GW - 004

AGWMR

10/20/2010

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October 20, 2010

Mr. Glenn von Gonten
New Mexico Oil Conservation Division
1220 South St. Francis Dr
Santa Fe, NM 87505

Subject: Report Submittal

Dear Glenn:

Please find enclosed one hardcopy and one electronic copy of the following reports:

Eunice North Chlorides Investigation Report
Eunice North Gas Plant, Lea Co., GW-004

2009 Annual Groundwater Monitoring Report
Eunice South Gas Plant, Lea Co., GW-003

2009 Annual Groundwater Monitoring Report
Mark Owen #9 Reserve Pit, Lea Co., AP ~~#57~~ 56

Please contact me with any questions.

Sincerely,

Matthew P. Hudson

Enclosure

cc:

GW004

EUNICE NORTH CHLORIDES INVESTIGATION REPORT

EUNICE NORTH GAS PLANT

Lea County, New Mexico

Stantec

Prepared and Submitted By:

Stantec Consulting Corporation

Daniel Woodward, Project Manager

Reviewed By:

Chad Vowell, Senior Project Manager

Stephanie Peters, Project Engineer

October 4, 2010

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1.0 SITE BACKGROUND

During December 2009, Stantec Consulting Corporation (Stantec), on behalf of Chevron Environmental Management Company (Chevron), completed the Eunice North Chlorides Investigation at the Eunice North Gas Plant (Plant) in Eunice, New Mexico. In accordance with the July 15, 2008 Chlorides Investigation Workplan for the Plant, Stantec field personnel advanced twenty-five soil borings to a maximum depth of 60 feet below ground surface (bgs) in six previously identified areas of concern (AOCs) with elevated groundwater chloride concentrations located within the Plant Assessment Area (Site). The Site is comprised of the original Plant location and the surrounding area of approximately one square mile. A Site Location Map is presented as **Figure 1**.

The following report has been prepared for the New Mexico Oil Conservation Division (NMOCD) – Energy, Minerals, and Natural Resources Department in response to conditions identified in the April 17, 2008 Discharge Permit (GW-004) issued for the Plant. The NMOCD, requested Chevron determine possible sources of detected chlorides in the soils within the general vicinity of the Plant. This report is intended to address the following items outlined in Section 20.A of the April 2008 permit (attached as **Appendix A**):

- To determine the possible source(s) of detected chlorides in six areas of concern (AOCs) within the area of the Site, as previously identified by the work plan; and
- To begin determination of whether Chevron is not responsible, fully responsible, or jointly responsible with another entity for the chlorides contamination detected in the vicinity of the former gas plant.

The location of each AOC location is illustrated on the Site Details Map presented on **Figure 2.**

1. 1 Site Location and Background

The Plant is located in the southeast corner of New Mexico, in Lea County. The Site is approximately 0.25 miles north of the town of Eunice in the south half (S/2) of the southeast quarter (SE/4) of the northeast quarter (NE/4) of Section 28, Township 21 South (T-21-S), Range 37 East (R-37-E). The approximate latitude/longitude coordinates are 32° 27' 01.46" N and 103° 09' 42.71". The Site is located within an oil and gas well field with numerous active and abandoned wells as depicted in red on **Figure 1**. Additionally, a saltwater disposal well is located west of the Site.

The Plant was originally constructed in the 1940s, and was owned and operated by Texaco from the 1940s through 1998. The gas plant was constructed and modified to operate as a turbo expander type natural gas processing plant for extraction of NGLC natural gas liquids. There are several buildings, structures, and tanks across the site, including sumps, the compressor building, and the cooling tower. Plant boundaries are identified in red on **Figure 1**.

In 1998, plant ownership was transferred to Versado LLP (Versado), a partnership between Texaco and Dynegy Midstream Services (Dynegy). Dynegy operated the Plant for Versado. The Plant has not operated as a gas plant since Versado assumed ownership in 1998. Gas plant operations ceased and the operational equipment has been partially dismantled. Much of the equipment is out of operation with the exception of some compression equipment. In 2005,

Dynegy was purchased by Targa Midstream Services (Targa), and Targa became the Plant operator for Versado. The Plant is currently operated by Targa as a natural gas compressor station under an agreement with Chevron. Targa has also operated two compressors in the northwest portion of the Site since 2005.

1. 2 Remediation Background

Dissolved benzene and chromium concentrations were detected in the soil within the plant boundaries and groundwater in the area of the Plant when Texaco was renewing the New Mexico Oil Conservation Division (NMOCD) Ground Water Discharge Permit for the plant in the early 1990s. In August 1996, the NMOCD required an initial investigation to evaluate the integrity of process area sumps at the Plant. Dissolved benzene and dissolved chromium were detected in groundwater above the State of New Mexico Water Quality Control Commission (WQCC) Human Health standards, which was documented in the *Subsurface Environmental Assessment Report* (Highlander, 1996). The possible source of the chromium was defined as cooling tower blowdown discharged to the surface southwest of the plant.

Several soil and groundwater investigations were conducted between 1996 and 2003, with semi-annual groundwater monitoring beginning in 2004. Based on the groundwater investigations, the three primary groups of dissolved-phase groundwater constituents of concern (COCs) for this Site are: chromium, petroleum hydrocarbons, and dissolved solids (chloride concentrations have been monitored as representative of the dissolved solids). Additionally, PSH was observed in two wells (MW005 and MW006). PSH recovery and remediation activities were initiated in 2004. Currently, neither well exhibits measurable PSH accumulations.

Beginning in 2006 and continuing through 2010, semiannual groundwater samples collected during March or April and July or August have been analyzed for chloride concentrations from approximately 146 groundwater monitor well locations. Generally, the first semiannual sampling event is conducted during the months of March or April and groundwater samples are collected from all 146 groundwater monitor well locations, excluding any wells deemed inaccessible at the time of sampling. The second semi-annual sampling event is generally conducted during the months of July or August and groundwater samples are collected from approximately 71 groundwater monitoring well locations. Chloride concentrations above the New Mexico Water Quality Control Commission (NMWQCC) regulatory limit of 250 mg/L have been reported in 131 wells located at the Site.

In 2006, a plan to reduce the analytical suite and number of sampled wells in each event was approved by the NMOCD. Currently, 144 wells are located at the Site and are utilized to provide assessment of groundwater conditions and migration characteristics.

Chloride distribution and historical process knowledge of plant operations suggest elevated chlorides are unrelated to plant operation. The highest concentrations are located to the south and southwest of the plant (hydraulically up-gradient) and to the east of the plant (hydraulically down-gradient). The sources of the chloride impact have not been determined with any certainty; however, there are currently, and have historically been, numerous oil wells located in the vicinity of the plant which may be considered as possible chloride sources.

Beginning in 2003, remedial efforts for chromium concentrations exceeding regulatory action levels began through In-Situ Reactive Zone (IRZ) treatment at a "study area" consisting of three injection wells near the area of the highest chromium concentrations. This was followed by an array of 14 injection wells at the distal end of the chromium plume. The IRZ process used a carbohydrate-based electron donor (molasses) to stimulate reducing conditions in the subsurface to reduce hexavalent chromium to trivalent chromium. IRZ was discontinued in September 2005 based on bench-scale test results which suggested a more effective technology was available.

The remedial approach selected for future in-situ treatment of the dissolved-phase hexavalent chromium groundwater is anticipated to be injection of an inorganic reducing agent (calcium polysulfide) along with an electron donor (sodium acetate). The calcium polysulfide will provide rapid reduction of hexavalent chromium within the injection area, while the sodium acetate will create a reducing zone through biological activity capable of treating hexavalent chromium migrating into the injection area.

1. 2 Regional Geology

The geologic formations of interest at the Site include (from the oldest to the youngest): Triassic Chinle; Cretaceous undifferentiated; Tertiary Ogallala; and Quaternary windblown (eolian) sediments, designated as the Blackwater Draw Formation. Of particular interest with regard to the groundwater impact at the Site are the Tertiary Ogallala and the Blackwater Draw which together make up the Ogallala Aquifer.

A file review of previously submitted soil boring advancement and groundwater monitor well completion logs indicates the following geology at the Site:

- Interbedded sand and sandstone from the ground surface to approximately twenty (20) feet bgs.
- A caliche strata layer extends from twenty (20) feet bgs to a sand layer found at approximately sixty-five (65) feet bgs.
- The sand layer overlays a layer of clay found at approximately sixty-five (65) to ninety (90) feet bgs.
- The clay overlays a second sand and gravel stratum that extends to approximately one-hundred fifteen (115) feet bgs.
- Clay beds are encountered at approximately one-hundred fifteen (115) feet bgs and define the total depth of the Site wells.

1. 3 Regional Hydrogeology

The primary source of fresh water at the Site is the Ogallala Aquifer. The Ogallala Aquifer at the Site consists of the fluvial and eolian sediments of the Tertiary Ogallala Formation and the eolian sediments of the Quaternary Blackwater Draw Formation. The Ogallala Aquifer is bounded unconformably upon the erosional surface of the claystones, sandstones, and siltstones of the Triassic Chinle Formation. The Chinle forms the base of the fresh groundwater in the area because of the Chinle's low vertical permeability.

The base of the Ogallala Aquifer is composed of five to ten feet of gravel, sand, and clay. This gravel unit is overlain by alternating layers of loose and well consolidated red and yellow

sandstones. Previous investigators termed the gravel unit as the "deep" water-bearing zone and the overlying sandstones as the "shallow" water bearing zone. Overall depth to groundwater roughly varies with topography across the Site, ranging from roughly 30 to 90 feet.

1. 4 Groundwater Flow

Historical groundwater gauging data, from shallow-zone monitor well locations in the vicinity of the Plant, suggests shallow-zone (approximately 30 feet to 70 feet) groundwater moves radially from the area southwest of the Plant, then to the north and northeast as it passes under the plant at an approximate gradient of 0.006 foot per foot (ft/ft). Additionally, in the northeast corner of the Plant, a slight increase in gradient has been observed as the base of the shallow-zone aquifer mounds up, requiring the groundwater gradient to curve around the mounded area. As an example of shallow-zone groundwater flow at the Site, a historical pontentiometric map, Potentiometric Surface Map – Shallow Wells (March/April 2008), is presented on **Figure 3**.

Historical groundwater gauging data, from deep-zone monitor well locations in the vicinity of the Plant, suggests deep-zone (approximately 90 feet to 115 feet) groundwater moves in a general northeast direction at an approximate gradient of 0.017 ft/ft. Additionally, in the eastern portion of the Site, a significant increase in gradient has been observed as the base of the aquifer mounds upward at the northeast portion of the Site in the area of four injection well locations (IW010, IW011, IW012, and IW013), requiring the groundwater to flow to the north and south around the mound. As an example of deep-zone groundwater flow at the Site, a historical potentiometric map, Potentiometric Surface Map – Deep Wells (March/April 2008), is presented on **Figure 4**.

2.0 CURRENT CHLORIDE OVERVIEW

Groundwater chloride concentrations in excess of the NMWQCC regulatory limit of 250 milligrams per liter (mg/L) have been observed across the regional cross-section assessed as part of the semiannual groundwater monitoring program for the Site beginning in 2006 and continuing though 2009. Six areas exhibited elevated groundwater chloride concentrations and have been identified as Areas of Concern (AOCs).

Historically, chloride impacts to groundwater detected during groundwater assessment activities have been considered a regional issue and not related to plant operations. Therefore, no remedial operations have been in place.

2. 1 Historical Aerial Review

As identified in the NMCOD discharge permit, one objective of the chloride investigation is to identify potential sources of the chloride impacts within the identified AOCs. Aerial photographs of the area were evaluated for any discernible evidence of potential sources of environmental impact. The general activity on a property and land use changes can often be discerned from the type and layout of structures visible in aerial photographs and maps; however, specific elements of a site operation cannot normally be determined. Evaluation of historical aerial photos has identified several potential source locations within the boundaries of AOC-1, AOC-2, AOC-4, AOC-5, and AOC-6 during the years 1949, 1955, and 1968. The following tables summarize the historical aerial review:

AOC-1	
1949	A dark square area at the northwest boundary of the AOC appears to contain a liquid substance and resembles a historical surface discharge pit location.
	Four small circular structures, adjacently connected from east to west, directly south of the north central AOC boundary appear to be individual tanks within a historical tank battery.
1955	The same features indentified in the 1949 aerial photograph are also visible in the 1955 photograph.
1968	The same features indentified in the 1968 aerial photograph are also visible in the 1955 photograph.

AOC-1 Summary
Circular structures, resembling a historic tank battery, and square pit-like surface discharge areas are visible in the select aerial photographs reviewed from 1949-1968.

AOC-2	
1949	Two rows of vertical and slanted objects are visible in the northeast corner of the AOC. These long rows appear to represent rows of well casing in a former pipe lay down yard.
	A cicular area located at the north central boundary of the AOC appears to potentially represent a historical pit location.
1955	Four small circular structures horizontally connected from east to west are located adjacent to the southwest boundary of the AOC and appear to be individual tanks within a historic tank battery.
	A rectangular area located within the western boundary of the AOC appears to be a potential pit location.
1968	Six small vertically adjoined circular structures aligned north to south, are located at the south central boundary of the AOC and appear to be individual tanks within a historical tank battery.
	A rectangular area located within the western boundary of the AOC appears to be a potential pit location.

AOC-2 Summary

Vertical and slanted objects resembling a former pipe lay down yard, circular structures, resembling historic tank batteries, and pit-like surface discharge areas are visible in the select aerial photographs reviewed from 1949-1968.

AOC-3	
1949 1955 1968	As this AOC is within the Plant boundary, structural components are not visually distinguishable in the select aerial photographs reviewed from 1949-1968.

AOC-4	
1949	No issues were visually identified.
1955	A barren area of land located at the south east boundary of the AOC appears to be a potential well pad.
1968	A barren area of land located at the west boundary of the AOC appears to be a potential well pad.
	A barren area of land located at the south east boundary of the AOC appears to be a potential well pad.

AOC-4 Summary
Two barren areas of land, resembling well pad locations are visible in the select aerial photographs reviewed from 1949-1968.

AOC-5	
1949	A tall shadow on a barren area of land located at the east central boundary of the AOC appears to potentially represent a drilling platform on a potential well pad.
1955	A barren area of land located at the east central boundary of the AOC appears to be a potential well pad.
1968	No issues were visually identified.

