip) vajala@dhpump.com  
 1221 Tower Trail Ln, El Paso TX 79907

Contact Person: vajala@dhpump.com  
 Victor Ayala  
 Invoice to (if different from above):  
 Del Oro Dairy, PO Box 1846, Anthony, TX 88021 Jerry Settles 575-882-4331

Project #: Del Oro Dairy  
 Project Name: Del Oro Dairy  
 Project Location (including state): Del Oro Dairy, 1025 East O'Hara, Anthony, NM  
 Sampler Signature: [Signature]

LAB #	Field Code	# Containers	Volume/Amount	MATRIX				PRESERVATIVE METHOD				Sampling		Turn Around Time			
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE		DATE	TIME	
2296716-1	692-01	1	250ml	X				X									
↓-2,3	692-01	2	250ml	X				X									
12-1	692-02	1	250ml	X				X									
↓-2,3	692-02	2	250ml	X				X									
18-1	692-04	1	250ml	X				X									
↓-2,3	692-04	2	250ml	X				X									
19-1	692-06	1	250ml	X				X									
↓-2,3	692-06	2	250ml	X				X									
20-1	692-07	1	250ml	X				X									
↓-2,3	692-07	2	250ml	X				X									
21-1	692-08	1	250ml	X				X									
↓-2,3	692-08	2	250ml	X				X									

Relinquished By: Chal N. Rivera Date: 5-8-12 Time: 14:18  
 Relinquished By: [Signature] Date: 5/8/12 Time: 16:30  
 Received By: [Signature] Date: 5/8/12 Time: 14:18  
 Received at Laboratory By: [Signature] Date: 5/8/12 Time: 14:18  
 Lab Use Only: Y N  
 Intact Y N  
 Headspace Y N  
 Temp 3/3 C  
 Log-in Review inc.  
 Remarks: TDS = EP  
SS: 47796980  
6x122  
6x122  
 Dry Weight Basis Required  
 TRRP Report Required

ANALYSIS REQUEST

MTBE 8021B/602	
BTEX 8021B/602	
TPH 418.1 / TX1005	
TX 1005 Extended (C35)	
PAH 8270C	
PAH 8270 (Low Level Analysis)	
Total Metals Ag As BA Cd Cr Pb Se Hg 6010B/200.7	
Nitrates EPA 300	X
TKN SM 4500 NORG C	X
Chloride EPA 300	X
Total Dissolved Solids SM 2540 C MOD	X



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298  
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 E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Jerry Settles  
 Del Oro Dairy, LLC.  
 1025 East O'Hara  
 P.O. Box 1846  
 Anthony, NM, 88021

Report Date: May 18, 2012

Work Order: 12050725



DP: 692  
 Project Location: 1025 East OHara, Anthony, NM  
 Project Name: Del Oro Dairy

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
296530	692-05	water	2012-05-07	14:06	2012-05-07
296531	692-09	water	2012-05-07	13:16	2012-05-07
296532	692 Lagoon	water	2012-05-07	14:28	2012-05-07

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 16 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

**Notes:**

*For inorganic analyses, the term MQL should actually read PQL.*

Dr. Blair Leftwich, Director  
 Dr. Michael Abel, Project Manager

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## Case Narrative

Samples for project Del Oro Dairy were received by TraceAnalysis, Inc. on 2012-05-07 and assigned to work order 12050725. Samples for work order 12050725 were received intact at a temperature of 0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77263	2012-05-09 at 11:00	91069	2012-05-10 at 11:49
NO3 (IC)	E 300.0	77263	2012-05-09 at 11:00	91069	2012-05-10 at 11:49
TDS	SM 2540C	77349	2012-05-11 at 15:05	91175	2012-05-11 at 15:05
TKN	E 351.3	77493	2012-05-18 at 11:00	91340	2012-05-18 at 14:06

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12050725 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 296530 - 692-05**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91069 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77263 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>420</b>	<b>420</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 296530 - 692-05**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91069 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77263 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>1.92</b>	<b>1.92</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296530 - 692-05**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91175 Date Analyzed: 2012-05-11 Analyzed By: MD  
 Prep Batch: 77349 Sample Preparation: 2012-05-11 Prepared By: JG

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>1570</b>	<b>1570</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296530 - 692-05**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91340 Date Analyzed: 2012-05-18 Analyzed By: AH  
 Prep Batch: 77493 Sample Preparation: 2012-05-18 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>3.08</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296531 - 692-09**

Laboratory: Lubbock  
 Analysis: Chloride (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 91069      Date Analyzed: 2012-05-10      Analyzed By: RL  
 Prep Batch: 77263      Sample Preparation: 2012-05-09      Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>391</b>	<b>391</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 296531 - 692-09**

Laboratory: Lubbock  
 Analysis: NO3 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 91069      Date Analyzed: 2012-05-10      Analyzed By: RL  
 Prep Batch: 77263      Sample Preparation: 2012-05-09      Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>7.80</b>	<b>7.80</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296531 - 692-09**

Laboratory: El Paso  
 Analysis: TDS      Analytical Method: SM 2540C      Prep Method: N/A  
 QC Batch: 91175      Date Analyzed: 2012-05-11      Analyzed By: MD  
 Prep Batch: 77349      Sample Preparation: 2012-05-11      Prepared By: JG

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>1470</b>	<b>1470</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296531 - 692-09**



Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91340 Date Analyzed: 2012-05-18 Analyzed By: AH  
 Prep Batch: 77493 Sample Preparation: 2012-05-18 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296532 - 692 Lagoon**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91069 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77263 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Chloride		2	<b>2780</b>	<b>2780</b>	<104	mg/L	500	104	2.5	0.209

**Sample: 296532 - 692 Lagoon**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91069 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77263 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>0.814</b>	<b>0.814</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296532 - 692 Lagoon**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91175 Date Analyzed: 2012-05-11 Analyzed By: MD  
 Prep Batch: 77349 Sample Preparation: 2012-05-11 Prepared By: JG

*continued . . .*

sample 296532 continued ...

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>24000</b>	<b>24000</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296532 - 692 Lagoon**

Laboratory: Lubbock  
Analysis: TKN  
QC Batch: 91340  
Prep Batch: 77493

Analytical Method: E 351.3  
Date Analyzed: 2012-05-18  
Sample Preparation: 2012-05-18

Prep Method: N/A  
Analyzed By: AH  
Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>872</b>	<b>872</b>	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 91069  
Prep Batch: 77263Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

### Method Blank (1)

QC Batch: 91069  
Prep Batch: 77263Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

### Method Blank (1)

QC Batch: 91175  
Prep Batch: 77349Date Analyzed: 2012-05-11  
QC Preparation: 2012-05-11Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

### Method Blank (1)

QC Batch: 91340  
Prep Batch: 77493Date Analyzed: 2012-05-18  
QC Preparation: 2012-05-18Analyzed By: AH  
Prepared By: AH

Report Date: May 18, 2012

Work Order: 12050725  
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1025 East OHara, Anthony, NM

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Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

---

**Duplicate (1)** Duplicated Sample: 296912

QC Batch: 91175

Date Analyzed: 2012-05-11

Analyzed By: MD

Prep Batch: 77349

QC Preparation: 2012-05-11

Prepared By: MD

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	21800	21900	mg/L	1	0	10

---

# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 91069  
Prep Batch: 77263Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	26.0	mg/L	1	25.0	<0.209	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Chloride		2	26.1	mg/L	1	25.0	<0.209	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 91069  
Prep Batch: 77263Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Nitrate-N		2	5.08	mg/L	1	5.00	<0.0228	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Nitrate-N		2	5.08	mg/L	1	5.00	<0.0228	102	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 91175  
Prep Batch: 77349Date Analyzed: 2012-05-11  
QC Preparation: 2012-05-11Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Total Dissolved Solids		1	972	mg/L	1	1000	<5.00	97	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110	4	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

### Laboratory Control Spike (LCS-1)

QC Batch: 91340  
Prep Batch: 77493

Date Analyzed: 2012-05-18  
QC Preparation: 2012-05-18

Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	45.1	mg/L	1	50.0	<1.72	90	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	46.2	mg/L	1	50.0	<1.72	92	65.4 - 113	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

### Matrix Spike (MS-1) Spiked Sample: 296692

QC Batch: 91069  
Prep Batch: 77263

Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	3260	mg/L	100	2080	1090	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	3240	mg/L	100	2080	1090	103	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

### Matrix Spike (MS-1) Spiked Sample: 296692

QC Batch: 91069  
Prep Batch: 77263

Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	441	mg/L	100	417	21.6	100	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate-N		2	436	mg/L	100	417	21.6	99	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296678

QC Batch: 91340  
Prep Batch: 77493

Date Analyzed: 2012-05-18  
QC Preparation: 2012-05-18

Analyzed By: AH  
Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	169	mg/L	1	50.0	112	114	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Kjeldahl Nitrogen - N		2	168	mg/L	1	50.0	112	112	29.2 - 129	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 91069

Date Analyzed: 2012-05-10

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.4	102	90 - 110	2012-05-10

### Standard (CCV-1)

QC Batch: 91069

Date Analyzed: 2012-05-10

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	4.98	100	90 - 110	2012-05-10

### Standard (CCV-2)

QC Batch: 91069

Date Analyzed: 2012-05-10

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.5	106	90 - 110	2012-05-10

### Standard (CCV-2)

QC Batch: 91069

Date Analyzed: 2012-05-10

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.19	104	90 - 110	2012-05-10





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## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

---

# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.