AOC-5 Summary
A barren area of land, resembling a well pad location is visible in the select aerial photograph reviewed from 1949-1968.

AOC-6	
1949	No issues were visually identified.
1955	Three square areas, each consisting of four circular structures, are located near the northwest boundary of the AOC and appear to potentially represent three separate tank batteries.
	A dark square area is located at the north central boundary of the AOC and appears to be a historical pit location.
1968	No issues were visually identified.

AOC-6 Summary
Circular structures, resembling historic tank batteries, and a square pit-like surface discharge area are visible in the select aerial photographs reviewed from 1949-1968.

Historical aerials with AOC overlay illustrations are presented in **Appendix B**.

2. 2 Chloride Groundwater Concentrations

Groundwater sampling events conducted during August 2008 through August 2009 include three consecutive groundwater sampling events and provide representative documentation of current water quality conditions within the Site. During the August 2008 through August 2009 semiannual sampling events, groundwater samples were collected from all accessible groundwater monitor well locations at the Site, and samples were analyzed for chloride concentrations. The following sections include historical aerial summaries and historical groundwater monitoring data results from August 2008 through August 2009 at the respective AOCs.

The August 2008 isopleth maps (Chloride mg/L Shallow Wells August 2008 and Chloride mg/L Deep Wells August 2008) are presented as **Figure 5** and **Figure 6**, respectively. The March/April 2009 isopleth maps (Chloride mg/L Shallow Wells March/April 2009 and Chloride mg/L Deep Wells March/April 2009) are presented as **Figure 7** and **Figure 8**, respectively. The July/August 2009 isopleth maps (Chloride mg/L Shallow Wells July/August 2009 and Chloride mg/L Shallow Wells July/August 2009) are presented as **Figure 9** and **Figure 10**, respectively.

2.2.1 AOC-1

AOC-1 is an area located approximately 750 feet west-southwest of the Plant and encompasses a land surface area of approximately 2.75 acres. The historical aerial review, from 1949 through

1968, indicated the presence of potential source locations related to former oil and gas production operations within and adjacent to the boundaries of AOC-1. Three potential source locations were visually identified during the historical aerial review and include the following structures: a tank battery (i.e. crude oil, produced water, or natural gas) located along the north side of the AOC, a pit located at the northwest boundary of the AOC, and a pit located at the northeast boundary of the AOC.

Beginning in August 2008 through August 2009, groundwater samples collected from two shallow-zone groundwater monitor wells (MW068 and MW069) located within the boundaries of AOC-1 (hydrologically up-gradient of the Plant) exhibited the following chloride concentrations:

- MW068 – reported chloride concentrations ranged from 1,170 mg/L to 5,690 mg/L; and
- MW069 was sampled for chlorides August 2009 (3,470 mg/L).

The groundwater monitor wells between the Plant and AOC-1 include four shallow-zone well locations (MW025, MW031, MW060, and MW061). Groundwater samples collected from between August 2008 and August 2009 from these four shallow-zone groundwater monitor well locations exhibited the following chloride concentrations:

- MW025 – reported chloride concentrations ranged from 392 mg/L to 432 mg/L;
- MW031 – reported chloride concentrations ranged from 90.4 mg/L to 121 mg/L;
- MW060 – reported chloride concentrations ranged from 1,130 mg/L to 1,450 mg/L; and
- MW061 – reported chloride concentrations ranged from 651 mg/L to 716 mg/L.

The AOC-1 groundwater chloride concentration results are included on isopleths maps presented as **Figure 5**, **Figure 7**, and **Figure 9**.

2.2.2 AOC-2

AOC-2 is an area located approximately 500 feet south of the Plant and encompasses a land surface area of approximately three acres. The historical aerial review, from 1949 through 1968, indicated the presence of potential source locations related to former oil and gas production operations within and adjacent to the boundaries of AOC-2. Six potential source locations were visually identified during the historical aerial review and include the following structures: a pipe storage/lay down yard located along the north east boundary of the AOC, a pit located at the north central boundary of the AOC, a tank battery located at the southwest boundary of the AOC, a tank battery located at south-central boundary of the AOC, a pit located at the west-central boundary of the AOC, and a tank battery located at the south-central boundary of the AOC.

Beginning in August 2008 through August 2009, groundwater samples collected from four groundwater monitor well locations (MW010, MW014, MW015, and MW015A) within the boundaries of AOC-2 (hydrologically up-gradient of the Plant) exhibited the following chloride concentrations:

- MW010 – reported chloride concentrations ranged from 2,570 mg/L to 2,960 mg/L;
- MW014 – reported chloride concentrations ranged from 133 mg/L to 1,600 mg/L;
- MW015 – reported chloride concentrations ranged from 1,590 mg/L to 2,380 mg/L; and
- MW015A – reported chloride concentrations ranged from 2,010 mg/L to 2,270 mg/L.

The groundwater monitor wells between the Plant and AOC-2 include two shallow-zone well locations (MW007 and MW013) and three deep-zone well locations (MW007A, MW013A, and MW040A). Groundwater samples collected from these five monitor well locations exhibited the following chloride concentrations:

- MW007 was not sampled due to localized construction activity;
- MW013 – reported chloride concentrations ranged from 760 mg/L to 819 mg/L;
- MW007A was not sampled due to localized construction activity;
- MW013A – reported chloride concentrations ranged from 68 mg/L to 85.3 mg/L; and
- MW040A – reported chloride concentrations ranged from 54.1 mg/L to 54.1 mg/L.

The AOC-2 groundwater chloride concentration results are included on isopleths maps presented as **Figure 5** through **Figure 10**.

2.2.3 AOC-3

AOC-3 is an area located in the southwest portion of the Eunice North Gas Plant and encompasses a land surface area of approximately 0.75 acres. The historical aerial review, from 1949 through 1968, indicated AOC-3 has historically been within the boundary of the Plant.

The groundwater samples collected during March 2009 from monitor wells within the area of AOC-3 exhibited the following chloride concentrations during March 2009:

- MW008M was sampled for chlorides March 2009 (1,230 mg/L);
- MW011 was sampled for chlorides March 2009 (1,380 mg/L);
- MW011M was sampled for chlorides March 2009 (1,330 mg/L);
- MW008A was sampled for chlorides March 2009 (1,130 mg/L);
- MW011A was sampled for chlorides March 2009 (1,420 mg/L); and
- MW087A was sampled for chlorides March 2009 (1,060 mg/L).

The AOC-3 groundwater chloride concentration results are included on isopleths maps presented as **Figure 7** and **Figure 8**.

2.2.4 AOC-4

AOC-4 is an area located in the northeast portion of the Plant and encompasses a land surface area of approximately 0.8 acres. The historical aerial review, from 1949 through 1968, indicated the presence of potential source locations related to former oil and gas production operations within and adjacent to the boundaries of AOC-4. Two potential source locations were visually identified during the historical aerial review and include the following structures: a well pad at the western boundary of the AOC, and a well pad at the southeast boundary of the AOC.

Beginning in August 2008 through August 2009, groundwater samples collected from two shallow-zone groundwater monitor wells (MW021A and MW042A) located within the boundaries of AOC-4 (hydrologically down-gradient of the Plant) exhibited the following chloride concentrations:

- MW021A – reported chloride concentrations ranged from 6,020 mg/L to 6,370 mg/L; and
- MW042A was sampled for chlorides March 2009 (2,990 mg/L).

The AOC-4 groundwater chloride concentration results are included on isopleths maps presented as **Figure 6**, **Figure 8**, and **Figure 10**.

2.2.5 AOC-5

AOC-5 is an area located approximately 500 feet east of the Plant and encompasses a land surface area of approximately 7.2 acres. The historical aerial review, from 1949 through 1968, indicated the presence of potential source locations related to former oil and gas production operations within and adjacent to the boundaries of AOC-5. One potential source location was visually identified during the historical aerial review and includes the following structure: a well pad located at the central east boundary of the AOC.

Beginning in August 2008 through August 2009, groundwater samples collected from five deep-zone groundwater monitor wells (MW049SA, MW050SA, MW051SA, MW052SA, and MW056SA) located within the boundaries of AOC-5 (hydrologically down-gradient of the Plant) exhibited the following chloride concentrations:

- MW049SA was sampled for chlorides March 2009 (2,210 mg/L);
- MW050SA was sampled for chlorides March 2009 (1,260 mg/L);
- MW051SA was sampled for chlorides April 2009 (1,240 mg/L);
- MW052SA was sampled for chlorides March 2009 (1,980 mg/L); and
- MW056SA – reported chloride concentrations ranged from 1,230 mg/L to 1,540 mg/L.

The groundwater monitor wells between the Plant and AOC-5 include three shallow-zone well locations (MW034, MW043, and MW044) and four deep-zone well locations (MW041A, MW091SA, MW092SA, and MW093SA). Groundwater samples collected from these seven monitor well locations exhibited the following chloride concentrations during 2009:

- MW034 was sampled for chlorides March 2009 (414 mg/L);
- MW043 was sampled for chlorides March 2009 (240 mg/L);
- MW044 was sampled for chlorides March 2009 (505 mg/L);
- MW041A was sampled for chlorides April 2009 (449 mg/L);
- MW091SA was sampled for chlorides March 2009 (834 mg/L);
- MW092SA was sampled for chlorides March 2009 (905 mg/L); and
- MW093SA was sampled for chlorides March 2009 (949 mg/L).

The AOC-5 groundwater chloride concentration results are included on isopleths maps presented as **Figure 5** through **Figure 10**.

2.2.6 AOC-6

AOC-6 is an area located approximately 1,250 feet east of the Plant and encompasses a land surface area of approximately 8.3 acres. The historical aerial review, from 1949 through 1968, indicated the presence of potential source locations related to former oil and gas production operations within and adjacent to the boundaries of AOC-6. Four potential source locations were visually identified during the historical aerial review and include the following structures: three small tank batteries located near the north central boundary of the AOC, and one historical pit location located adjacent to the north central boundary of the AOC.

Beginning in August 2008 through August 2009, groundwater samples collected from eight deep-zone groundwater monitor wells (MW064SA, MW065SA, MW066SA, MW071SA, MW083SA, MW084SA, MW085SA, and MW086SA) located within the boundaries of AOC-6 (hydrologically down-gradient of the Plant) exhibited the following chloride concentrations:

- MW064SA – reported chloride concentrations ranged from 1,190 mg/L to 1,500 mg/L;
- MW065SA – reported chloride concentrations ranged from 967 mg/L to 1,120 mg/L;
- MW066SA – reported chloride concentrations ranged from 966 mg/L to 1,160 mg/L;
- MW071SA – reported chloride concentrations ranged from 929 mg/L to 1,170 mg/L;
- MW083SA – reported chloride concentrations ranged from 1,470 mg/L to 1,980 mg/L;
- MW084SA – reported chloride concentrations ranged from 1,980 mg/L to 2,530 mg/L;
- MW085SA – reported chloride concentrations ranged from 1,160 mg/L to 1,620 mg/L; and
- MW086SA – reported chloride concentrations ranged from 1,250 mg/L to 1,390 mg/L.

In addition to the seven well locations identified between AOC-5 and the Plant, the groundwater samples collected from the five deep-zone groundwater monitor wells between the Plant and AOC-6 exhibited the following concentrations between August 2008 and August 2009:

- MW048SA – reported chloride concentrations ranged from 492 mg/L to 589 mg/L;
- MW053SA – reported chloride concentrations ranged from 161 mg/L to 205 mg/L;
- MW054SA – reported chloride concentrations ranged from 834 mg/L to 985 mg/L;
- MW055SA – reported chloride concentrations ranged from 582 mg/L to 719 mg/L;
- MW057SA – reported chloride concentrations ranged from 324 mg/L to 581 mg/L; and
- MW074SA – reported chloride concentrations ranged from 491 mg/L to 634 mg/L.

The AOC-6 groundwater chloride concentration results are included on isopleths maps presented as **Figure 5** through **Figure 10**.

3.0 SOIL SAMPLING PROTOCOL AND ANALYSIS

During December 2009, Stantec field personnel collected soil samples from twenty-five soil borings within the six AOCs identified at the Site and submitted the samples to a Chevron approved laboratory, for chlorides analysis. Analytical results from the chloride soils investigation at the Site are utilized to:

- Serve as the initial assessment to determine possible sources of regional chloride impacts to groundwater;
- Assist in determining the responsible party(s) for future chloride remediation; and
- Assess the degree and amount of responsibility, if any, Chevron may have regarding chloride impacts to groundwater detected within the Site area.

3.1 Field Assessment Protocol

Field assessment activities were centered on the six AOCs identified. Assessment activities included the advancement and sampling of twenty-five soil borings to determine possible sources of regional impacts to groundwater. The soil boring locations for each AOC are listed below:

- AOC-1: SB-1, SB-2, SB-3, SB-4, and SB-5;
- AOC-2: SB-1, SB-2, SB-3, and SB-4;
- AOC-3: SB-1, SB-2, SB-3, and SB-4;
- AOC-4: SB-1, SB-2, SB-3, and SB-4;
- AOC-5: SB-1, SB-2, SB-3, and SB-4; and
- AOC-6: SB-1, SB-2, SB-3, and SB-4.

The sample ID for each sample location is indicated by the respective AOC followed by the soil boring and the depth interval (in feet) from which the soil sample was collected (i.e. AOC-1, SB-3 (15-20)). Soil boring locations are presented on **Figure 2**.

3.1.1 Utility Notification and Clearance

Proper underground pipeline and utility clearance notifications and preparations were made prior to conducting intrusive activities. Underground pipeline location and clearance activities included:

- Notifying New Mexico One Call;
- Notifying Plant personnel;
- Walking the proposed locations with a line locating device prior to advancement;
- Meeting underground utility operators at the time of drilling to verify clearance; and
- Clearing borehole locations using hand auger prior to boring advancement (hydro-vac technology was present at the time of drilling activities but was frozen due to adverse weather conditions).

3.1.2 Soil Boring Advancement Protocol

Field assessment activities included the advancement of twenty-five soil boring to approximately 40-60 feet below ground surface (bgs). Soil borings were advanced utilizing air rotary technology. The proposed boring depths were derived from a review of historic groundwater

elevation that suggested the static groundwater is approximately 50-60 feet bgs. All borings were terminated when groundwater was reached.

During borehole advancement, soil characterization was documented by observing cuttings brought to the surface through standard air rotary protocol. Lithologic descriptions – including type, color, interface transitions, and depth were logged on standard borehole log forms attached in **Appendix C**.

3.1.3 Soil Sampling Protocol

Beginning at a depth of ten feet, soil cuttings were collected at each five foot interval and screened for chlorides using a chloride test kit. Chloride titration strips (HACH chloride in soil test kits) were used to measure dissolved chloride concentrations in soil by creating and measuring aqueous extracts.

The field sampling protocol consisted of samples collected and submitted from:

- The soil sample from the depth interval exhibiting the most elevated field test chloride reading;
- The soil samples from depths immediately above and below the most elevated field test chloride reading sample location were collected and submitted to the laboratory and held pending results from the previous sample; and
- The soil sample from the boring terminus or in the event groundwater was reached the sample was collected immediately above the groundwater interface.

3.1.4 Soil Sample Handling and Analysis

Selected soil samples were placed in laboratory provided containers, labeled, logged on a laboratory chain of custody, and placed on ice in an insulated cooler to maintain a temperature of approximately 40°F (4°C). Samples were packed in coolers with inert packing material to prevent breakage. At the end of the sampling effort each day, the samplers inventoried the samples in each cooler against the chain of custody form. Soil samples were then transmitted via FedEx to Lancaster Laboratories in Lancaster, Pennsylvania for analysis of chlorides by EPA Method 300.

Sample possession is traceable from the time each sample was collected until the sample was received at the laboratory.

3.1.5 Soil Boring Abandonment

Once terminated, soil borings were backfilled in accordance with State regulations after all soil samples were collected.

3. 2 Analytical Results

HACH test kits were used to analyze chloride concentrations in each soil sample by Stantec field personnel and the resulting quantab units were utilized to determine the estimated chloride concentrations for each depth interval collected. The results of the field chloride titration strips

are tabulated in **Table 1**. Results of soil samples sent for laboratory analysis have been tabulated in **Table 2**. The laboratory analytical reports can be found in **Appendix D.**

The laboratory analytical results of all soil samples collected during the December 2009 chloride soils investigation were assessed for elevated chloride concentrations. As there is currently no New Mexico regulatory limit for chloride concentrations in soils, concentration results above 250 (milligrams per killigram) mg/kg were considered elevated and are identified in the tabulated data. Results from each AOC are discussed below.

3.2.1 AOC-1

AOC-1		
Number of Detections	*14*	
Number of Elevated Chloride Concentrations	*8*	
Minimum Concentration (mg/kg)	*14.5*	*AOC-1 SB-5 (55-60)*
Maximum Concentration (mg/kg)	*6,430*	*AOC-1 SB-4 (20-25)*

A concentration map displaying sample results from respective depth intervals and soil boring locations, AOC 1 Soil Analytical Results December 8, 2009, is presented as **Figure 11**.

3.2.2 AOC-2

AOC-2		
Number of Detections	*7*	
Number of Elevated Chloride Concentrations	*0*	
Minimum Concentration (mg/kg)	*10.2*	*AOC-2 SB-1 (40-45)*
Maximum Concentration (mg/kg)	*147*	*AOC-2 SB-4 (35-40)*

A concentration map displaying sample results from respective depth intervals and soil boring locations, AOC 2 Soil Analytical Results December 7, 2009, is presented as **Figure 12**.

3.2.3 AOC-3

AOC-3	
Number of Detections	*0*
Number of Elevated Chloride Concentrations	*0*

* No sample analysis resulted in detectable concentrations of chlorides in AOC-3.

A concentration map displaying sample results from respective depth intervals and soil boring locations, AOC 3 Soil Analytical Results December 10, 2009, is presented as **Figure 13**.

3.2.4 AOC-4

AOC-4		
Number of Detections	*10*	
Number of Elevated Chloride Concentrations	*1*	
Minimum Concentration (mg/kg)	*14.1*	*AOC-4 SB-2 (10-15)*
Maximum Concentration (mg/kg)	*484*	*AOC-4 SB-2 (15-20)*

A concentration map displaying sample results from respective depth intervals and soil boring locations, AOC 4 Soil Analytical Results December 9, 2009, is presented as **Figure 14**.

3.2.5 AOC-5

AOC-5		
Number of Detections	*10*	
Number of Elevated Chloride Concentrations	*1*	
Minimum Concentration (mg/kg)	*30.7*	*AOC-5 SB-4 (10-15)*
Maximum Concentration (mg/kg)	*283*	*AOC-5 SB-4 (15-20)*

A concentration map displaying sample results from respective depth intervals and soil boring locations, AOC 5 Soil Analytical Results December 9 & 11, 2009, is presented as **Figure 15**.

3.2.6 AOC-6

AOC-6		
Number of Detections	*12*	
Number of Elevated Chloride Concentrations	*4*	
Minimum Concentration (mg/kg)	*20.7*	*AOC-6 SB-1 (55-60)*
Maximum Concentration (mg/kg)	*844*	*AOC-6 SB-1 (25-30)*

A concentration map displaying sample results from respective depth intervals and soil boring locations, AOC 6 Soil Analytical Results December 10 & 11, 2009, is presented as **Figure 16**.

4.0 QUALITY ASSURANCE/QUALITY CONTROL PROGRAM

Quality assurance/quality control (QA/QC) objectives for soil sampling data include:

- Collecting data in accordance with procedures as appropriate for its intended use;
- Maintaining sufficient quality data to meet scientific and legal scrutiny;
- Generating representative data of known and acceptable precision and accuracy; and
- Evaluating data that is consistent in content and quality.

Results for the QA/QC samples along with laboratory QA/QC results are included in the laboratory analytical reports located in **Appendix D**.

4.1 FIELD DUPLICATE SAMPLES

A field duplicate sample is a second sample collected at the same location as the original sample. Duplicate samples are collected simultaneously, or in immediate succession, using identical recovery techniques, and treated in an identical manner during storage, transportation, and analysis. Duplicate samples are collected to assure accuracy of testing methods by the laboratory. Nine duplicate samples were collected during the December 2009 chlorides soil investigation. Duplicate samples are submitted to the laboratory without a reference to the corresponding sample location. All duplicate samples and their corresponding sample locations are listed in the field notes located in **Appendix E**.

The following table presents chloride analytical results from selected soil samples during the December 2009 chlorides soil investigation compared to their respective duplicate sample results.

Date	Original Sample ID	Original Sample Analytical Results (ug/L)	Duplicate Sample ID	Duplicate Sample Analytical Result (ug/L)
12/7/09	AOC-2 SB-4 (35-40)	147	DUP100	151
12/8/09	AOC-1 SB-2 (55-60)	251	DUP101	105
12/8/09	AOC-1 SB-1 (55-60)	43.4	DUP102	34.6
12/9/09	AOC-4 SB-2 (45-50)	22.4	DUP103	39.7
12/10/09	AOC-3 SB-2 (40-45)	<10.3	DUP104	<10.3
12/11/09	AOC-5 SB-4 (45-50)	59.5	DUP105	60.9
12/11/09	AOC-5 SB-2 (45-50)	34.5	DUP106	30.5
12/11/09	AOC-5 SB-3 (45-50)	45.6	DUP107	55.4
12/11/09	AOC-6 SB-3 (55-60)	63.9	DUP108	67.6

Though seven out of the nine duplicate sample results represent acceptable laboratory precision, the analytical chloride results of two duplicate samples (DUP101 and DUP103) varied from the respective original sample ID results. The chloride concentrations associated with DUP103 and the respective original sample ID (AOC-4 SB-2 (45-50)) are both low concentration values and the reported chloride concentrations only differ by 17.3 micrograms per liter (ug/L). The chloride concentrations associated with DUP101 and the respective original sample ID (AOC-1 SB-2 (55-60)) resulted in significant variance. However, due to the nature of the soil

samples collected and the fact that most other samples produced acceptable laboratory precision results, the variation identified in DUP101 is attributed to a sample homogeneity issue and is not the result of unacceptable laboratory precision.

4.2 Decontamination Procedures

An Alconox-water solution was used to decontaminate soil sampling equipment followed by a distilled water rinse. The Alconox-water solution was changed periodically. One-time use disposable equipment was not decontaminated, but was packaged and appropriated disposed.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based upon reviews of historical data, a historical aerial review, and soil data collected during December 2009.

5. 1 Conclusions

During the Eunice North chloride investigation, soil samples were analyzed from various depth intervals in twenty-five soil boring locations from six AOCs within a one mile radius of the Eunice North gas plant. The intent of this investigation was to locate potential chloride source areas related to the historical operation of the Plant. The following conclusions are derived from the analysis of the historical data, the historical aerial review, and the results of the December 2009 soil survey:

A chloride source area does not potentially appear to be within the Plant boundary

- AOC-3 was the only AOC identified within the plant boundary. Process knowledge gathered from interviews with plant personnel indicates the Eunice North gas plant has never conducted operations that included the utilization or waste production of possible chloride contaminants;
- AOC-3 is in relative close proximity to historical production operations on the southwest side of the plant. However, no historical objects of concern were identified in AOC-3 during the historical aerial review;
- The results of all soil sample analyzed from AOC-3 were reported non-detect (**Figure 13**);
- A comparison of the historical gauging data illustrating potentiometric groundwater flow moving north-northeast across the Plant (**Figure 3** and **Figure 4**) versus a review of the reported historical chloride groundwater results, which consistently depict elevated chloride plume concentrations to the south and southwest of the Plant (**Figure 5** through **Figure 10**), demonstrates the potential for alternative chloride source locations outside the plant boundary (perhaps originating in AOC-1 or AOC-2); and
- Though a review of the reported 2009 groundwater data within the area of AOC-3 identified elevated chloride concentrations at four deep-zone monitor well locations (MW011M, MW011A, MW008M, and MW087A) (**Figure 8** and **Figure 10**), the non-detect results identified in the soils investigation and process knowledge of the gas plant operations support the conclusion that AOC-3 does not contain a chloride source.

At least two potential chloride source areas appear within AOC-1

- The historical aerial review (**Section 2.1**) identified several objects of concern in close proximity to the December 2009 soil boring locations SB-1 and SB-2, including former pit locations and tank batteries;
- The AOC-1 reported chloride concentration results, from the analysis of soil samples collected from boring locations SB-4 and SB-2, were elevated (as presented on **Figure 11**). Though the historical aerial review did not indicate an object of concern at SB-4, the reported chloride concentration result from the analysis of soil sample AOC-1 SB-4 (20-25) (6,430 mg/kg), was the highest concentration detected during the December 2009 investigation;
- Historical groundwater data indicate elevated chloride concentrations from several of the groundwater samples collected from shallow-zone monitor well locations within the

boundaries of AOC-1. These elevated groundwater concentrations are likely related to the AOC-1 source areas identified in the soil investigation.

- Groundwater sample results from August 2008 (**Figure 5)** indicate a peak concentration at shallow-zone monitor well MW068 (5,690 mg/L), slightly down-gradient of boring SB-4. Therefore, the source area at SB-4 is likely contributing to the reported chloride groundwater concentrations at MW068; and
- Groundwater sample results from August 2009 (**Figure 9**) indicate an elevated concentration at shallow-zone monitor well MW069 (3,470 mg/L), slightly down-gradient of boring SB-2. Therefore, the source area at SB-2 is likely contributing to the reported chloride groundwater concentrations at MW069.

<u>At least two potential chloride source areas appear within AOC-6</u>

- Though the historical aerial review did not identify objects of concern within the southern boundaries of AOC-6, the tank batteries and potential pit location identified along the northern boundary of the AOC is evidence of historical oil and gas production activity conducted within the AOC;
- The reported AOC-6 chloride concentrations were slightly elevated in the soil sample results from boring locations SB-3 and SB-1 (as presented on **Figure 16**); and
- Reported historical data indicates elevated groundwater chloride concentrations from the analysis of several of the groundwater samples collected from deep-zone well locations within the boundaries of AOC-6. These elevated groundwater concentrations are likely related to the AOC-6 source areas identified in the soil investigation.
  - Historical groundwater sample results from August 2008 through August 2009 (**Figure 6**, **Figure 8**, and **Figure 10**) consistently demonstrate elevated chloride concentrations at deep-zone monitor wells east of the distal array of injection well locations. The potential chloride source detected at SB-3 may contribute to the elevated chloride concentrations from groundwater samples collected at monitor well locations slightly down-gradient (MW077SA, GOPWW2, and MW086SA).
  - The potential chloride source detected at SB-1 may contribute to the elevated chloride concentrations from the analysis of groundwater samples collected at a deep-zone monitor well location slightly down-gradient (MW071SA). SB-1 may also potentially contribute to the elevated concentration at the deep-zone monitor well location MW066SA, located in close proximity to and directly west of SB-1, though MW066SA is technically up-gradient of SB-1.

<u>At least one potential chloride source area appears within AOC-4</u>

- Though the historical aerial review did not identify objects of concern within the boundaries of AOC-4, there is evidence of historical oil and gas production activity (i.e. well pad locations) within the boundaries of AOC-4, specifically near boring locations SB-1, SB-2, and SB-4;
- The reported AOC-4 chloride concentrations were elevated in the soil samples results from boring location SB-2 (as presented on **Figure 14**); and
- Reported historical data results from 2009 indicate elevated chloride concentrations from the analysis of groundwater samples collected from deep-zone monitor well locations along the northeast perimeter of the gas plant (MW021A and MW042A). These elevated groundwater concentrations are likely related to the AOC-4 source area identified in the soil investigation.

- Monitor well MW021A is directly down-gradient from SB-2 and the potential source area at SB-2 is likely contributing to the elevated chloride concentrations reported in historical groundwater samples; and
- Monitor well location MW042SA is slightly up-gradient of SB-2. However, due to the close proximity of SB-2 to MW042SA, the potential source area at SB-2 is likely contributing to the respective elevated chloride concentrations reported in historical groundwater samples.

At least one potential chloride source area appears within AOC-5

- The historical aerial review identified a potential pit on the east boundary of AOC-5 (**Section 2.1**) in close proximity to boring location SB-4. Boring location SB-4 is located directly north of the pit area identified on historical aerials.
- The reported AOC-5 chloride concentration result of soil sample AOC-5 SB-4 (15-20) was elevated (283 mg/kg);
- Reported historical data results from 2008 and 2009 indicate elevated chloride concentrations from groundwater samples collected from four deep-zone monitor wells (MW084SA, MW064SA, MW085SA, and MW083SA) located north-northeast of the potential source at SB-4 (**Figure 6**, **Figure 8**, and **Figure 10**). These elevated groundwater concentrations are likely related to the AOC-4 source area identified in the soil investigation. All four deep-zone monitor well locations are directly down-gradient from SB-4.