6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298  
200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944  
5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313  
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750  
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

George Segura  
Big Sky Dairy  
17800 Stern Drive  
P.O. Box 10  
Mesquite, NM, 88048

Report Date: May 18, 2012

Work Order: 12050726



DP: 833  
Project Location: 17800 Stern Drive, Mesquite, NM 88048  
Project Name: Big Sky Dairy

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
296533	833-2	water	2012-05-07	10:56	2012-05-07
296534	833-7	water	2012-05-07	07:52	2012-05-07
296535	833-9	water	2012-05-07	08:49	2012-05-07
296536	833-10	water	2012-05-07	09:42	2012-05-07
296537	833 Lagoon	water	2012-05-07	08:12	2012-05-07

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 19 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

### Notes:

*For inorganic analyses, the term MQL should actually read PQL.*

*Blair Leftwich*

---

Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

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## Case Narrative

Samples for project Big Sky Dairy were received by TraceAnalysis, Inc. on 2012-05-07 and assigned to work order 12050726. Samples for work order 12050726 were received intact at a temperature of 0.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77263	2012-05-09 at 11:00	91069	2012-05-10 at 11:49
NO3 (IC)	E 300.0	77263	2012-05-09 at 11:00	91069	2012-05-10 at 11:49
TDS	SM 2540C	77435	2012-05-14 at 15:31	91276	2012-05-14 at 15:31
TDS	SM 2540C	77435	2012-05-14 at 15:31	91277	2012-05-14 at 15:31
TKN	E 351.3	77493	2012-05-18 at 11:00	91340	2012-05-18 at 14:06

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12050726 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 296533 - 833-2**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91069 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77263 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>635</b>	<b>635</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296533 - 833-2**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91069 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77263 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>43.3</b>	<b>43.3</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 296533 - 833-2**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91276 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2420</b>	<b>2420</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296533 - 833-2**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91340 Date Analyzed: 2012-05-18 Analyzed By: AH  
 Prep Batch: 77493 Sample Preparation: 2012-05-18 Prepared By: AH

Report Date: May 18, 2012

Work Order: 12050726  
Big Sky Dairy

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17800 Stern Drive, Mesquite, NM 88048

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>65.1</b>	<b>65.1</b>	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296534 - 833-7**

Laboratory: Lubbock  
 Analysis: Chloride (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 91069      Date Analyzed: 2012-05-10      Analyzed By: RL  
 Prep Batch: 77263      Sample Preparation: 2012-05-09      Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Chloride		2	<b>1460</b>	<b>1460</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296534 - 833-7**

Laboratory: Lubbock  
 Analysis: NO3 (IC)      Analytical Method: E 300.0      Prep Method: N/A  
 QC Batch: 91069      Date Analyzed: 2012-05-10      Analyzed By: RL  
 Prep Batch: 77263      Sample Preparation: 2012-05-09      Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>95.6</b>	<b>95.6</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 296534 - 833-7**

Laboratory: El Paso  
 Analysis: TDS      Analytical Method: SM 2540C      Prep Method: N/A  
 QC Batch: 91277      Date Analyzed: 2012-05-14      Analyzed By: MD  
 Prep Batch: 77435      Sample Preparation: 2012-05-14      Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>4880</b>	<b>4880</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296534 - 833-7**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91340 Date Analyzed: 2012-05-18 Analyzed By: AH  
 Prep Batch: 77493 Sample Preparation: 2012-05-18 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>7.56</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296535 - 833-9**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91069 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77263 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>745</b>	<b>745</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296535 - 833-9**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91069 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77263 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>80.4</b>	<b>80.4</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 296535 - 833-9**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91277 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

*continued . . .*

*sample 296535 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>3830</b>	<b>3830</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296535 - 833-9**

Laboratory: Lubbock

Analysis: TKN

QC Batch: 91340

Prep Batch: 77493

Analytical Method: E 351.3

Date Analyzed: 2012-05-18

Sample Preparation: 2012-05-18

Prep Method: N/A

Analyzed By: AH

Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296536 - 833-10**

Laboratory: Lubbock

Analysis: Chloride (IC)

QC Batch: 91069

Prep Batch: 77263

Analytical Method: E 300.0

Date Analyzed: 2012-05-10

Sample Preparation: 2012-05-09

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>581</b>	<b>581</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296536 - 833-10**

Laboratory: Lubbock

Analysis: NO3 (IC)

QC Batch: 91069

Prep Batch: 77263

Analytical Method: E 300.0

Date Analyzed: 2012-05-10

Sample Preparation: 2012-05-09

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>3.95</b>	<b>3.95</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296536 - 833-10**

Laboratory: El Paso

Analysis: TDS

QC Batch: 91277

Prep Batch: 77435

Analytical Method: SM 2540C

Date Analyzed: 2012-05-14

Sample Preparation: 2012-05-14

Prep Method: N/A

Analyzed By: MD

Prepared By: MD

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2350</b>	<b>2350</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296536 - 833-10**

Laboratory: Lubbock

Analysis: TKN

QC Batch: 91340

Prep Batch: 77493

Analytical Method: E 351.3

Date Analyzed: 2012-05-18

Sample Preparation: 2012-05-18

Prep Method: N/A

Analyzed By: AH

Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296537 - 833 Lagoon**

Laboratory: Lubbock

Analysis: Chloride (IC)

QC Batch: 91069

Prep Batch: 77263

Analytical Method: E 300.0

Date Analyzed: 2012-05-10

Sample Preparation: 2012-05-09

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>565</b>	<b>565</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296537 - 833 Lagoon**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91069 Date Analyzed: 2012-05-10 Analyzed By: RL  
 Prep Batch: 77263 Sample Preparation: 2012-05-09 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N	J	2	<b>0.142</b>	<0.200	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296537 - 833 Lagoon**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91277 Date Analyzed: 2012-05-14 Analyzed By: MD  
 Prep Batch: 77435 Sample Preparation: 2012-05-14 Prepared By: MD

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>4400</b>	<b>4400</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296537 - 833 Lagoon**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91340 Date Analyzed: 2012-05-18 Analyzed By: AH  
 Prep Batch: 77493 Sample Preparation: 2012-05-18 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N		2	<b>484</b>	<b>484</b>	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 91069  
Prep Batch: 77263Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

### Method Blank (1)

QC Batch: 91069  
Prep Batch: 77263Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

### Method Blank (1)

QC Batch: 91276  
Prep Batch: 77435Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14Analyzed By: MD  
Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

### Method Blank (1)

QC Batch: 91277  
Prep Batch: 77435Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14Analyzed By: MD  
Prepared By: MD





# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 91069  
Prep Batch: 77263Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	26.0	mg/L	1	25.0	<0.209	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Chloride		2	26.1	mg/L	1	25.0	<0.209	104	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 91069  
Prep Batch: 77263Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Nitrate-N		2	5.08	mg/L	1	5.00	<0.0228	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Nitrate-N		2	5.08	mg/L	1	5.00	<0.0228	102	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 91276  
Prep Batch: 77435Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Total Dissolved Solids		1	955	mg/L	1	1000	<5.00	96	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Dissolved Solids		1	915	mg/L	1	1000	<5.00	92	90 - 110	4	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91277  
Prep Batch: 77435

Date Analyzed: 2012-05-14  
QC Preparation: 2012-05-14

Analyzed By: MD  
Prepared By: MD

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Dissolved Solids		1	1030	mg/L	1	1000	<5.00	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110	2	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91340  
Prep Batch: 77493

Date Analyzed: 2012-05-18  
QC Preparation: 2012-05-18

Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	45.1	mg/L	1	50.0	<1.72	90	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	46.2	mg/L	1	50.0	<1.72	92	65.4 - 113	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Matrix Spike (MS-1) Spiked Sample: 296692

QC Batch: 91069  
Prep Batch: 77263

Date Analyzed: 2012-05-10  
QC Preparation: 2012-05-09

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	3260	mg/L	100	2080	1090	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	3240	mg/L	100	2080	1090	103	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296692

QC Batch: 91069 Date Analyzed: 2012-05-10 Analyzed By: RL  
Prep Batch: 77263 QC Preparation: 2012-05-09 Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	441	mg/L	100	417	21.6	100	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	436	mg/L	100	417	21.6	99	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296678

QC Batch: 91340 Date Analyzed: 2012-05-18 Analyzed By: AH  
Prep Batch: 77493 QC Preparation: 2012-05-18 Prepared By: AH

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	169	mg/L	1	50.0	112	114	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	168	mg/L	1	50.0	112	112	29.2 - 129	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 91069

Date Analyzed: 2012-05-10

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.4	102	90 - 110	2012-05-10

### Standard (CCV-1)

QC Batch: 91069

Date Analyzed: 2012-05-10

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	4.98	100	90 - 110	2012-05-10

### Standard (CCV-2)

QC Batch: 91069

Date Analyzed: 2012-05-10

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.5	106	90 - 110	2012-05-10

### Standard (CCV-2)

QC Batch: 91069

Date Analyzed: 2012-05-10

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.19	104	90 - 110	2012-05-10

**Standard (ICV-1)**

QC Batch: 91340                                      Date Analyzed: 2012-05-18                                      Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.51	90	85 - 115	2012-05-18

**Standard (CCV-1)**

QC Batch: 91340                                      Date Analyzed: 2012-05-18                                      Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.96	99	85 - 115	2012-05-18

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## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

---

# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.