At least one potential chloride source area appears within AOC-2

- The historical aerial review (**Section 2.1**) identified several objects of concern in close proximity to boring locations SB-2 and SB-3, potentially including former pit locations, tank batteries, and a storage/lay down pipe yard;
- The reported AOC-2 chloride concentration results were all below 250 mg/kg;
- Though no elevated chloride concentrations were reported from the analysis of soil samples collected at four boring locations within the boundary of AOC-2, the historical aerial review and a review of the reported historical groundwater data both suggest there may be a chloride source within the boundaries of AOC-2.
  - Shallow-zone monitor well groundwater sample results from August 2008 through August 2009 (**Figure 5**, **Figure 7**, and **Figure 9**) consistently reported elevated chloride concentrations in the analysis of groundwater samples at monitor well locations MW010 and MW015.
  - Deep-zone monitor well groundwater sample results from August 2008 through 2009 (**Figure 6**, **Figure 8**, and **Figure 10**) consistently reported elevated chloride concentrations in the analysis of groundwater samples at monitor well location MW015A.

5. 2 Recommendations

The following recommendations are derived from the conclusions generated from the results of the December 2009 soil survey:

- The area south of AOC-2 SB-3, between the monitor well locations MW010 and MW015 and the area directly southwest of AOC-2 SB-2 should be further analyzed to determine the existence of a chloride source(s) within AOC-2; and

- The Plant Discharge Permit (GW-004) should be amended to indicate that the Eunice North gas plant is no longer considered a potential source area for the chloride groundwater plume within the Plant boundary and in the general vicinity of the Plant.

6.0 STATEMENT OF LIMITATIONS

The conclusions and recommendations contained in this report are based upon professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted geologic and engineering standards and practices applicable to the Site. Stantec derived the data in this report primarily from visual inspections, examination of data collected from consulting professionals previously conducting site activities, examination of records in the public domain, and interviews with individuals having information about the Site.

7.0 REFERENCES

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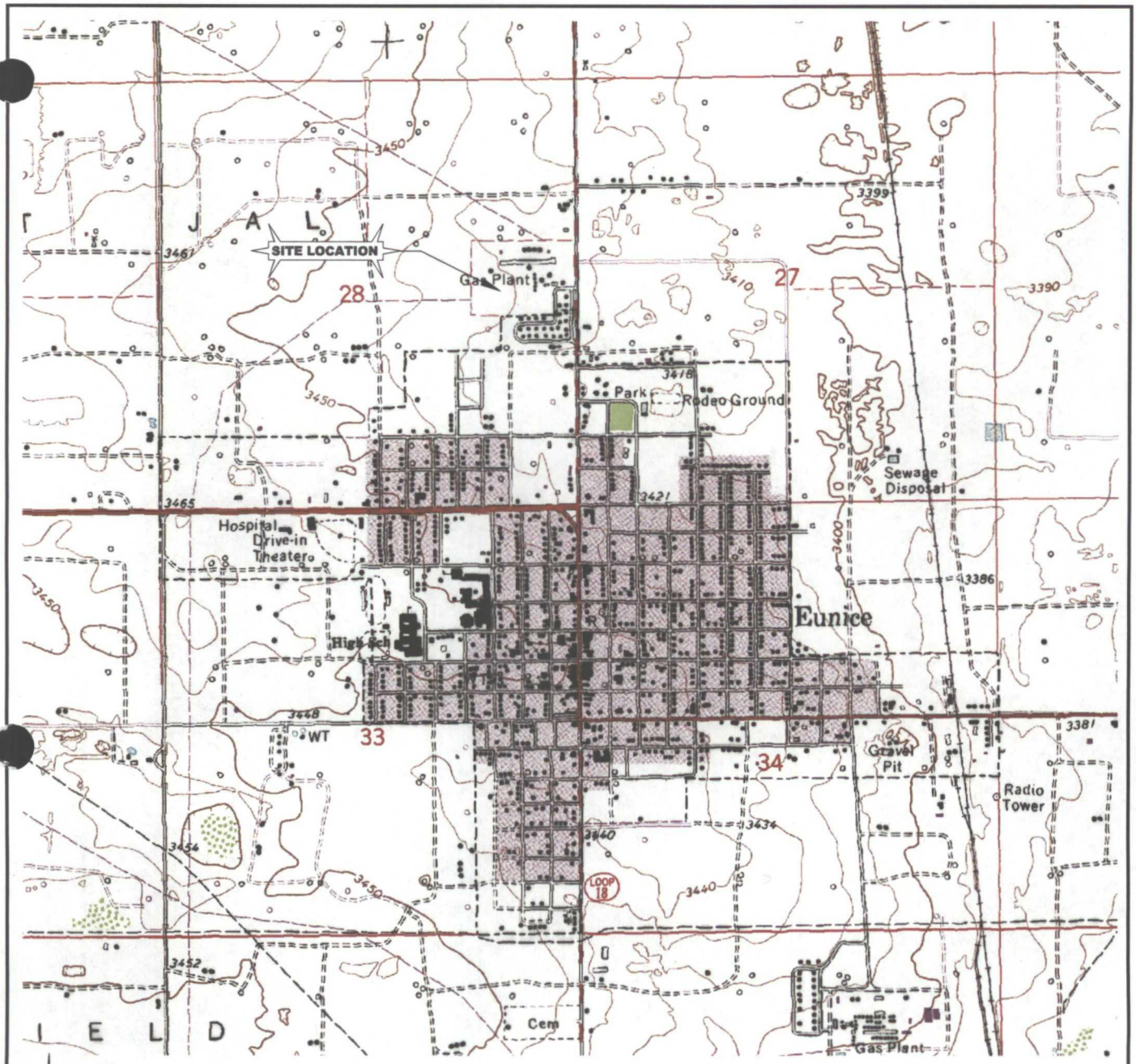
Walker, J. R. (1978). *Baylor Geological Studies, Geomorphic Evolution of the Southern High Plains.* (Bulletin No. 35). Baylor University Department of Geology, Waco, Texas.

FIGURE 1
Site Location Map



REFERENCE: USGS 7.5 MINUTE QUADRANGLE; EUNICE AND RATTLESNAKE CANYON, NEW MEXICO

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Houston, Texas 77040
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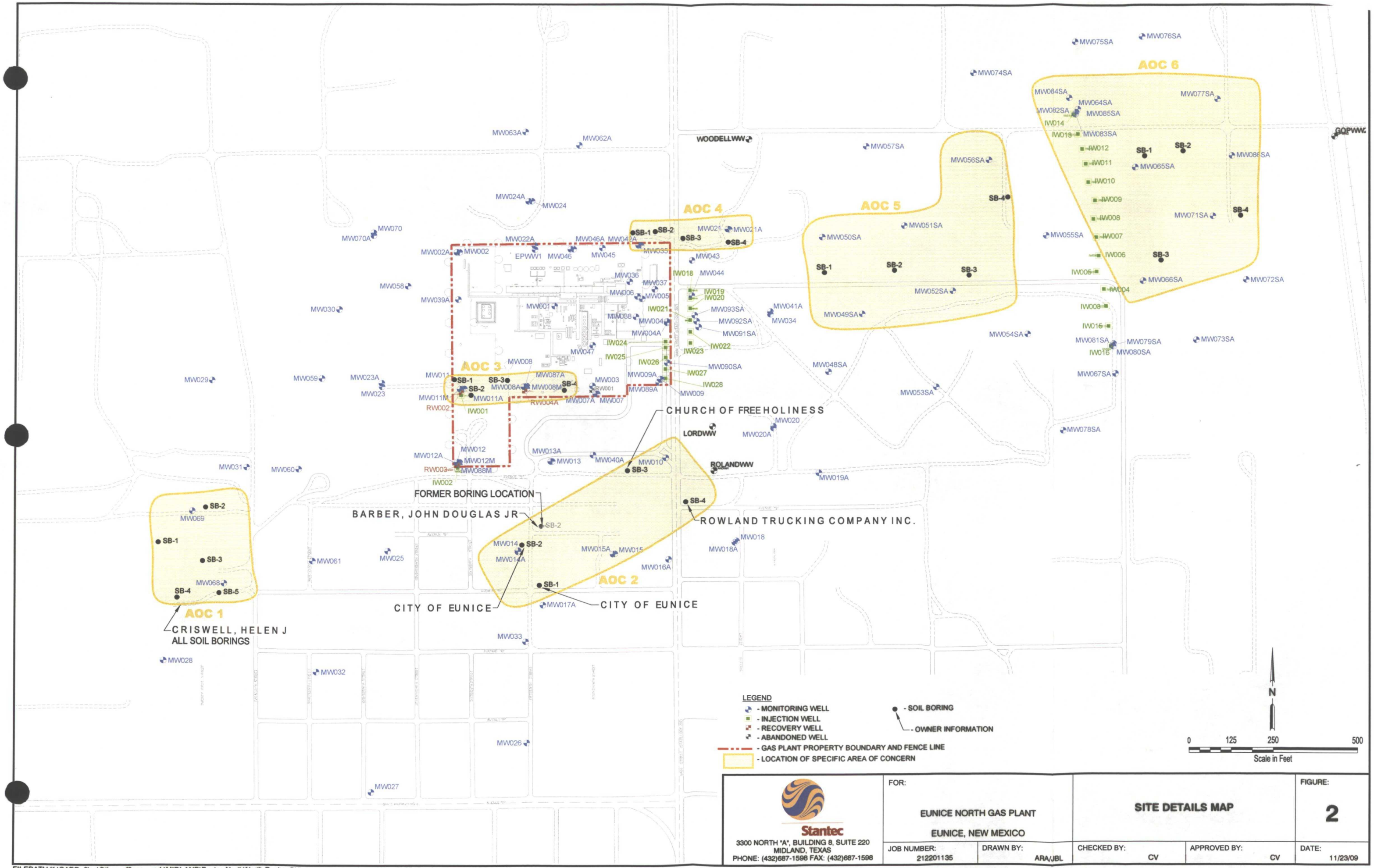
FOR:				FIGURE:
CHEVRON EUNICE NORTH GAS PLANT EUNICE, NEW MEXICO		SITE LOCATION MAP		1
JOB NUMBER: 212201135	DRAWN BY: ARA	CHECKED BY: DNW	APPROVED BY: CV	DATE: 1/5/10

Eunice N... Site Location Map.dwg

FIGURE 2
Site Details Map



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SITE DETAILS MAP

FIGURE: 2

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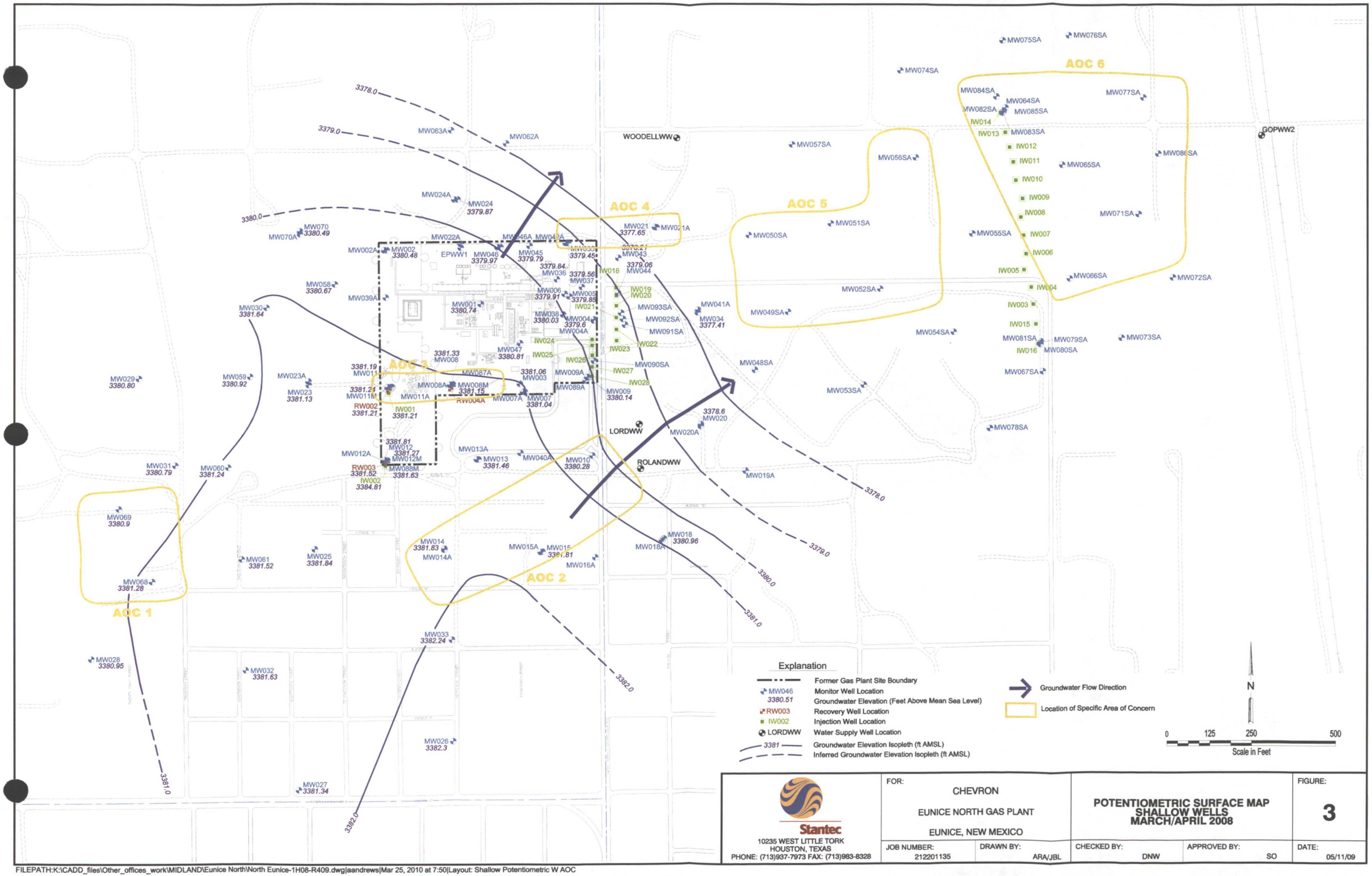
212201135	ARA/JBL	CV	CV	11/23/09

FILEPATH:K:\CADD_files\Other_offices_work\MIDLAND\Eunice North\North Eunice-CHL-invest.dwg|aandrews|May 19, 2010 at 9:44|Layout: AOC map

FIGURE 3
POTENTIOMETRIC SURFACE MAP – SHALLOW WELLS (MARCH/APRIL 2008)



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POTENTIOMETRIC SURFACE MAP SHALLOW WELLS MARCH/APRIL 2008

FIGURE: **3**

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212201135	ARA/JBL	DNW	SO	05/11/09

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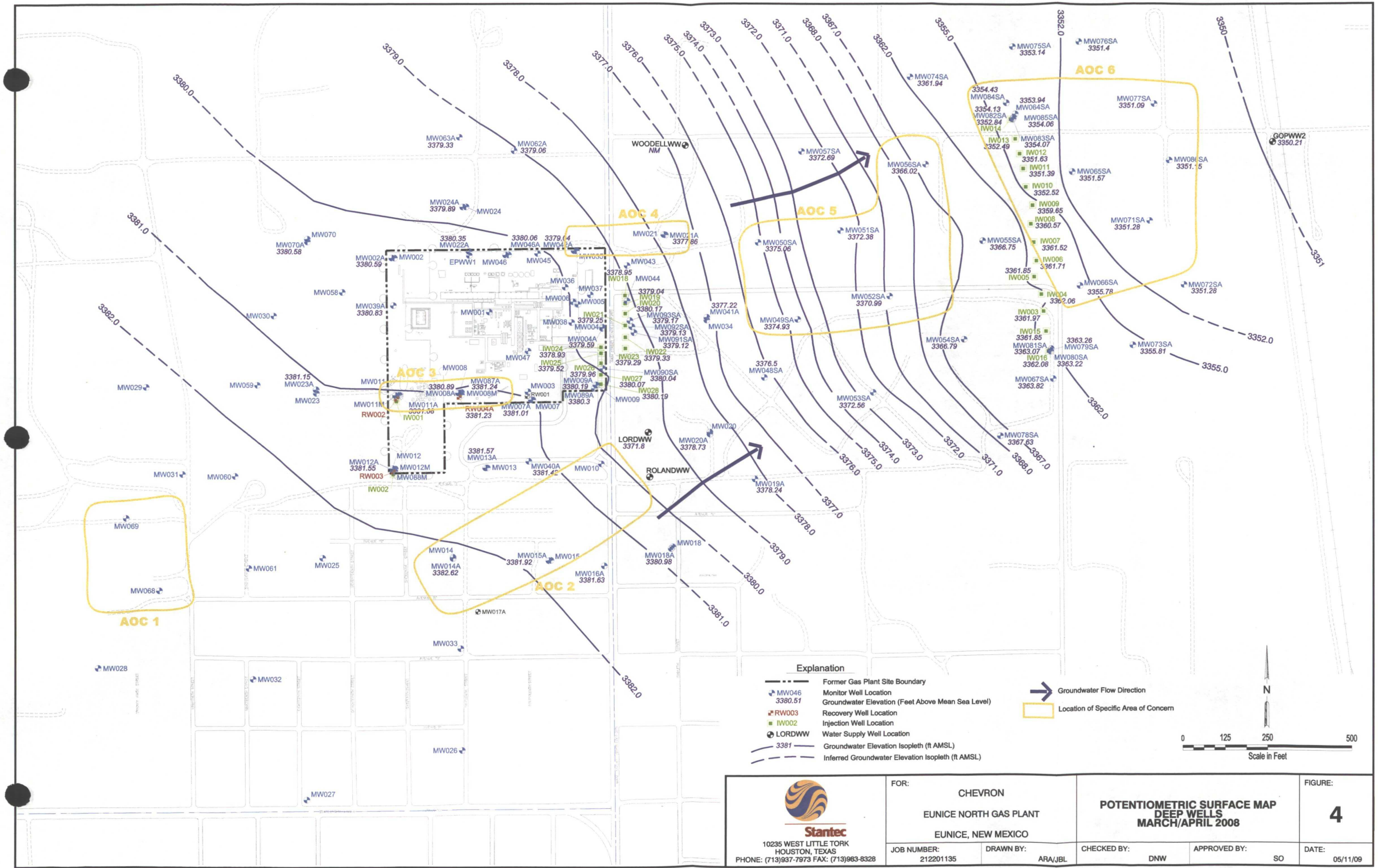
FIGURE 4
Potentiometric Surface Map – Deep Wells (March/April 2008)



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POTENTIOMETRIC SURFACE MAP DEEP WELLS MARCH/APRIL 2008

FIGURE: 4

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212201135	ARA/JBL	DNW	SO	05/11/09

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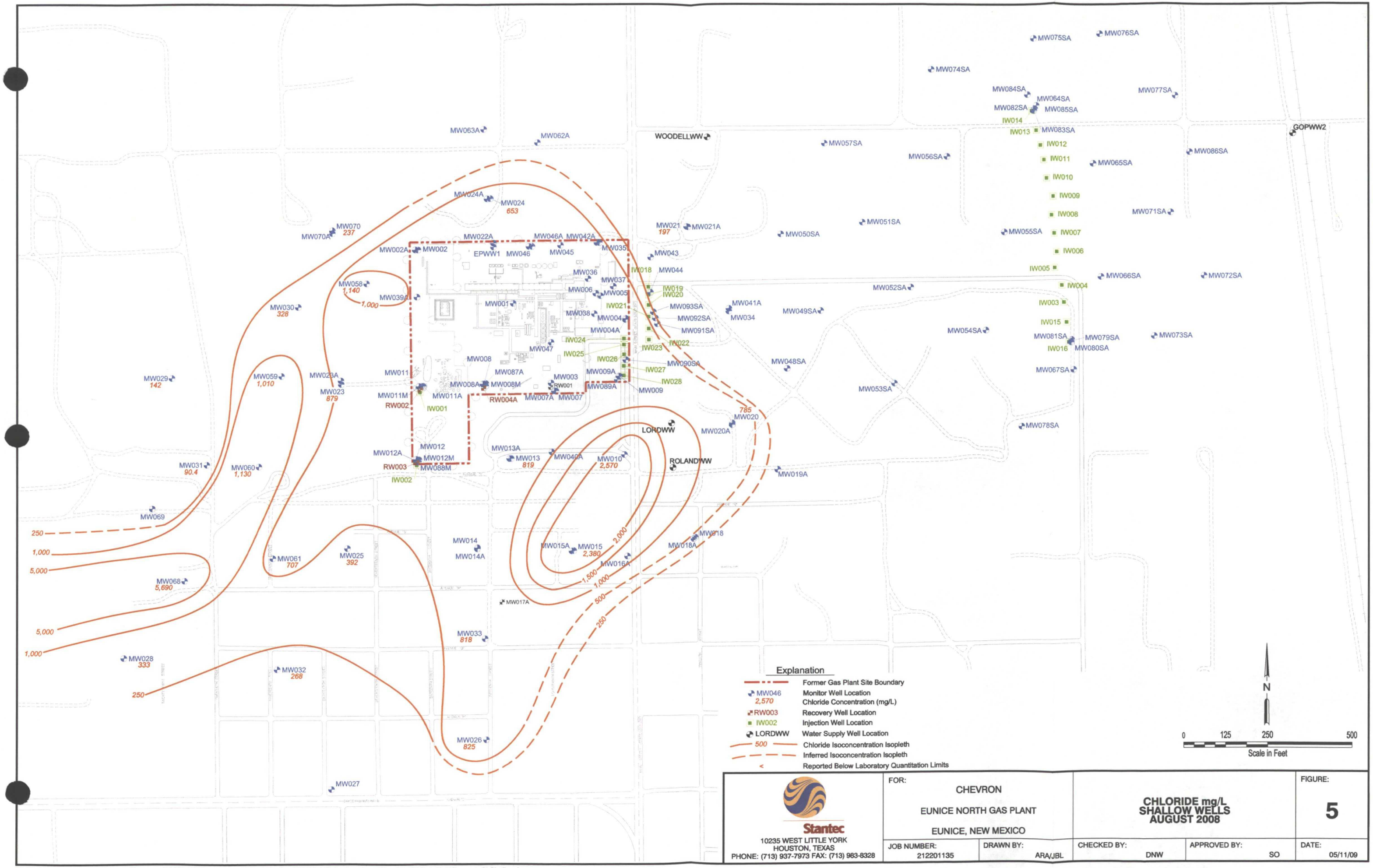
FIGURE 5
CHLORIDE MG/L SHALLOW WELLS AUGUST 2008



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CHLORIDE mg/L
SHALLOW WELLS
AUGUST 2008

FIGURE: **5**

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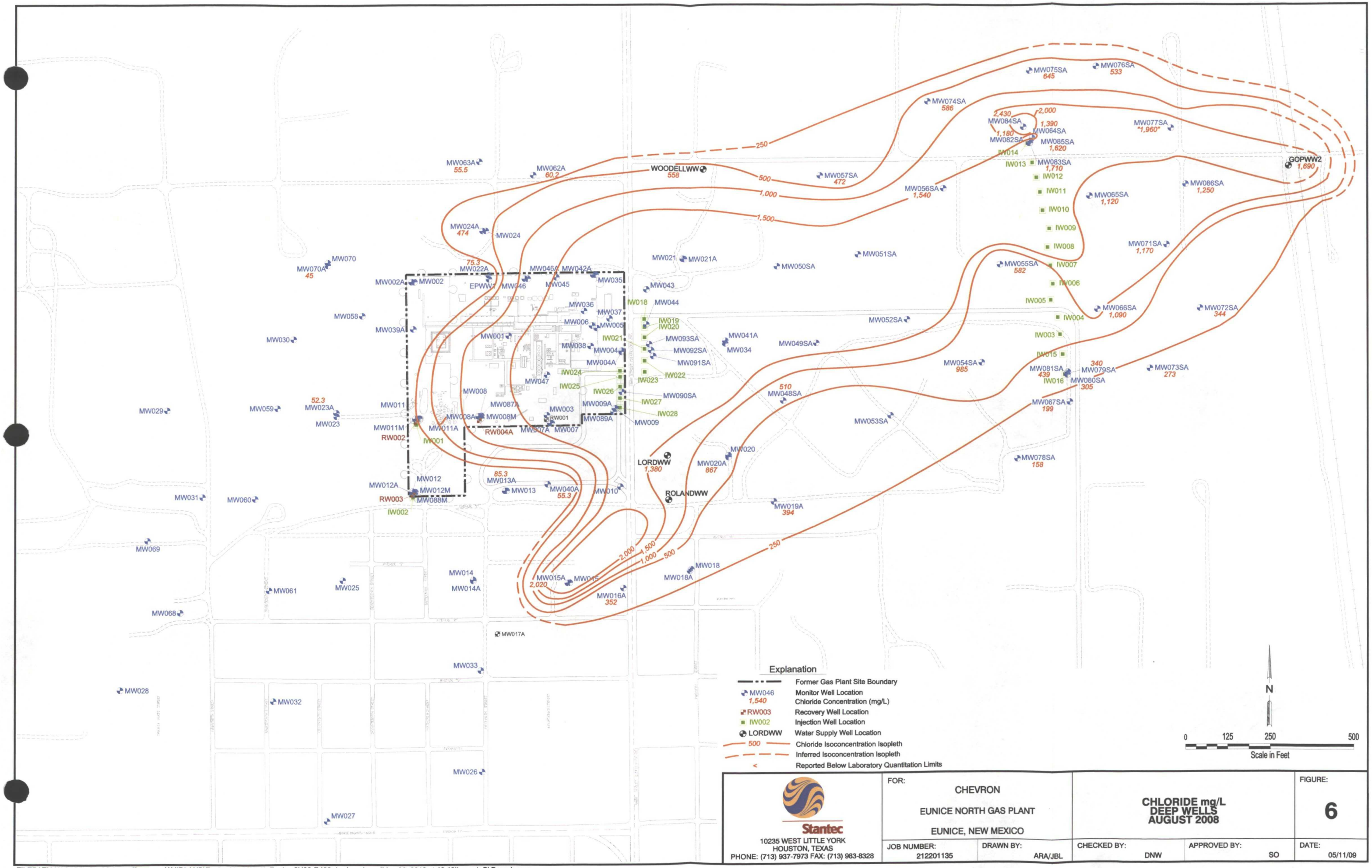
FILEPATH:K:\CADD_files\Other_offices_work\MIDLAND\Eunice North\North Eunice-2H08-R409.dwg|aandrews|May 26, 2010 at 10:10|Layout: Cl Shallow Isocon

FIGURE 6
CHLORIDE MG/L DEEP WELLS AUGUST 2008



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CHLORIDE mg/L
DEEP WELLS
AUGUST 2008