6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298  
 200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944  
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 (BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750  
 E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Linda Armstrong  
 Dona Ana Dairies

Report Date: May 23, 2012

P.O. Box 10  
 Mesquite, NM, 88048

Work Order: 12051038



Project Location: Various Dairies, Dona Ana County, NM  
 Project Name: Dona Ana Dairies Consortium  
 Project #: DAD

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
297049	DAD-09	water	2012-05-10	07:10	2012-05-10
297050	DAD-10	water	2012-05-10	08:15	2012-05-10
297051	DAD-13	water	2012-05-10	13:35	2012-05-10
297052	DAD-17	water	2012-05-10	11:56	2012-05-10
297053	DAD-18	water	2012-05-10	11:21	2012-05-10
297054	DAD-19	water	2012-05-10	10:38	2012-05-10
297055	DAD-21	water	2012-05-10	09:13	2012-05-10
297056	DAD-22	water	2012-05-10	08:44	2012-05-10

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 27 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

### Notes:

*For inorganic analyses, the term MQL should actually read PQL.*

*Blair Leftwich*

---

Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

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## Case Narrative

Samples for project Dona Ana Dairies Consortium were received by TraceAnalysis, Inc. on 2012-05-10 and assigned to work order 12051038. Samples for work order 12051038 were received intact at a temperature of 3.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77376	2012-05-14 at 12:00	91209	2012-05-15 at 08:44
Chloride (IC)	E 300.0	77473	2012-05-15 at 08:00	91395	2012-05-16 at 09:00
NO3 (IC)	E 300.0	77376	2012-05-14 at 12:00	91209	2012-05-15 at 08:44
NO3 (IC)	E 300.0	77473	2012-05-15 at 08:00	91395	2012-05-16 at 09:00
TDS	SM 2540C	77556	2012-05-17 at 17:00	91414	2012-05-17 at 17:00
TKN	E 351.3	77598	2012-05-21 at 15:00	91473	2012-05-21 at 17:00

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12051038 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 297049 - DAD-09**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91209 Date Analyzed: 2012-05-15 Analyzed By: RL  
 Prep Batch: 77376 Sample Preparation: 2012-05-14 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>561</b>	<b>561</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 297049 - DAD-09**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91209 Date Analyzed: 2012-05-15 Analyzed By: RL  
 Prep Batch: 77376 Sample Preparation: 2012-05-14 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>50.9</b>	<b>50.9</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 297049 - DAD-09**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91414 Date Analyzed: 2012-05-17 Analyzed By: JR  
 Prep Batch: 77556 Sample Preparation: 2012-05-17 Prepared By: JR

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2270</b>	<b>2270</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 297049 - DAD-09**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91473 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77598 Sample Preparation: 2012-05-21 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 297050 - DAD-10**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91209 Date Analyzed: 2012-05-15 Analyzed By: RL  
 Prep Batch: 77376 Sample Preparation: 2012-05-14 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>361</b>	<b>361</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 297050 - DAD-10**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91209 Date Analyzed: 2012-05-15 Analyzed By: RL  
 Prep Batch: 77376 Sample Preparation: 2012-05-14 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>1.52</b>	<b>1.52</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 297050 - DAD-10**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91414 Date Analyzed: 2012-05-17 Analyzed By: JR  
 Prep Batch: 77556 Sample Preparation: 2012-05-17 Prepared By: JR

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>1400</b>	<b>1400</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 297050 - DAD-10**



Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91473 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77598 Sample Preparation: 2012-05-21 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 297051 - DAD-13**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91209 Date Analyzed: 2012-05-15 Analyzed By: RL  
 Prep Batch: 77376 Sample Preparation: 2012-05-14 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Chloride		2	<b>514</b>	<b>514</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 297051 - DAD-13**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91209 Date Analyzed: 2012-05-15 Analyzed By: RL  
 Prep Batch: 77376 Sample Preparation: 2012-05-14 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>8.66</b>	<b>8.66</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 297051 - DAD-13**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91414 Date Analyzed: 2012-05-17 Analyzed By: JR  
 Prep Batch: 77556 Sample Preparation: 2012-05-17 Prepared By: JR

*continued . . .*

sample 297051 continued ...

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2010</b>	<b>2010</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 297051 - DAD-13**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91473 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77598 Sample Preparation: 2012-05-21 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 297052 - DAD-17**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77473 Sample Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>353</b>	<b>353</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 297052 - DAD-17**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77473 Sample Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N	u	2	<0.114	<0.200	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 297052 - DAD-17**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91414 Date Analyzed: 2012-05-17 Analyzed By: JR  
 Prep Batch: 77556 Sample Preparation: 2012-05-17 Prepared By: JR

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>1580</b>	<b>1580</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 297052 - DAD-17**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91473 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77598 Sample Preparation: 2012-05-21 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 297053 - DAD-18**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77473 Sample Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>558</b>	<b>558</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 297053 - DAD-18**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77473 Sample Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Nitrate-N		2	9.11	9.11	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 297053 - DAD-18**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91414 Date Analyzed: 2012-05-17 Analyzed By: JR  
 Prep Batch: 77556 Sample Preparation: 2012-05-17 Prepared By: JR

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	2700	2700	<5.00	mg/L	1	5.00	5	5

**Sample: 297053 - DAD-18**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91473 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77598 Sample Preparation: 2012-05-21 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	U	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 297054 - DAD-19**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77473 Sample Preparation: 2012-05-15 Prepared By: RL

*continued ...*

sample 297054 continued ...

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>835</b>	<b>835</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 297054 - DAD-19**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77473 Sample Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>54.8</b>	<b>54.8</b>	<2.28	mg/L	100	2.28	0.04	0.0228

**Sample: 297054 - DAD-19**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91414 Date Analyzed: 2012-05-17 Analyzed By: JR  
 Prep Batch: 77556 Sample Preparation: 2012-05-17 Prepared By: JR

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>3460</b>	<b>3460</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 297054 - DAD-19**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91473 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77598 Sample Preparation: 2012-05-21 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 297055 - DAD-21**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77473 Sample Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>364</b>	<b>364</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 297055 - DAD-21**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77473 Sample Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>1.16</b>	<b>1.16</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 297055 - DAD-21**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91414 Date Analyzed: 2012-05-17 Analyzed By: JR  
 Prep Batch: 77556 Sample Preparation: 2012-05-17 Prepared By: JR

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2840</b>	<b>2840</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 297055 - DAD-21**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91473 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77598 Sample Preparation: 2012-05-21 Prepared By: AH

*continued ...*

sample 297055 continued ...

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 297056 - DAD-22**

Laboratory: Lubbock  
 Analysis: Chloride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 91395                                  Date Analyzed: 2012-05-16                      Analyzed By: RL  
 Prep Batch: 77473                                  Sample Preparation: 2012-05-15                      Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>818</b>	<b>818</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 297056 - DAD-22**

Laboratory: Lubbock  
 Analysis: NO3 (IC)                                  Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 91395                                  Date Analyzed: 2012-05-16                      Analyzed By: RL  
 Prep Batch: 77473                                  Sample Preparation: 2012-05-15                      Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>18.3</b>	<b>18.3</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 297056 - DAD-22**

Laboratory: El Paso  
 Analysis: TDS    Analytical Method: SM 2540C                      Prep Method: N/A  
 QC Batch: 91414                                  Date Analyzed: 2012-05-17                      Analyzed By: JR  
 Prep Batch: 77556                                  Sample Preparation: 2012-05-17                      Prepared By: JR

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>1580</b>	<b>1580</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 297056 - DAD-22**

Laboratory: Lubbock

Analysis: TKN

QC Batch: 91473

Prep Batch: 77598

Analytical Method: E 351.3

Date Analyzed: 2012-05-21

Sample Preparation: 2012-05-21

Prep Method: N/A

Analyzed By: AH

Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72



## Method Blanks

### Method Blank (1)

QC Batch: 91209  
Prep Batch: 77376Date Analyzed: 2012-05-15  
QC Preparation: 2012-05-14Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	0.227	mg/L	0.209

### Method Blank (1)

QC Batch: 91209  
Prep Batch: 77376Date Analyzed: 2012-05-15  
QC Preparation: 2012-05-14Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

### Method Blank (1)

QC Batch: 91395  
Prep Batch: 77473Date Analyzed: 2012-05-16  
QC Preparation: 2012-05-15Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

### Method Blank (1)

QC Batch: 91395  
Prep Batch: 77473Date Analyzed: 2012-05-16  
QC Preparation: 2012-05-15Analyzed By: RL  
Prepared By: RL







Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	44.5	mg/L	1	50.0	<1.72	89	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	44.0	mg/L	1	50.0	<1.72	88	65.4 - 113	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 297051

QC Batch: 91209 Date Analyzed: 2012-05-15 Analyzed By: RL  
 Prep Batch: 77376 QC Preparation: 2012-05-14 Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	2640	mg/L	100	2080	514	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	2640	mg/L	100	2080	514	102	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 297051

QC Batch: 91209 Date Analyzed: 2012-05-15 Analyzed By: RL  
 Prep Batch: 77376 QC Preparation: 2012-05-14 Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	429	mg/L	100	417	7.49	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	420	mg/L	100	417	7.49	99	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 297056

QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77473 QC Preparation: 2012-05-15 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	2890	mg/L	100	2080	818	99	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		2	2900	mg/L	100	2080	818	100	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 297056

QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77473 QC Preparation: 2012-05-15 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	428	mg/L	100	417	16.3	99	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate-N		2	420	mg/L	100	417	16.3	97	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 297322

QC Batch: 91473 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77598 QC Preparation: 2012-05-21 Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	53.2	mg/L	1	50.0	7.7	91	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Kjeldahl Nitrogen - N		2	48.3	mg/L	1	50.0	7.7	81	29.2 - 129	10	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 91209

Date Analyzed: 2012-05-15

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.0	100	90 - 110	2012-05-15

### Standard (CCV-1)

QC Batch: 91209

Date Analyzed: 2012-05-15

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.00	100	90 - 110	2012-05-15

### Standard (CCV-2)

QC Batch: 91209

Date Analyzed: 2012-05-15

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.7	103	90 - 110	2012-05-15

### Standard (CCV-2)

QC Batch: 91209

Date Analyzed: 2012-05-15

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.13	103	90 - 110	2012-05-15



**Standard (CCV-1)**

QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.4	102	90 - 110	2012-05-16

**Standard (CCV-1)**

QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	4.96	99	90 - 110	2012-05-16

**Standard (CCV-2)**

QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.2	101	90 - 110	2012-05-16

**Standard (CCV-2)**

QC Batch: 91395 Date Analyzed: 2012-05-16 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	4.99	100	90 - 110	2012-05-16

**Standard (ICV-1)**

QC Batch: 91473 Date Analyzed: 2012-05-21 Analyzed By: AH

Report Date: May 23, 2012

Work Order: 12051038  
Dona Ana Dairies Consortium

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Various Dairies, Dona Ana County, NM

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Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	5.10	102	85 - 115	2012-05-21

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**Standard (CCV-1)**

QC Batch: 91473

Date Analyzed: 2012-05-21

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.96	99	85 - 115	2012-05-21

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## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

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# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.



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Lubbock, TX 79424  
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# TraceAnalysis, Inc.

155 McCutcheon, Ste. H  
Paso, TX 79932  
Tel (915) 585-3443  
Fax (915) 585-4944

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 12051038

Phone #: 915-859-8150

Cell #: \_\_\_\_\_

Fax #: \_\_\_\_\_

E-mail: [vajala@dhpump.com](mailto:vajala@dhpump.com)

Company Name: \_\_\_\_\_

D&H Petroleum & Environmental Services

Address: (Street, City, Zip)

1221 Tower Trail Ln, El Paso TX 79907

Contact Person: \_\_\_\_\_

Victor Ayala

Invoice to (if different from above): \_\_\_\_\_

Dona Ana Dairies, PO Box 10, Mesquite, NM 88048

Project #: \_\_\_\_\_

Project Name: \_\_\_\_\_

Dona Ana Dairies Consortium

Sampler Signature: \_\_\_\_\_

Project Location (including state): \_\_\_\_\_

Various Dairies, Dona Ana County, NM

LAB # (LAB USE ONLY)	Field Code	# Containers	Volume/Amount	MATRIX				PRESERVATIVE METHOD				Sampling		TIME	Hold		
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE			DATE	TIME
297052-1	DAD-17	1	250mL	X				X				X					
↓ 23	DAD-17	2	250mL	X				X				X					
53-1	DAD-18	1	250mL	X				X				X					
↓ 23	DAD-18	2	250mL	X				X				X					
54-1	DAD-19	1	250mL	X				X				X					
↓ 23	DAD-19	2	250mL	X				X				X					
	DAD-20	1		X				X				X					
	DAD-20	2		X				X				X					
55-1	DAD-21	1	250mL	X				X				X					
↓ 23	DAD-21	2	250mL	X				X				X					
56-1	DAD-22	1	250mL	X				X				X					
↓ 23	DAD-22	2	250mL	X				X				X					

### ANALYSIS REQUEST

MTBE 8021B/602																		
BTEX 8021B/602																		
TPH 418.1 / TX1005																		
TX 1005 Extended (C35)																		
PAH 8270C																		
PAH 8270 (Low Level Analysis)																		
Total Metals Ag As BA Cd Cr Pb Se Hg 6010B/200.7																		
Nitrates EPA 300																		
TKN SM 4500 NORGC																		
Chloride EPA 300																		
Total Dissolved Solids SM 2540 C MOD																		
Turn Around Time																		

Relinquished By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished By: ASG JA Date: 5-11-12 Time: 9:15

Received By: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received at Laboratory By: Colin Slone Date: 5-10-12 Time: 14:02

Lab Use Only  
Intact  / N  
Headspace Y / N  
Temp 3/20 C  
Log-in Review mkl

Remarks: JDS - EP  
IR 3.4/3.3  
LS: 477 94983  
5/12/12  
8:50 AM

Dry Weight Basis Required  
TRRP Report Required



6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800-378-1296 806-794-1296 FAX 806-794-1298  
200 East Sunset Road, Suite E El Paso, Texas 79922 915-585-3443 FAX 915-585-4944  
5002 Basin Street, Suite A1 Midland, Texas 79703 432-689-6301 FAX 432-689-6313  
(BioAquatic) 2501 Mayes Rd., Suite 100 Carrollton, Texas 75006 972-242-7750  
E-Mail: lab@traceanalysis.com WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

## Analytical and Quality Control Report

Linda Armstrong  
Dona Ana Dairies

Report Date: May 24, 2012

P.O. Box 10  
Mesquite, NM, 88048

Work Order: 12051420



Project Location: Various Dairies, Dona Ana County, NM  
Project Name: Dona Ana Dairies Consortium  
Project #: DAD

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
297296	DAD-11	water	2012-05-14	10:47	2012-05-14
297297	DAD-12	water	2012-05-14	09:37	2012-05-14
297298	DAD-14	water	2012-05-14	08:45	2012-05-14
297299	DAD-16	water	2012-05-14	11:25	2012-05-14

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 19 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

### Notes:

*For inorganic analyses, the term MQL should actually read PQL.*

*Michael Abel*

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Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager



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## Case Narrative

Samples for project Dona Ana Dairies Consortium were received by TraceAnalysis, Inc. on 2012-05-14 and assigned to work order 12051420. Samples for work order 12051420 were received intact at a temperature of 3.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77475	2012-05-15 at 12:00	91401	2012-05-16 at 09:00
NO3 (IC)	E 300.0	77475	2012-05-15 at 12:00	91401	2012-05-16 at 09:00
TDS	SM 2540C	77581	2012-05-21 at 16:10	91443	2012-05-21 at 16:16
TKN	E 351.3	77607	2012-05-22 at 13:00	91481	2012-05-22 at 15:09
TKN	E 351.3	77608	2012-05-22 at 10:22	91474	2012-05-22 at 12:32

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12051420 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.

# Analytical Report

**Sample: 297296 - DAD-11**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91401 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77475 Sample Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>359</b>	<b>359</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 297296 - DAD-11**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91401 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77475 Sample Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>0.791</b>	<b>0.791</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 297296 - DAD-11**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91443 Date Analyzed: 2012-05-21 Analyzed By: MD  
 Prep Batch: 77581 Sample Preparation: 2012-05-21 Prepared By: MD

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>1550</b>	<b>1550</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 297296 - DAD-11**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91474 Date Analyzed: 2012-05-22 Analyzed By: AH  
 Prep Batch: 77608 Sample Preparation: 2012-05-22 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 297297 - DAD-12**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91401 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77475 Sample Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>561</b>	<b>561</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 297297 - DAD-12**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91401 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77475 Sample Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>23.1</b>	<b>23.1</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 297297 - DAD-12**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91443 Date Analyzed: 2012-05-21 Analyzed By: MD  
 Prep Batch: 77581 Sample Preparation: 2012-05-21 Prepared By: MD

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2870</b>	<b>2870</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 297297 - DAD-12**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91474 Date Analyzed: 2012-05-22 Analyzed By: AH  
 Prep Batch: 77608 Sample Preparation: 2012-05-22 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 297298 - DAD-14**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91401 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77475 Sample Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Chloride		2	<b>881</b>	<b>881</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 297298 - DAD-14**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91401 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77475 Sample Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>28.8</b>	<b>28.8</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 297298 - DAD-14**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91443 Date Analyzed: 2012-05-21 Analyzed By: MD  
 Prep Batch: 77581 Sample Preparation: 2012-05-21 Prepared By: MD

*continued . . .*

*sample 297298 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>3280</b>	<b>3280</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 297298 - DAD-14**

Laboratory: Lubbock

Analysis: TKN

QC Batch: 91474

Prep Batch: 77608

Analytical Method: E 351.3

Date Analyzed: 2012-05-22

Sample Preparation: 2012-05-22

Prep Method: N/A

Analyzed By: AH

Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 297299 - DAD-16**

Laboratory: Lubbock

Analysis: Chloride (IC)

QC Batch: 91401

Prep Batch: 77475

Analytical Method: E 300.0

Date Analyzed: 2012-05-16

Sample Preparation: 2012-05-15

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>378</b>	<b>378</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 297299 - DAD-16**

Laboratory: Lubbock

Analysis: NO3 (IC)

QC Batch: 91401

Prep Batch: 77475

Analytical Method: E 300.0

Date Analyzed: 2012-05-16

Sample Preparation: 2012-05-15

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N	J	2	<b>0.147</b>	<0.200	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 297299 - DAD-16**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91443 Date Analyzed: 2012-05-21 Analyzed By: MD  
 Prep Batch: 77581 Sample Preparation: 2012-05-21 Prepared By: MD

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2080</b>	<b>2080</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 297299 - DAD-16**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91481 Date Analyzed: 2012-05-22 Analyzed By: AH  
 Prep Batch: 77607 Sample Preparation: 2012-05-22 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	U	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 91401 Date Analyzed: 2012-05-16 Analyzed By: RL  
Prep Batch: 77475 QC Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

### Method Blank (1)

QC Batch: 91401 Date Analyzed: 2012-05-16 Analyzed By: RL  
Prep Batch: 77475 QC Preparation: 2012-05-15 Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

### Method Blank (1)

QC Batch: 91443 Date Analyzed: 2012-05-21 Analyzed By: MD  
Prep Batch: 77581 QC Preparation: 2012-05-21 Prepared By: JR

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

### Method Blank (1)

QC Batch: 91474 Date Analyzed: 2012-05-22 Analyzed By: AH  
Prep Batch: 77608 QC Preparation: 2012-05-22 Prepared By: AH



Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

**Method Blank (1)**

QC Batch: 91481                                      Date Analyzed: 2012-05-22                                      Analyzed By: AH  
 Prep Batch: 77607                                      QC Preparation: 2012-05-22                                      Prepared By: AH

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

**Duplicate (1)**      Duplicated Sample: 297302

QC Batch: 91443                                      Date Analyzed: 2012-05-21                                      Analyzed By: MD  
 Prep Batch: 77581                                      QC Preparation: 2012-05-21                                      Prepared By: JR

Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	1350	1340	mg/L	1	1	10

# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 91401  
Prep Batch: 77475Date Analyzed: 2012-05-16  
QC Preparation: 2012-05-15Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	26.0	mg/L	1	25.0	<0.209	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Chloride		2	25.8	mg/L	1	25.0	<0.209	103	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 91401  
Prep Batch: 77475Date Analyzed: 2012-05-16  
QC Preparation: 2012-05-15Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Nitrate-N		2	5.13	mg/L	1	5.00	<0.0228	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Nitrate-N		2	5.07	mg/L	1	5.00	<0.0228	101	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 91443  
Prep Batch: 77581Date Analyzed: 2012-05-21  
QC Preparation: 2012-05-21Analyzed By: MD  
Prepared By: JR

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110	0	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91474  
Prep Batch: 77608

Date Analyzed: 2012-05-22  
QC Preparation: 2012-05-22

Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	40.7	mg/L	1	50.0	<1.72	81	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	43.3	mg/L	1	50.0	<1.72	87	65.4 - 113	6	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91481  
Prep Batch: 77607

Date Analyzed: 2012-05-22  
QC Preparation: 2012-05-22

Analyzed By: AH  
Prepared By: AH

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	42.0	mg/L	1	50.0	<1.72	84	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	47.3	mg/L	1	50.0	<1.72	95	65.4 - 113	12	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Matrix Spike (MS-1) Spiked Sample: 297303

QC Batch: 91401  
Prep Batch: 77475

Date Analyzed: 2012-05-16  
QC Preparation: 2012-05-15

Analyzed By: RL  
Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	2650	mg/L	100	2080	499	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	2590	mg/L	100	2080	499	100	90 - 110	2	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 297303

QC Batch: 91401 Date Analyzed: 2012-05-16 Analyzed By: RL  
 Prep Batch: 77475 QC Preparation: 2012-05-15 Prepared By: RL

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	513	mg/L	100	417	91.3	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	508	mg/L	100	417	91.3	100	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 297298

QC Batch: 91474 Date Analyzed: 2012-05-22 Analyzed By: AH  
 Prep Batch: 77608 QC Preparation: 2012-05-22 Prepared By: AH

Param	F	C	MS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Total Kjeldahl Nitrogen - N		2	16.1	mg/L	1	50.0	<1.72	32	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Total Kjeldahl Nitrogen - N		2	16.1	mg/L	1	50.0	<1.72	32	29.2 - 129	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 297346

QC Batch: 91481  
 Prep Batch: 77607

Date Analyzed: 2012-05-22  
 QC Preparation: 2012-05-22

Analyzed By: AH  
 Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	59.5	mg/L	1	50.0	<1.72	119	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Kjeldahl Nitrogen - N		2	59.9	mg/L	1	50.0	<1.72	120	29.2 - 129	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 91401

Date Analyzed: 2012-05-16

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.8	103	90 - 110	2012-05-16

### Standard (CCV-1)

QC Batch: 91401

Date Analyzed: 2012-05-16

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.15	103	90 - 110	2012-05-16

### Standard (CCV-2)

QC Batch: 91401

Date Analyzed: 2012-05-16

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.7	103	90 - 110	2012-05-16

### Standard (CCV-2)

QC Batch: 91401

Date Analyzed: 2012-05-16

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.07	101	90 - 110	2012-05-16

**Standard (ICV-1)**

QC Batch: 91474

Date Analyzed: 2012-05-22

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	5.10	102	85 - 115	2012-05-22

**Standard (CCV-1)**

QC Batch: 91474

Date Analyzed: 2012-05-22

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	5.32	106	85 - 115	2012-05-22

**Standard (ICV-1)**

QC Batch: 91481

Date Analyzed: 2012-05-22

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.73	95	85 - 115	2012-05-22

**Standard (CCV-1)**

QC Batch: 91481

Date Analyzed: 2012-05-22

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	5.10	102	85 - 115	2012-05-22

---

## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass



---

# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.

6701 Aberdeen, Ste. 9  
Lubbock, TX 79424  
Tel (806) 794-1296  
Fax (806) 794-1298

# TraceAnalysis, Inc.

Company Name:

D&H Petroleum & Environmental Services

Address: (Street, City, Zip)

1221 Tower Trail Ln, El Paso TX 79907

Contact Person:

Victor Ayala

Phone #:

915-859-8150

Call #:

Fax #:

E-mail:

vayala@dhump.com

Invoice to (if different from above):

Dona Ana Dairies, P.O. Box 10, Mesquite, NM 88048

Project #:

Linda Armstrong 575-233-3620

Project Name:

Dona Ana Dairies Consortium

Project Location (including state):

Various Dairies, Dona Ana County, NM

Sampler Signature:



LAB #	Field Code	# Containers	Volume/Amount	MATRIX			PRESERVATIVE METHOD					SAMPLING			
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE	DATE	TIME
DAD-11		1	250ml	X				X			X			5-14-12	10:47
DAD-11		2	250ml	X				X			X			5-14-12	10:47
DAD-12		1	250ml	X				X			X			5-14-12	9:37
DAD-12		2	250ml	X				X			X			5-14-12	9:37
DAD-14		1	250ml	X				X			X			5-14-12	8:45
DAD-14		2	250ml	X				X			X			5-14-12	8:45
DAD-16		1	250ml	X				X			X			5-14-12	11:25
DAD-16		2	250ml	X				X			X			5-14-12	11:25

Reinquired By: *Cheryl Nichols* Date: 5-14-12 Time: 13:36  
 Received at Laboratory By: *[Signature]* Date: 5/14/12 Time: 15:30  
 Reinquired By: *[Signature]* Date: 5-14-12 Time: 14:36

Lab Use Only  
 Intraplan  
 Headspace Y L N  
 Temp 3/2 C  
 Log-in Review In/Out

Remarks: *see TDS in E1*  
*0-0-0-2*  
 Dry Weight Basis Required  
 TRRP Report Required

LAB Order ID # 12051420

ANALYSIS REQUEST

Method	PAH 8270 (Low Level Analysis)	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	Nitrates EPA 300	TKN SM 4500 NORG C	Chloride EPA 300	Total Dissolved Solids SM 2540 C MOD
TPH 418.1 / TX1005			X			
TX 1005 Extended (C35)			X			
PAH 8270C			X			
PAH 8270			X			
MTBE 8021B/602						
BTEX 8021B/602						
Hold						

(12)

6701 Aberdeen, Ste. 9  
Lubbock, TX 79424  
Tel (806) 794-1296  
Fax (806) 794-1298

# TraceAnalysis, Inc.

155 McCutcheon, Ste. H  
Paso, TX 79832  
Tel (915) 585-3443  
Fax (915) 585-4944

LAB Order ID # 12051420

**Company Name:** D&H Petroleum & Environmental Services  
**Address:** (Street, City, Zip) 1221 Tower Trail Ln, El Paso TX 79907  
**Contact Person:** Victor Ayala  
**Phone #:** 915-859-8150  
**Cell #:**  
**Fax #:**  
**E-mail:** vajala@dhpump.com

**Project #:** 88048  
**Project Name:** Linda Armstrong 575-233-3620  
**Project Location (including state):** Dona Ana Dairies, PO Box 10, Mesquite, NM 88048  
**Sampler Signature:** *Clayton...*

LAB # (LAB USE ONLY)	Field Code	# Containers	Volume/Amount	MATRIX			PRESERVATIVE METHOD					Sampling		TIME	Hold	
				WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE			DATE
<del>287286</del>	DAD-11	1	250ml	X				X				X	5-14-12	10:47		
<del>287287</del>	DAD-11	2	250ml	X				X				X	5-14-12	10:47		
<del>287287-1</del>	DAD-12	1	250ml	X				X				X	5-14-12	9:37		
<del>287288</del>	DAD-12	2	250ml	X				X				X	5-14-12	9:37		
<del>287288-1</del>	DAD-1.4	1	250ml	X				X				X	5-14-12	8:45		
<del>287288-2</del>	DAD-14	2	250ml	X				X				X	5-14-12	8:45		
<del>287288-3</del>	DAD-16	1	250ml	X				X				X	5-14-12	11:25		
<del>287288-4</del>	DAD-16	2	250ml	X				X				X	5-14-12	11:25		

**ANALYSIS REQUEST**

MTBE 8021B/602	
BTEX 8021B/602	
TPH 418.1 / TX1005	
TX 1005 Extended (C35)	
PAH 8270C	
PAH 8270 (Low Level Analysis)	
Total Metals Ag As BA Cd Cr Pb Se Hg 6010B/200.7	
Nitrates EPA 300	X
TKN SM 4500 NORG C	X
Chloride EPA 300	X
Total Dissolved Solids SM 2540 C MOD	X

**Relinquished By:** *Clayton...* Date: 5-14-12 Time: 15:30  
**Received at Laboratory By:** *[Signature]* Date: 5/14/12 Time: 15:30  
**Relinquished By:** *[Signature]* Date: 5-14-12 Time: 16:30  
**Received at Laboratory By:** *[Signature]* Date: 5/15/12 Time: 9:05

**Remarks:** *see TDS - EA*  
*KS 47796985*  
*0-122 3.3/3.2 #1-2*  
Dry Weight Basis Required  
TRRP Report Required

Lab Use Only  
Integr D/N  
Headspace Y/N  
Temp 3/3 C see  
Log-in Review In/Out