FIGURE: **6**

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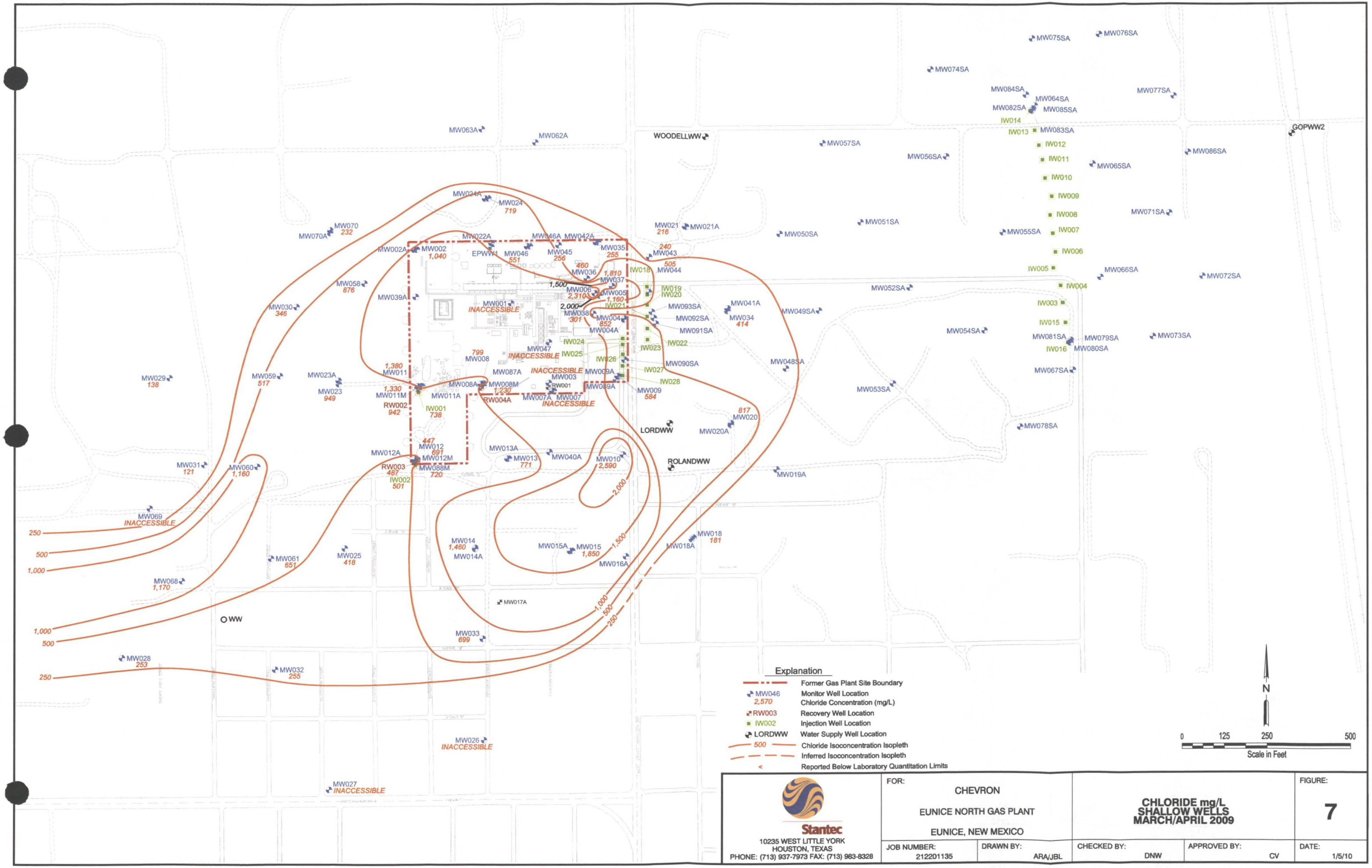
FIGURE 7
Chloride mg/L Shallow Wells March/April 2009



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CHLORIDE mg/L
SHALLOW WELLS
MARCH/APRIL 2009

FIGURE: **7**

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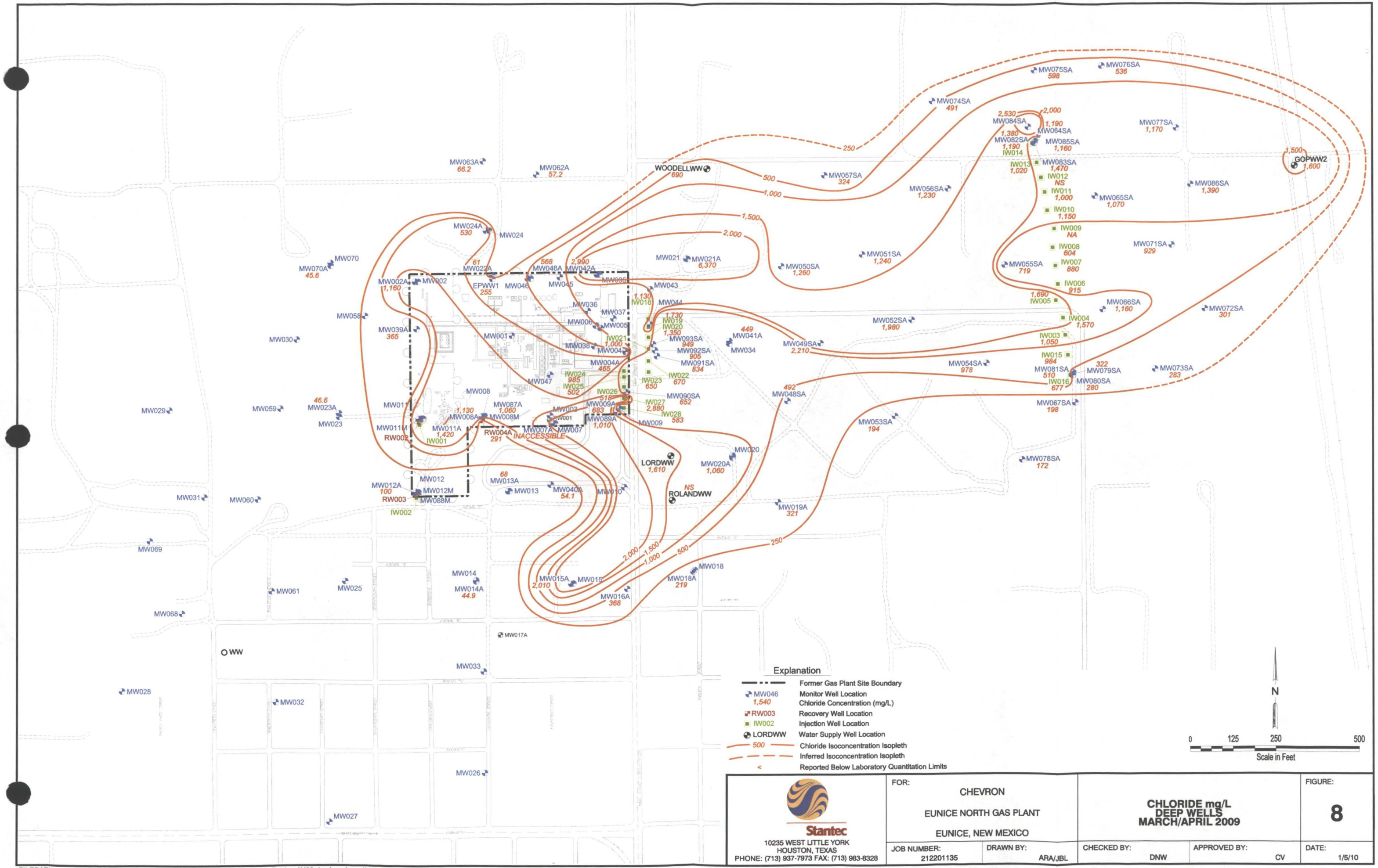
212201135	ARA/JBL	DNW	CV	1/5/10

FILEPATH:K:\CADD_files\Other_offices_work\MIDLAND\Eunice North\North Eunice-1H09.dwg|aandrews|May 26, 2010 at 10:20|Layout: Cl Shallow Isocon

FIGURE 8
Chloride mg/L Deep Wells March/April 2009



Explanation

- Former Gas Plant Site Boundary
- MW046 / 1,540 — Monitor Well Location / Chloride Concentration (mg/L)
- RW003 — Recovery Well Location
- IW002 — Injection Well Location
- LORDWW — Water Supply Well Location
- 500 — Chloride Isoconcentration Isopleth
- Inferred Isoconcentration Isopleth
- < — Reported Below Laboratory Quantitation Limits

N

0 125 250 500
Scale in Feet

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CHLORIDE mg/L
DEEP WELLS
MARCH/APRIL 2009

FIGURE: 8

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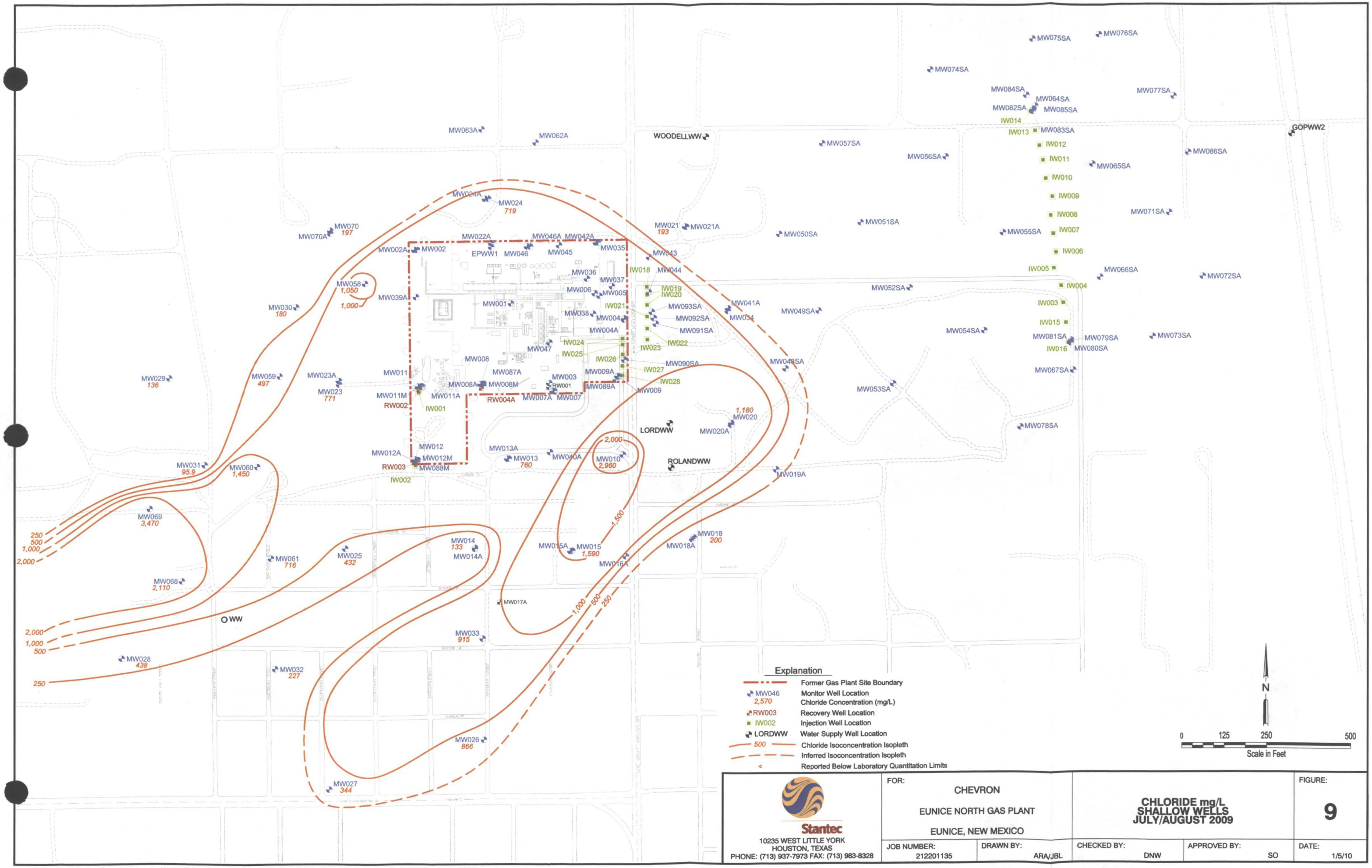
FIGURE 9
Chloride mg/L Shallow Wells July/August 2009



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CHLORIDE mg/L SHALLOW WELLS JULY/AUGUST 2009

FIGURE: 9

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
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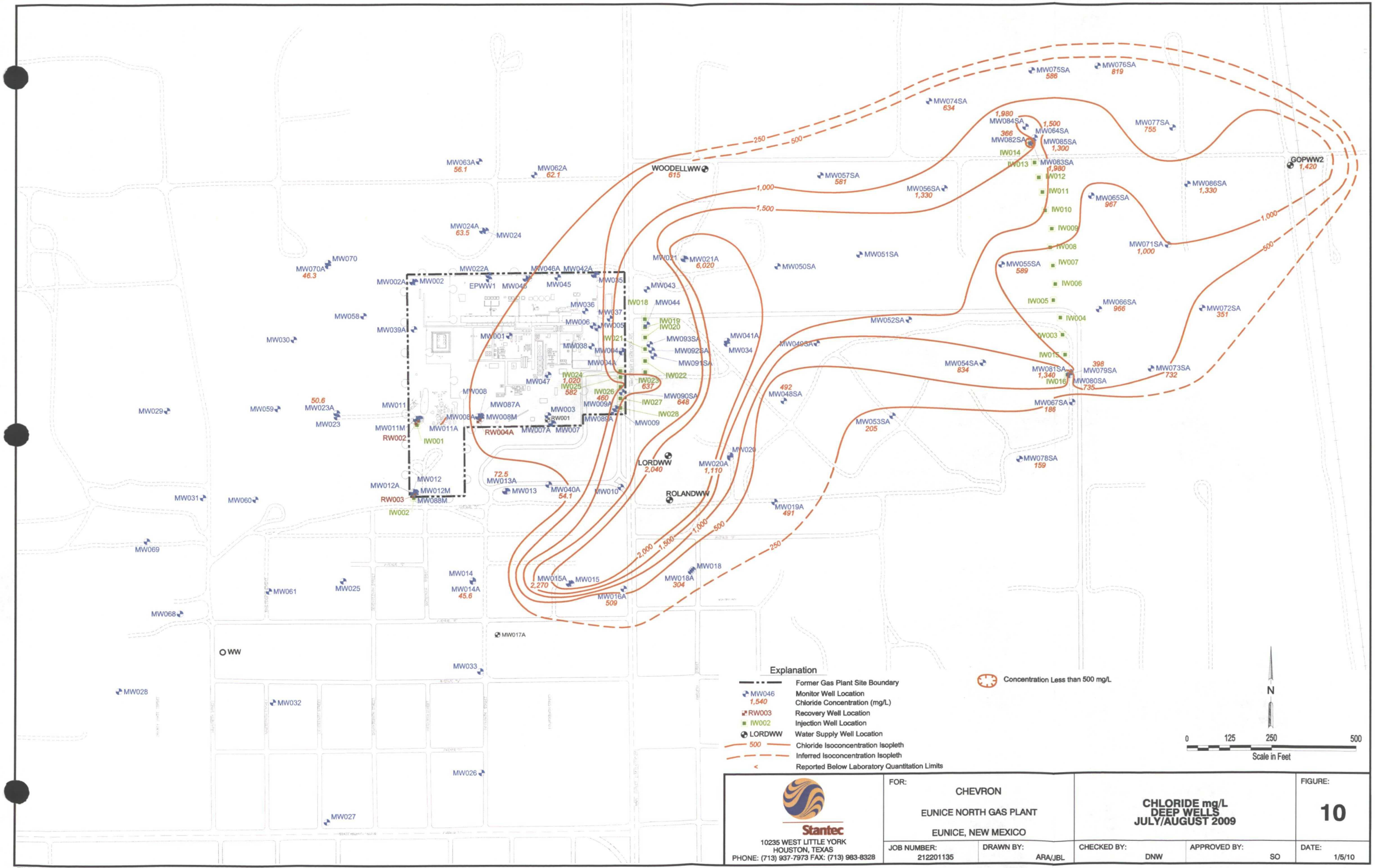
FILEPATH:K:\CADD_files\Other_offices_work\MIDLAND\Eunice North\North Eunice-2H09.dwg|aandrews|May 26, 2010 at 10:23|Layout: Cl Shallow Isocon