6701 Aberdeen Avenue, Suite 9      Lubbock, Texas 79424      800-378-1296      806-794-1296      FAX 806-794-1298  
 200 East Sunset Road, Suite E      El Paso, Texas 79922           915-585-3443      FAX 915-585-4944  
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 (BioAquatic) 2501 Mayes Rd., Suite 100      Carrollton, Texas 75006           972-242-7750  
 E-Mail: lab@traceanalysis.com      WEB: www.traceanalysis.com

## Certifications

WBE HUB NCTRCA DBE NELAP DoD LELAP Kansas Oklahoma ISO 17025

# Analytical and Quality Control Report

Linda Armstrong  
 Dona Ana Dairies

Report Date: May 24, 2012

P.O. Box 10  
 Mesquite, NM, 88048

Work Order: 12050923



Project Location: Various Dairies, Dona Ana County, NM  
 Project Name: Dona Ana Dairies Consortium  
 Project #: DAD

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
296876	DAD-01	water	2012-05-09	07:04	2012-05-09
296877	DAD-02	water	2012-05-09	08:01	2012-05-09
296878	DAD-03	water	2012-05-09	08:23	2012-05-09
296879	DAD-04	water	2012-05-09	09:11	2012-05-09
296880	DAD-05	water	2012-05-09	10:53	2012-05-09
296881	DAD-06	water	2012-05-09	09:58	2012-05-09
296882	DAD-07	water	2012-05-09	12:56	2012-05-09
296883	DAD-08	water	2012-05-09	12:15	2012-05-09

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 28 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

**Notes:**

*For inorganic analyses, the term MQL should actually read PQL.*

*Michael Abel*

---

Dr. Blair Leftwich, Director  
Dr. Michael Abel, Project Manager

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## Case Narrative

Samples for project Dona Ana Dairies Consortium were received by TraceAnalysis, Inc. on 2012-05-09 and assigned to work order 12050923. Samples for work order 12050923 were received intact at a temperature of 3.0 C.

Samples were analyzed for the following tests using their respective methods.

Test	Method	Prep Batch	Prep Date	QC Batch	Analysis Date
Chloride (IC)	E 300.0	77325	2012-05-11 at 11:00	91155	2012-05-12 at 12:00
Chloride (IC)	E 300.0	77326	2012-05-11 at 11:00	91156	2012-05-12 at 12:00
Chloride (IC)	E 300.0	77374	2012-05-14 at 12:00	91208	2012-05-15 at 08:42
NO3 (IC)	E 300.0	77325	2012-05-11 at 11:00	91155	2012-05-12 at 12:00
NO3 (IC)	E 300.0	77326	2012-05-11 at 11:00	91156	2012-05-12 at 12:00
TDS	SM 2540C	77561	2012-05-16 at 13:43	91420	2012-05-16 at 13:43
TKN	E 351.3	77597	2012-05-21 at 12:00	91470	2012-05-21 at 13:58

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 12050923 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.



# Analytical Report

## Sample: 296876 - DAD-01

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL  
 Prep Batch: 77325 Sample Preparation: 2012-05-11 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>401</b>	<b>401</b>	<10.4	mg/L	50	10.4	2.5	0.209

## Sample: 296876 - DAD-01

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL  
 Prep Batch: 77325 Sample Preparation: 2012-05-11 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>6.88</b>	<b>6.88</b>	<0.114	mg/L	5	0.114	0.04	0.0228

## Sample: 296876 - DAD-01

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91420 Date Analyzed: 2012-05-16 Analyzed By: JR  
 Prep Batch: 77561 Sample Preparation: 2012-05-16 Prepared By: JR

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	SQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>1660</b>	<b>1660</b>	<5.00	mg/L	1	5.00	5	5

## Sample: 296876 - DAD-01

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91470 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77597 Sample Preparation: 2012-05-21 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>2.80</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296877 - DAD-02**

Laboratory: Lubbock  
 Analysis: Chloride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 91155                                  Date Analyzed: 2012-05-12                      Analyzed By: RL  
 Prep Batch: 77325                                  Sample Preparation: 2012-05-11                      Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Chloride		2	<b>373</b>	<b>373</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 296877 - DAD-02**

Laboratory: Lubbock  
 Analysis: NO3 (IC)                                  Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 91155                                  Date Analyzed: 2012-05-12                      Analyzed By: RL  
 Prep Batch: 77325                                  Sample Preparation: 2012-05-11                      Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>7.71</b>	<b>7.71</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296877 - DAD-02**

Laboratory: El Paso  
 Analysis: TDS    Analytical Method: SM 2540C                      Prep Method: N/A  
 QC Batch: 91420                                  Date Analyzed: 2012-05-16                      Analyzed By: JR  
 Prep Batch: 77561                                  Sample Preparation: 2012-05-16                      Prepared By: JR

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based Result	Based Result	Blank Result				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>1830</b>	<b>1830</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296877 - DAD-02**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91470 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77597 Sample Preparation: 2012-05-21 Prepared By: AH

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296878 - DAD-03**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91208 Date Analyzed: 2012-05-15 Analyzed By: RL  
 Prep Batch: 77374 Sample Preparation: 2012-05-14 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Chloride		2	<b>1200</b>	<b>1200</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296878 - DAD-03**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL  
 Prep Batch: 77325 Sample Preparation: 2012-05-11 Prepared By: RL

Parameter	F	C	SDL	SQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Nitrate-N	u	2	<0.114	<0.200	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296878 - DAD-03**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91420 Date Analyzed: 2012-05-16 Analyzed By: JR  
 Prep Batch: 77561 Sample Preparation: 2012-05-16 Prepared By: JR

*continued . . .*

*sample 296878 continued ...*

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>4160</b>	<b>4160</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296878 - DAD-03**

Laboratory: Lubbock

Analysis: TKN

QC Batch: 91470

Prep Batch: 77597

Analytical Method: E 351.3

Date Analyzed: 2012-05-21

Sample Preparation: 2012-05-21

Prep Method: N/A

Analyzed By: AH

Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>2.66</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296879 - DAD-04**

Laboratory: Lubbock

Analysis: Chloride (IC)

QC Batch: 91155

Prep Batch: 77325

Analytical Method: E 300.0

Date Analyzed: 2012-05-12

Sample Preparation: 2012-05-11

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>502</b>	<b>502</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296879 - DAD-04**

Laboratory: Lubbock

Analysis: NO3 (IC)

QC Batch: 91155

Prep Batch: 77325

Analytical Method: E 300.0

Date Analyzed: 2012-05-12

Sample Preparation: 2012-05-11

Prep Method: N/A

Analyzed By: RL

Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>0.305</b>	<b>0.305</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296879 - DAD-04**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91420 Date Analyzed: 2012-05-16 Analyzed By: JR  
 Prep Batch: 77561 Sample Preparation: 2012-05-16 Prepared By: JR

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>1970</b>	<b>1970</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296879 - DAD-04**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91470 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77597 Sample Preparation: 2012-05-21 Prepared By: AH

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296880 - DAD-05**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL  
 Prep Batch: 77325 Sample Preparation: 2012-05-11 Prepared By: RL

Parameter	F	C	SDL Based Result	MQL Based Result	Method Blank Result	Units	Dilution	SDL	MQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>566</b>	<b>566</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296880 - DAD-05**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL  
 Prep Batch: 77325 Sample Preparation: 2012-05-11 Prepared By: RL

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Nitrate-N		2	<b>0.908</b>	<b>0.908</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296880 - DAD-05**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91420 Date Analyzed: 2012-05-16 Analyzed By: JR  
 Prep Batch: 77561 Sample Preparation: 2012-05-16 Prepared By: JR

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Dissolved Solids		1	<b>2380</b>	<b>2380</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296880 - DAD-05**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91470 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77597 Sample Preparation: 2012-05-21 Prepared By: AH

Parameter	F	C	SDL	MQL	Method	Units	Dilution	SDL	MQL	MDL
			Based	Based	Blank				(Unadjusted)	(Unadjusted)
Total Kjeldahl Nitrogen - N	J	2	<b>2.10</b>	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296881 - DAD-06**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL  
 Prep Batch: 77325 Sample Preparation: 2012-05-11 Prepared By: RL

*continued ...*

sample 296881 continued ...

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>375</b>	<b>375</b>	<10.4	mg/L	50	10.4	2.5	0.209

**Sample: 296881 - DAD-06**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL  
 Prep Batch: 77325 Sample Preparation: 2012-05-11 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>11.0</b>	<b>11.0</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296881 - DAD-06**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91420 Date Analyzed: 2012-05-16 Analyzed By: JR  
 Prep Batch: 77561 Sample Preparation: 2012-05-16 Prepared By: JR

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>1570</b>	<b>1570</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296881 - DAD-06**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91470 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77597 Sample Preparation: 2012-05-21 Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296882 - DAD-07**

Laboratory: Lubbock  
 Analysis: Chloride (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL  
 Prep Batch: 77325 Sample Preparation: 2012-05-11 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>588</b>	<b>588</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296882 - DAD-07**

Laboratory: Lubbock  
 Analysis: NO3 (IC) Analytical Method: E 300.0 Prep Method: N/A  
 QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL  
 Prep Batch: 77325 Sample Preparation: 2012-05-11 Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>3.81</b>	<b>3.81</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296882 - DAD-07**

Laboratory: El Paso  
 Analysis: TDS Analytical Method: SM 2540C Prep Method: N/A  
 QC Batch: 91420 Date Analyzed: 2012-05-16 Analyzed By: JR  
 Prep Batch: 77561 Sample Preparation: 2012-05-16 Prepared By: JR

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>2150</b>	<b>2150</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296882 - DAD-07**

Laboratory: Lubbock  
 Analysis: TKN Analytical Method: E 351.3 Prep Method: N/A  
 QC Batch: 91470 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77597 Sample Preparation: 2012-05-21 Prepared By: AH

*continued ...*



sample 296882 continued ...