FIGURE 10
Chloride mg/L Deep Wells July/August 2009



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CHLORIDE mg/L
DEEP WELLS
JULY/AUGUST 2009

FIGURE: **10**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212201135	ARA/JBL	DNW	SO	1/5/10

FILEPATH:K:\CADD_files\Other_offices_work\MIDLAND\Eunice North\North Eunice-2H09.dwg|aandrews|May 26, 2010 at 10:24|Layout: Cl Deep Isocon

FIGURE 11
AOC 1 Soil Analytical Results December 8, 2009

SB-2	SB-2	SB-2	SB-2
10-15	15-20	20-25	55-60
573	1,060	778	251

AOC 1

SB-2

MW069

SB-1	SB-1
15-20	55-60
166	43.4

SB-1

SB-3	SB-3
15-20	55-60
93.5	20.3

SB-3

NINETEENTH STREET

MW061

MW068

SB-5

SB-4

SB-4	SB-4	SB-4	SB-4
15-20	20-25	25-30	55-60
3,320	6,430	4,980	1,030

CRISWELL, HELEN J
ALL SOIL BORINGS

SB-5	SB-5
25-30	55-60
128	14.5

LEGEND
- MONITORING WELL
- SOIL BORING
- LOCATION OF SPECIFIC AREA OF CONCERN

N

0 100 200

APPROXIMATE SCALE IN FEET

SB-1	SAMPLE ID
30-35	SAMPLE DEPTH IN FEET, bgs
207	CHLORIDE CONCENTRATION, mg/kg

mg/kg MILLIGRAMS PER KILOGRAM

Stantec
3300 NORTH "A", BUILDING 8, SUITE 220
MIDLAND, TEXAS
PHONE: (432)687-1598 FAX: (432)687-1598

FOR:
EUNICE NORTH GAS PLANT
EUNICE, NEW MEXICO

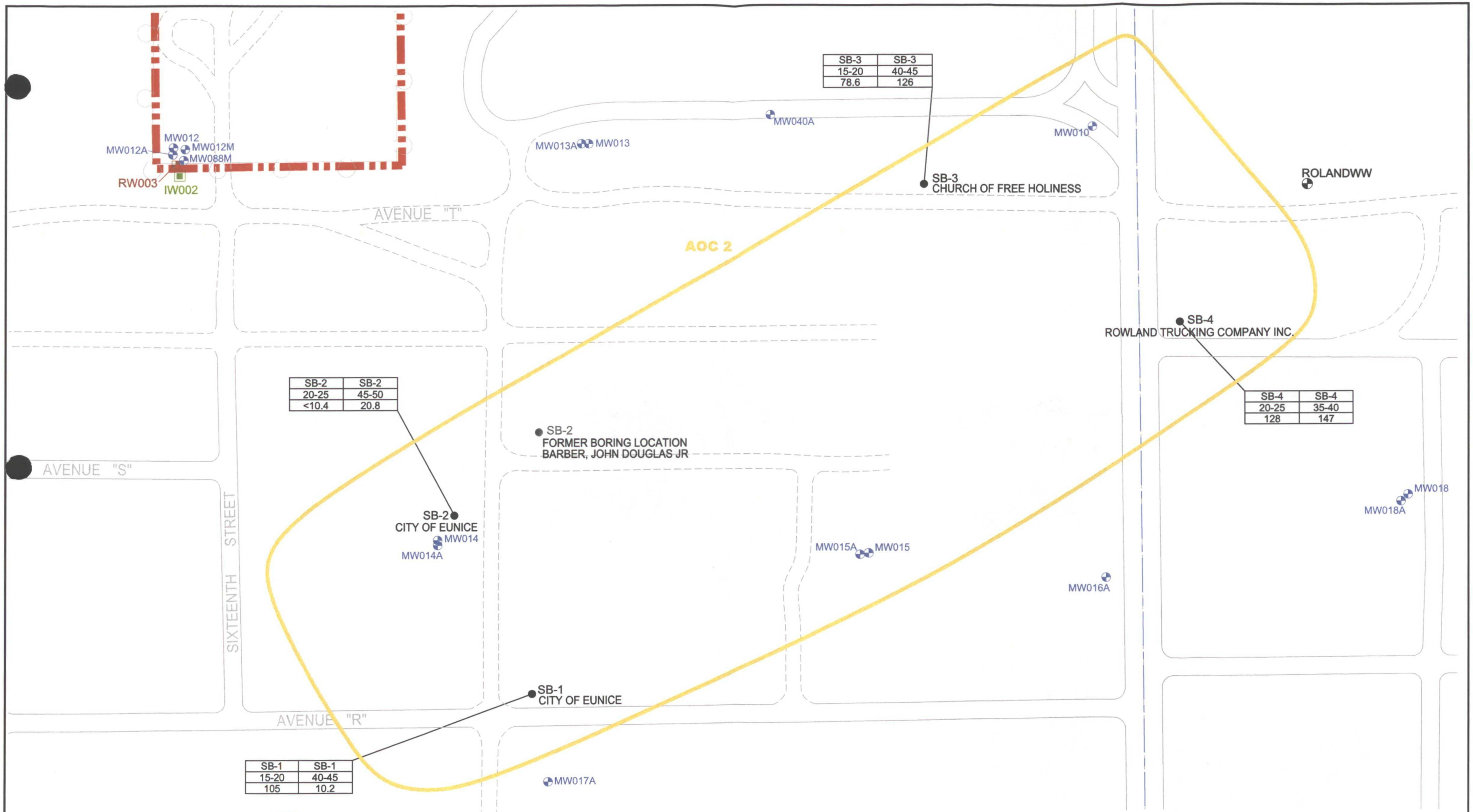
AOC 1
SOIL ANALYTICAL RESULTS
DECEMBER 8, 2009

FIGURE: **11**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212201135	ARA	DW	DW	1/26/10

FILEPATH:K:\CADD_files\Other_offices_work\MIDLAND\Eunice North\North Eunice-CHL-invest.dwg|aandrews|May 26, 2010 at 10:25|Layout: AOC 1

FIGURE 12
AOC 2 Soil Analytical Results December 7, 2009

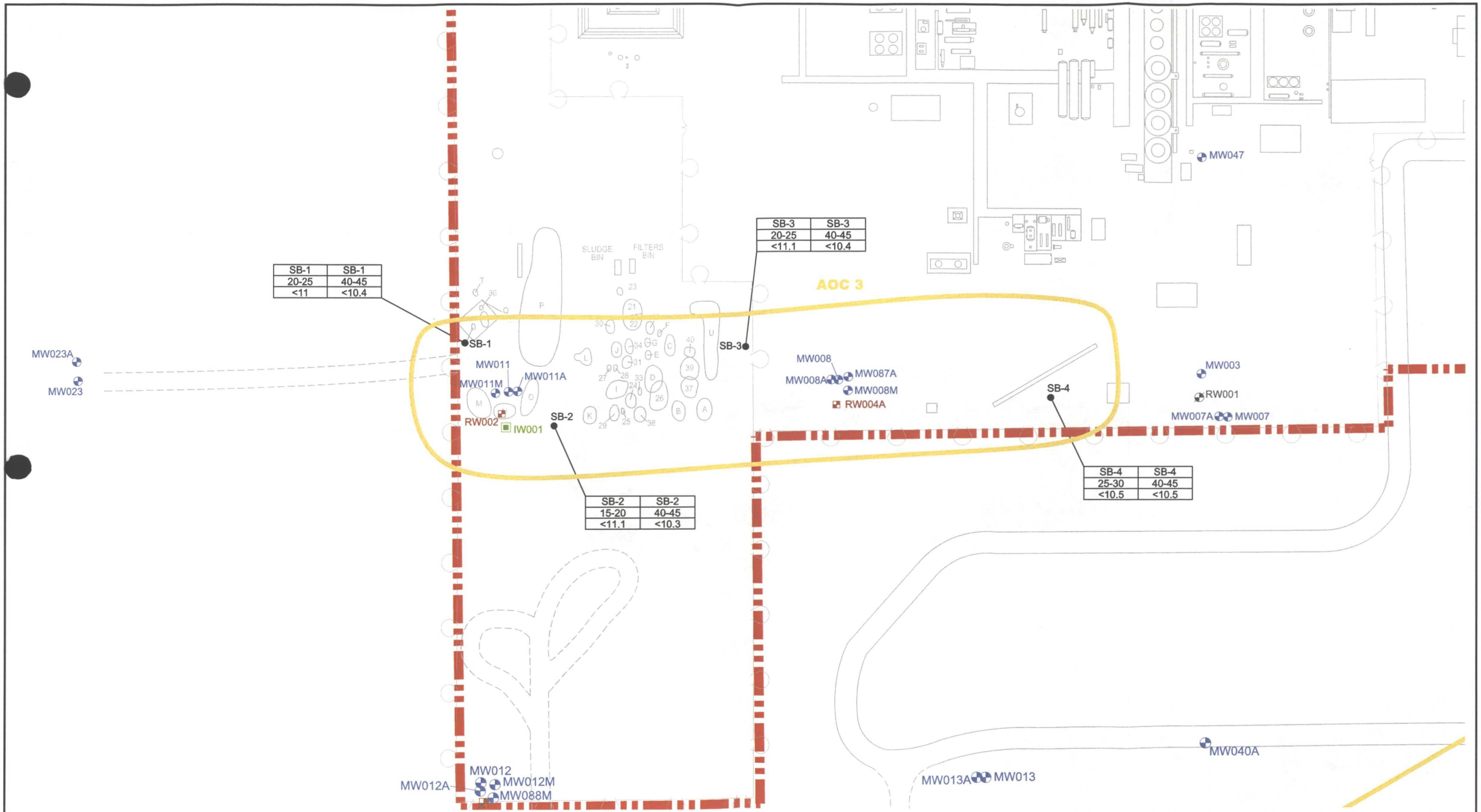


Stantec
3300 NORTH "A", BUILDING 8, SUITE 220
MIDLAND, TEXAS
PHONE: (432)687-1598 FAX: (432)687-1598

FOR:				FIGURE:
EUNICE NORTH GAS PLANT EUNICE, NEW MEXICO		**AOC 2 SOIL ANALYTICAL RESULTS DECEMBER 7, 2009**		**12**
JOB NUMBER: 212201135	DRAWN BY: ARA	CHECKED BY: DW	APPROVED BY: DW	DATE: 1/26/10

FILEPATH:K:\CADD_files\Other_offices_work\MIDLAND\Eunice North\North Eunice-CHL-invest.dwg|aandrews|May 26, 2010 at 10:27|Layout: AOC 2

FIGURE 13
AOC 3 Soil Analytical Results December 10, 2009

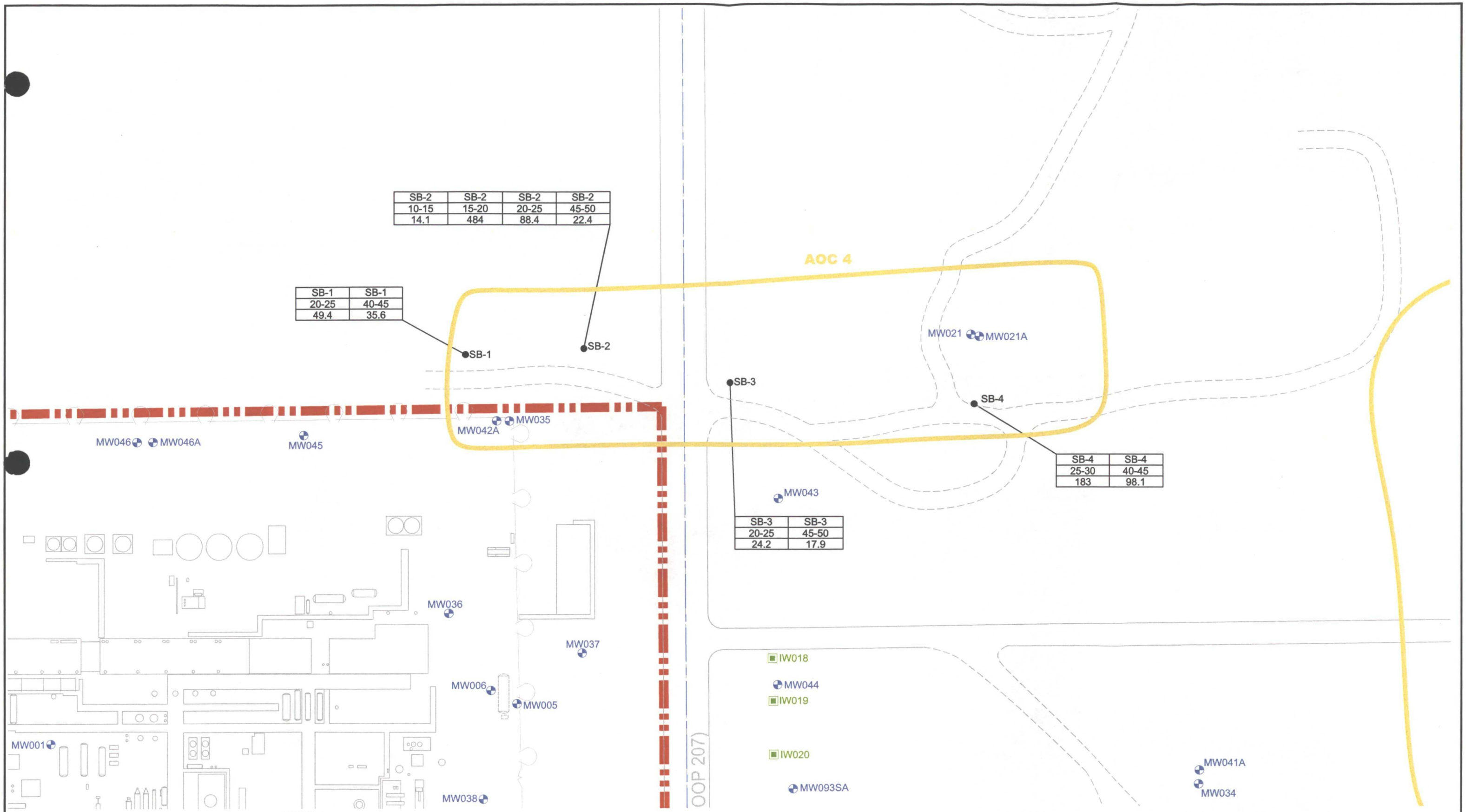


Stantec
3300 NORTH "A", BUILDING 8, SUITE 220
MIDLAND, TEXAS
PHONE: (432)687-1598 FAX: (432)687-1598

FOR:		AOC 3 SOIL ANALYTICAL RESULTS DECEMBER 10, 2009	FIGURE:
EUNICE NORTH GAS PLANT EUNICE, NEW MEXICO			13
JOB NUMBER: 212201135	DRAWN BY: ARA	CHECKED BY: DW	APPROVED BY: DW	DATE: 1/26/10