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

**Sample: 296883 - DAD-08**

Laboratory: Lubbock  
 Analysis: Chloride (IC)                      Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 91156                                  Date Analyzed: 2012-05-12                      Analyzed By: RL  
 Prep Batch: 77326                                  Sample Preparation: 2012-05-11                      Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Chloride		2	<b>1150</b>	<b>1150</b>	<20.9	mg/L	100	20.9	2.5	0.209

**Sample: 296883 - DAD-08**

Laboratory: Lubbock  
 Analysis: NO3 (IC)                                  Analytical Method: E 300.0                      Prep Method: N/A  
 QC Batch: 91156                                  Date Analyzed: 2012-05-12                      Analyzed By: RL  
 Prep Batch: 77326                                  Sample Preparation: 2012-05-11                      Prepared By: RL

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Nitrate-N		2	<b>2.39</b>	<b>2.39</b>	<0.114	mg/L	5	0.114	0.04	0.0228

**Sample: 296883 - DAD-08**

Laboratory: El Paso  
 Analysis: TDS    Analytical Method: SM 2540C                      Prep Method: N/A  
 QC Batch: 91420                                  Date Analyzed: 2012-05-16                      Analyzed By: JR  
 Prep Batch: 77561                                  Sample Preparation: 2012-05-16                      Prepared By: JR

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Dissolved Solids		1	<b>3260</b>	<b>3260</b>	<5.00	mg/L	1	5.00	5	5

**Sample: 296883 - DAD-08**

Laboratory: Lubbock

Analysis: TKN

QC Batch: 91470

Prep Batch: 77597

Analytical Method: E 351.3

Date Analyzed: 2012-05-21

Sample Preparation: 2012-05-21

Prep Method: N/A

Analyzed By: AH

Prepared By: AH

Parameter	F	C	SDL Based Result	SQL Based Result	Method Blank Result	Units	Dilution	SDL	SQL (Unadjusted)	MDL (Unadjusted)
Total Kjeldahl Nitrogen - N	u	2	<1.72	<10.0	<1.72	mg/L	1	1.72	10	1.72

## Method Blanks

### Method Blank (1)

QC Batch: 91155  
Prep Batch: 77325Date Analyzed: 2012-05-12  
QC Preparation: 2012-05-11Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

### Method Blank (1)

QC Batch: 91155  
Prep Batch: 77325Date Analyzed: 2012-05-12  
QC Preparation: 2012-05-11Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

### Method Blank (1)

QC Batch: 91156  
Prep Batch: 77326Date Analyzed: 2012-05-12  
QC Preparation: 2012-05-11Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	0.664	mg/L	0.209

### Method Blank (1)

QC Batch: 91156  
Prep Batch: 77326Date Analyzed: 2012-05-12  
QC Preparation: 2012-05-11Analyzed By: RL  
Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Nitrate-N		2	<0.0228	mg/L	0.0228

**Method Blank (1)**

QC Batch: 91208                      Date Analyzed: 2012-05-15                      Analyzed By: RL  
Prep Batch: 77374                      QC Preparation: 2012-05-14                      Prepared By: RL

Parameter	F	C	Result	Units	Reporting Limits
Chloride		2	<0.209	mg/L	0.209

**Method Blank (1)**

QC Batch: 91420                      Date Analyzed: 2012-05-16                      Analyzed By: JR  
Prep Batch: 77561                      QC Preparation: 2012-05-16                      Prepared By: MD

Parameter	F	C	Result	Units	Reporting Limits
Total Dissolved Solids		1	<5.00	mg/L	5

**Method Blank (1)**

QC Batch: 91470                      Date Analyzed: 2012-05-21                      Analyzed By: AH  
Prep Batch: 77597                      QC Preparation: 2012-05-21                      Prepared By: AH

Parameter	F	C	Result	Units	Reporting Limits
Total Kjeldahl Nitrogen - N		2	<1.72	mg/L	1.72

**Duplicate (1)**    Duplicated Sample: 296883

QC Batch: 91420                      Date Analyzed: 2012-05-16                      Analyzed By: JR  
Prep Batch: 77561                      QC Preparation: 2012-05-16                      Prepared By: MD

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Param	F	C	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Total Dissolved Solids		1	3480	3260	mg/L	1	6	10

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# Laboratory Control Spikes

## Laboratory Control Spike (LCS-1)

QC Batch: 91155  
Prep Batch: 77325Date Analyzed: 2012-05-12  
QC Preparation: 2012-05-11Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	25.6	mg/L	1	25.0	<0.209	102	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Chloride		2	25.9	mg/L	1	25.0	<0.209	104	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 91155  
Prep Batch: 77325Date Analyzed: 2012-05-12  
QC Preparation: 2012-05-11Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Nitrate-N		2	5.17	mg/L	1	5.00	<0.0228	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units	Dil.						
Nitrate-N		2	5.15	mg/L	1	5.00	<0.0228	103	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Laboratory Control Spike (LCS-1)

QC Batch: 91156  
Prep Batch: 77326Date Analyzed: 2012-05-12  
QC Preparation: 2012-05-11Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS			Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units	Dil.				
Chloride		2	26.1	mg/L	1	25.0	<0.209	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec. Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	25.9	mg/L	1	25.0	<0.209	104	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91156  
Prep Batch: 77326

Date Analyzed: 2012-05-12  
QC Preparation: 2012-05-11

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Nitrate-N		2	5.00	mg/L	1	5.00	<0.0228	100	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Nitrate-N		2	5.03	mg/L	1	5.00	<0.0228	101	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91208  
Prep Batch: 77374

Date Analyzed: 2012-05-15  
QC Preparation: 2012-05-14

Analyzed By: RL  
Prepared By: RL

Param	F	C	LCS		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
			Result	Units					
Chloride		2	25.9	mg/L	1	25.0	<0.209	104	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD		Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
			Result	Units							
Chloride		2	25.6	mg/L	1	25.0	<0.209	102	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

#### Laboratory Control Spike (LCS-1)

QC Batch: 91420  
Prep Batch: 77561

Date Analyzed: 2012-05-16  
QC Preparation: 2012-05-16

Analyzed By: JR  
Prepared By: MD

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Dissolved Solids		1	1010	mg/L	1	1000	<5.00	101	90 - 110	0	10

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 91470  
 Prep Batch: 77597

Date Analyzed: 2012-05-21  
 QC Preparation: 2012-05-21

Analyzed By: AH  
 Prepared By: AH

Param	F	C	LCS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	44.1	mg/L	1	50.0	<1.72	88	65.4 - 113

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Total Kjeldahl Nitrogen - N		2	45.4	mg/L	1	50.0	<1.72	91	65.4 - 113	3	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296882

QC Batch: 91155  
 Prep Batch: 77325

Date Analyzed: 2012-05-12  
 QC Preparation: 2012-05-11

Analyzed By: RL  
 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	2740	mg/L	100	2080	588	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec. Limit	RPD	RPD Limit	
Chloride		2	2730	mg/L	100	2080	588	103	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.



**Matrix Spike (MS-1)** Spiked Sample: 296882

QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL  
 Prep Batch: 77325 QC Preparation: 2012-05-11 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	435	mg/L	100	417	4.84	103	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate-N		2	431	mg/L	100	417	4.84	102	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296909

QC Batch: 91156 Date Analyzed: 2012-05-12 Analyzed By: RL  
 Prep Batch: 77326 QC Preparation: 2012-05-11 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	39200	mg/L	1000	20800	18900	97	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		2	39200	mg/L	1000	20800	18900	97	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296909

QC Batch: 91156 Date Analyzed: 2012-05-12 Analyzed By: RL  
 Prep Batch: 77326 QC Preparation: 2012-05-11 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Nitrate-N		2	4150	mg/L	1000	4170	<22.8	100	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Nitrate-N		2	4200	mg/L	1000	4170	<22.8	101	90 - 110	1	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 296926

QC Batch: 91208 Date Analyzed: 2012-05-15 Analyzed By: RL  
 Prep Batch: 77374 QC Preparation: 2012-05-14 Prepared By: RL

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Chloride		2	212	mg/L	5	104	111	97	90 - 110

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Chloride		2	211	mg/L	5	104	111	96	90 - 110	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1)** Spiked Sample: 297045

QC Batch: 91470 Date Analyzed: 2012-05-21 Analyzed By: AH  
 Prep Batch: 77597 QC Preparation: 2012-05-21 Prepared By: AH

Param	F	C	MS Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit
Total Kjeldahl Nitrogen - N		2	42.3	mg/L	1	50.0	<1.72	85	29.2 - 129

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Param	F	C	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	Rec. Limit	RPD	RPD Limit
Total Kjeldahl Nitrogen - N		2	42.4	mg/L	1	50.0	<1.72	85	29.2 - 129	0	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

## Calibration Standards

### Standard (CCV-1)

QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.7	103	90 - 110	2012-05-12

### Standard (CCV-1)

QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.05	101	90 - 110	2012-05-12

### Standard (CCV-2)

QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.9	104	90 - 110	2012-05-12

### Standard (CCV-2)

QC Batch: 91155 Date Analyzed: 2012-05-12 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.17	103	90 - 110	2012-05-12

**Standard (CCV-1)**

QC Batch: 91156 Date Analyzed: 2012-05-12 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.9	104	90 - 110	2012-05-12

**Standard (CCV-1)**

QC Batch: 91156 Date Analyzed: 2012-05-12 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.17	103	90 - 110	2012-05-12

**Standard (CCV-2)**

QC Batch: 91156 Date Analyzed: 2012-05-12 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.1	104	90 - 110	2012-05-12

**Standard (CCV-2)**

QC Batch: 91156 Date Analyzed: 2012-05-12 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Nitrate-N		2	mg/L	5.00	5.14	103	90 - 110	2012-05-12

**Standard (CCV-1)**

QC Batch: 91208 Date Analyzed: 2012-05-15 Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	26.1	104	90 - 110	2012-05-15

**Standard (CCV-2)**

QC Batch: 91208

Date Analyzed: 2012-05-15

Analyzed By: RL

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		2	mg/L	25.0	25.0	100	90 - 110	2012-05-15

**Standard (ICV-1)**

QC Batch: 91470

Date Analyzed: 2012-05-21

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	5.07	101	85 - 115	2012-05-21

**Standard (CCV-1)**

QC Batch: 91470

Date Analyzed: 2012-05-21

Analyzed By: AH

Param	F	C	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Kjeldahl Nitrogen - N		2	mg/L	5.00	4.93	99	85 - 115	2012-05-21

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## Limits of Detection (LOD)

Test	Method	Matrix	Instrument	Analyte	Spike	
					Amount	Pass
Chloride (IC)	E 300.0	water	Dionex IC	Chloride	0.0400	Pass
NO3 (IC)	E 300.0	water	Dionex IC	Nitrate-N	0.0400	Pass
TKN	E 351.3	water	N/A	Total Kjeldahl Nitrogen - N	5.00	Pass

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# Appendix

## Report Definitions

Name	Definition
MDL	Method Detection Limit
MQL	Minimum Quantitation Limit
SDL	Sample Detection Limit

## Laboratory Certifications

C	Certifying Authority	Certification Number	Laboratory Location
-	NCTRCA	WFWB384444Y0909	TraceAnalysis
-	DBE	VN 20657	TraceAnalysis
-	HUB	1752439743100-86536	TraceAnalysis
-	WBE	237019	TraceAnalysis
1	NELAP	T104704221-11-2	El Paso
2	NELAP	T104704219-12-8	Lubbock

## Standard Flags

F	Description
B	Analyte detected in the corresponding method blank above the method detection limit
H	Analyzed out of hold time
J	Estimated concentration
Jb	The analyte is positively identified and the value is approximated between the SDL and MQL. Sample contains less than ten times the concentration found in the method blank. The result should be considered non-detect to the SDL.
Je	Estimated concentration exceeding calibration range.
Qc	Calibration check outside of laboratory limits.
Qr	RPD outside of laboratory limits
Qs	Spike recovery outside of laboratory limits.
Qsr	Surrogate recovery outside of laboratory limits.
U	The analyte is not detected above the SDL

## Attachments

The scanned attachments will follow this page.  
Please note, each attachment may consist of more than one page.

6701 Aberdeen, Ste. 9  
 Lubbock, TX 79424  
 Tel (806) 794-1296  
 Fax (806) 794-1298

**12050923 TraceAnalysis, Inc.**

155 McCutcheon, Ste. H  
 Paso, TX 79932  
 Tel (915) 585-3443  
 Fax (915) 585-4944

Company Name: D&H Petroleum & Environmental Services  
 Address: (Street, City, Zip)  
 1221 Tower Trail Ln, El Paso TX 79907  
 Contact Person: Victor Ayala  
 Phone #: 915-859-8150  
 Cell #: 915-859-8150  
 Fax #: vajala@dhpump.com  
 E-mail: vajala@dhpump.com

Project #: 12050923  
 Project Name: Linda Armstrong 575-233-3620  
 Project Location (including state): Dona Ana Dairies, PO Box 10, Mesquite, NM 88048  
 Various Dairies, Dona Ana County, NM  
 Sampler Signature: [Signature]

LAB # (LAB USE ONLY)	Field Code	# Containers	MATRIX			PRESERVATIVE METHOD					Sampling			
			WATER	SOIL	AIR	SLUDGE	HCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE	DATE	TIME
29876-1	DAD-01	1	X					X					5-9-12	7:04
76-3	DAD-01	2	X					X					5-9-12	7:04
77-1	DAD-02	1	X					X					5-9-12	8:01
77-2	DAD-02	2	X					X					5-9-12	8:01
78-1	DAD-03	1	X					X					5-9-12	8:23
78-2	DAD-03	2	X					X					5-9-12	8:23
79-1	DAD-04	1	X					X					5-9-12	9:11
79-2	DAD-04	2	X					X					5-9-12	9:11
80-1	DAD-05	1	X					X					5-9-12	10:53
80-2	DAD-05	2	X					X					5-9-12	10:53
81-1	DAD-06	1	X					X					5-9-12	9:58
81-2	DAD-06	2	X					X					5-9-12	9:58
82-1	DAD-07	1	X					X					5-9-12	12:56
82-2	DAD-07	2	X					X					5-9-12	12:56
83-1	DAD-08	1	X					X					5-9-12	12:15
83-2	DAD-08	2	X					X					5-9-12	12:15

Relinquished By: [Signature] Date: 5-9-12 Time: 10:30

Received By: [Signature] Date: 5/9/12 Time: 14:30

Lab Use Only  
 Intact 20 LIN  
 Headspace 33 °C  
 Temp 33 °C  
 Log-in Review 29

Remarks: TAS in EP 122 4/14/0 CS: 4099 6981

Turn Around Time



**APPENDIX C  
HYDROGRAPHS**

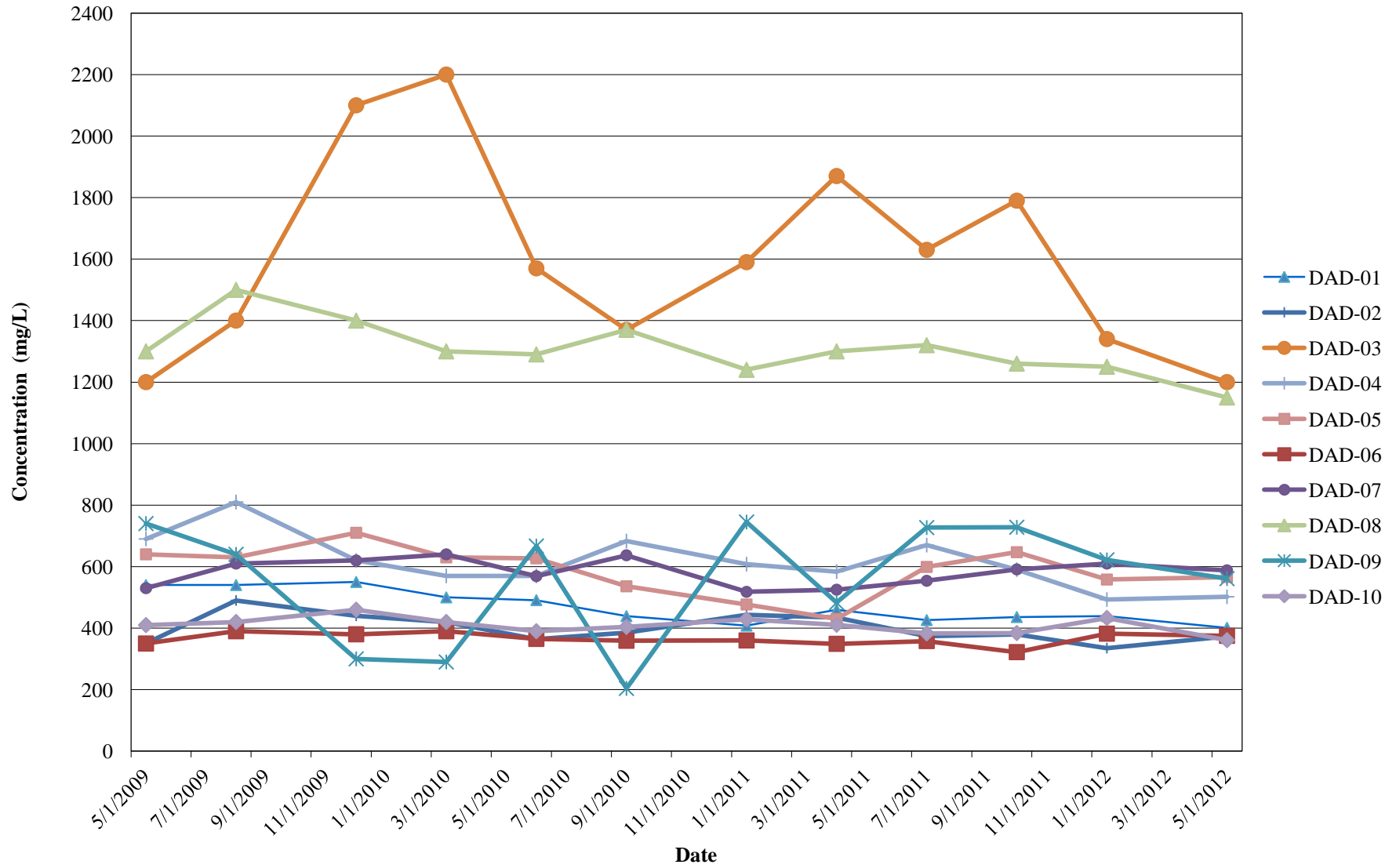






**APPENDIX D  
CONCENTRATION TRENDS**

### CONCENTRATION TRENDS FOR CHLORIDE IN DAD MONITORING WELLS



### CONCENTRATION TRENDS FOR NITRATE IN SELECT DAD MONITORING WELLS