FILEPATH:K:\CADD_files\Other_offices_work\MIDLAND\Eunice North\North Eunice-CHL-invest.dwg|aandrews|May 26, 2010 at 10:29|Layout: AOC 3

FIGURE 14
AOC 4 Soil Analytical Results December 9, 2009

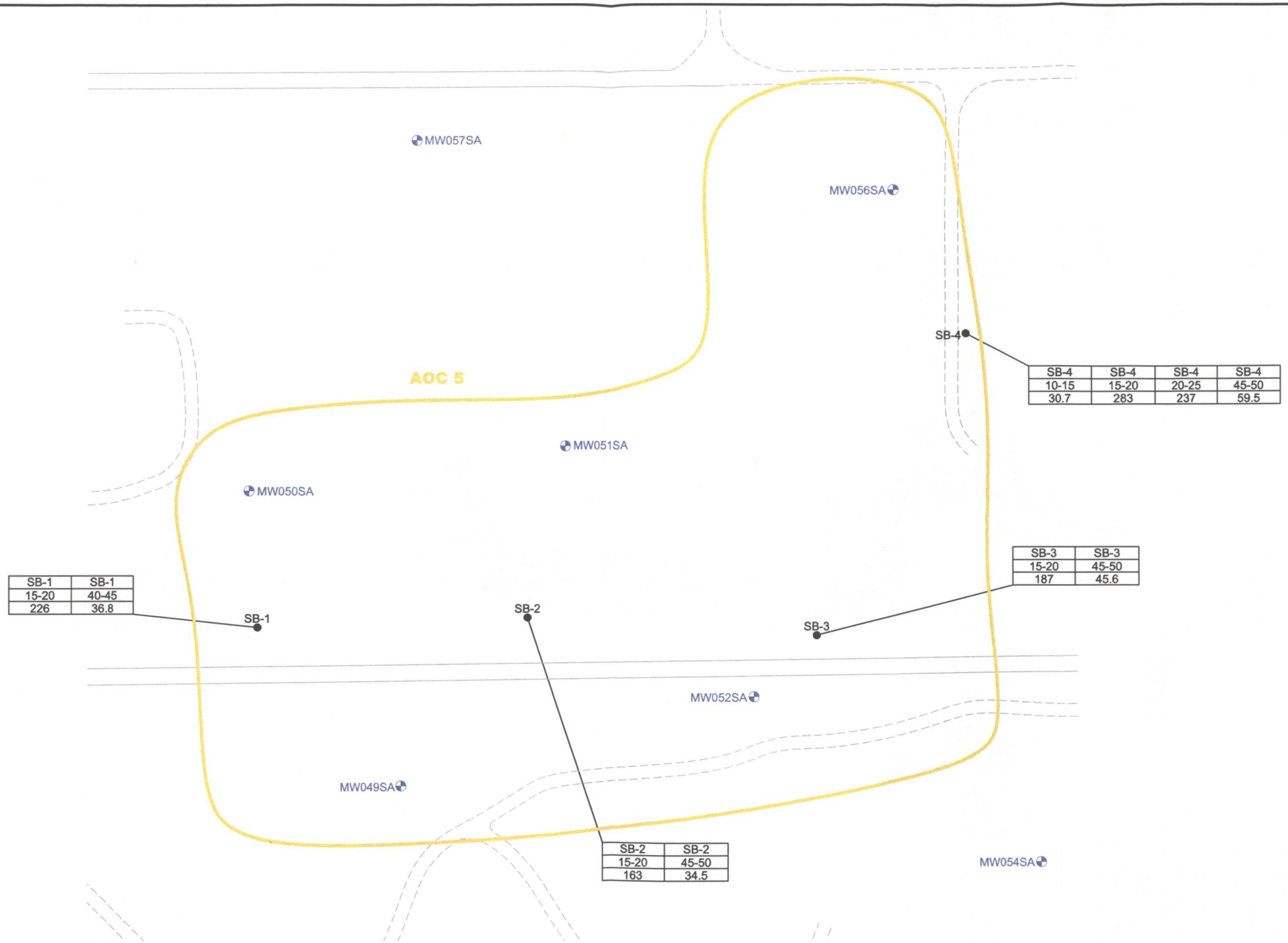


Stantec
3300 NORTH "A", BUILDING 8, SUITE 220
MIDLAND, TEXAS
PHONE: (432)687-1598 FAX: (432)687-1598

FOR:				FIGURE:
EUNICE NORTH GAS PLANT EUNICE, NEW MEXICO		AOC 4 SOIL ANALYTICAL RESULTS DECEMBER 9, 2009		14
JOB NUMBER: 212201135	DRAWN BY: ARA	CHECKED BY: DW	APPROVED BY: DW	DATE: 1/26/10

FILEPATH:K:\CADD_files\Other_offices_work\MIDLAND\Eunice North\North Eunice-CHL-invest.dwg|aandrews|May 26, 2010 at 10:30|Layout: AOC 4

FIGURE 15
AOC 5 Soil Analytical Results December 9 & 11, 2009



LEGEND
- MONITORING WELL
- SOIL BORING
- LOCATION OF SPECIFIC AREA OF CONCERN

SB-1	SAMPLE ID
30-35	SAMPLE DEPTH IN FEET, bgs
207	CHLORIDE CONCENTRATION, mg/kg

mg/kg MILLIGRAMS PER KILOGRAM

N

0 160 320

APPROXIMATE SCALE IN FEET

Stantec
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FOR:
EUNICE NORTH GAS PLANT
EUNICE, NEW MEXICO

AOC 5
SOIL ANALYTICAL RESULTS
DECEMBER 9 & 11, 2009

FIGURE: **15**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212201135	ARA	DW	DW	1/26/10

FILEPATH:K:\CADD_files\Other_offices_work\MIDLAND\Eunice North\North Eunice-CHL-invest.dwg|aandrews|May 26, 2010 at 10:31|Layout: AOC 5

FIGURE 16
AOC 6 Soil Analytical Results December 10 & 11, 2009

AOC 6

MW084SA
MW077SA
MW064SA
MW082SA
MW085SA
IW014
MW083SA
IW013
GOPWW2
IW012
IW011
MW065SA
IW010
IW009
IW008
MW071SA
MW086SA
MW055SA
IW007
IW006
IW005
MW066SA
MW072SA
IW004

SB-1	SB-1	SB-1	SB-1
20-25	25-30	30-35	55-60
150	421	207	20.7

SB-1

SB-2

SB-2	SB-2
45-50	50-55
95	56.8

SB-4

SB-4	SB-4
30-35	50-55
141	30.4

SB-3

SB-3	SB-3	SB-3	SB-3
20-25	25-30	30-35	55-60
325	844	397	63.9

LEGEND
- MONITORING WELL
- INJECTION WELL
- SOIL BORING
- LOCATION OF SPECIFIC AREA OF CONCERN

N

0 160 320

APPROXIMATE SCALE IN FEET

SB-1	SAMPLE ID
30-35	SAMPLE DEPTH IN FEET, bgs
207	CHLORIDE CONCENTRATION, mg/kg

mg/kg MILLIGRAMS PER KILOGRAM

Stantec
3300 NORTH "A", BUILDING 8, SUITE 220
MIDLAND, TEXAS
PHONE: (432)687-1598 FAX: (432)687-1598

FOR:
EUNICE NORTH GAS PLANT
EUNICE, NEW MEXICO

AOC 6
SOIL ANALYTICAL RESULTS
DECEMBER 10 & 11, 2009

FIGURE: **16**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212201135	ARA	DW	DW	1/26/10

FILEPATH:K:\CADD_files\Other_offices_work\MIDLAND\Eunice North\North Eunice-CHL-invest.dwg|aandrews|May 26, 2010 at 10:31|Layout: AOC 6

TABLE 1
CHLORIDE FIELD SCREENING

Table 1
Chloride Field Screening Results
North Eunice Gas Plant Chlorides Investigation
Eunice, New Mexico

Location (Depth in Feet)	Date	AOC	Quantab Units	Estimated Chloride Concentration[1] (mg/L)
SB-1 (10-15)	12/8/2009	1	0.2	<128
SB-1 (15-20)*	12/8/2009	1	1.8	180
SB-1 (20-25)	12/8/2009	1	1.4	128
SB-1 (25-30)	12/8/2009	1	0.8	<128
SB-1 (30-35)	12/8/2009	1	1.0	<128
SB-1 (35-40)	12/8/2009	1	0.6	<128
SB-1 (40-45)	12/8/2009	1	0.8	<128
SB-1 (45-50)	12/8/2009	1	0.8	<128
SB-1 (50-55)	12/8/2009	1	0.6	<128
SB-1 (55-60)*	12/8/2009	1	0.4	<128
SB-2 (10-15)*	12/8/2009	1	3.8	644
SB-2 (15-20)*	12/8/2009	1	4.6	924
SB-2 (20-25)*	12/8/2009	1	4.4	848
SB-2 (25-30)	12/8/2009	1	3.0	416
SB-2 (30-35)	12/8/2009	1	2.0	212
SB-2 (35-40)	12/8/2009	1	2.2	244
SB-2 (40-45)	12/8/2009	1	2.2	244
SB-2 (45-50)	12/8/2009	1	2.0	212
SB-2 (50-55)	12/8/2009	1	1.6	152
SB-2 (55-60)*	12/8/2009	1	1.4	128
SB-3 (10-15)	12/8/2009	1	1.8	180
SB-3 (15-20)*	12/8/2009	1	2.0	212
SB-3 (20-25)	12/8/2009	1	1.4	128
SB-3 (25-30)	12/8/2009	1	1.6	152
SB-3 (30-35)	12/8/2009	1	1.8	180
SB-3 (35-40)	12/8/2009	1	1.0	<128
SB-3 (40-45)	12/8/2009	1	1.2	<128
SB-3 (45-50)	12/8/2009	1	1.6	152
SB-3 (50-55)	12/8/2009	1	1.4	128
SB-3 (55-60)*	12/8/2009	1	0.8	<128
SB-4 (10-15)	12/8/2009	1	2.0	212
SB-4 (15-20)*	12/8/2009	1	8.0	>2532
SB-4 (20-25)*	12/8/2009	1	9.2	>2532
SB-4 (25-30)*	12/8/2009	1	8.8	>2532
SB-4 (30-35)	12/8/2009	1	7.8	>2532
SB-4 (35-40)	12/8/2009	1	7.4	2532
SB-4 (40-45)	12/8/2009	1	7.6	>2532
SB-4 (45-50)	12/8/2009	1	7.6	>2532
SB-4 (50-55)	12/8/2009	1	7.4	2532
SB-4 (55-60)*	12/8/2009	1	7.6	>2532

Table 1
Chloride Field Screening Results
North Eunice Gas Plant Chlorides Investigation
Eunice, New Mexico

Location (Depth in Feet)	Date	AOC	Quantab Units	Estimated Chloride Concentration[1] (mg/L)
SB-5 (5-10)	12/8/2009	1	0.4	<128
SB-5 (10-15)	12/8/2009	1	1.4	128
SB-5 (15-20)	12/8/2009	1	1.2	<128
SB-5 (20-25)	12/8/2009	1	1.6	152
SB-5 (25-30)*	12/8/2009	1	1.6	152
SB-5 (30-35)	12/8/2009	1	1.4	128
SB-5 (35-40)	12/8/2009	1	0.4	<128
SB-5 (40-45)	12/8/2009	1	1.2	<128
SB-5 (45-50)	12/8/2009	1	1.6	152
SB-5 (50-55)	12/8/2009	1	1.0	<128
SB-5 (55-60)*	12/8/2009	1	1.4	<128
SB-1 (5-10)	12/7/2009	2	0.2	<128
SB-1 (10-15)	12/7/2009	2	0.8	<128
SB-1 (15-20)*	12/7/2009	2	1.1	<128
SB-1 (20-25)	12/7/2009	2	0.9	<128
SB-1 (25-30)	12/7/2009	2	0.5	<128
SB-1 (30-35)	12/7/2009	2	0.4	<128
SB-1 (35-40)	12/7/2009	2	0.3	<128
SB-1 (40-45)*	12/7/2009	2	0.6	<128
SB-2 (5-10)	12/7/2009	2	0.4	<128
SB-2 (10-15)	12/7/2009	2	0.4	<128
SB-2 (15-20)	12/7/2009	2	0.2	<128
SB-2 (20-25)*	12/7/2009	2	0.5	<128
SB-2 (25-30)	12/7/2009	2	0.4	<128
SB-2 (30-35)	12/7/2009	2	0.4	<128
SB-2 (35-40)	12/7/2009	2	0.5	<128
SB-2 (40-45)	12/7/2009	2	0.4	<128
SB-2 (45-50)*	12/7/2009	2	0.6	<128
SB-3 (5-10)	12/7/2009	2	0.6	<128
SB-3 (10-15)	12/7/2009	2	0.6	<128
SB-3 (15-20)*	12/7/2009	2	0.9	<128
SB-3 (20-25)	12/7/2009	2	0.4	<128
SB-3 (25-30)	12/7/2009	2	0.5	<128
SB-3 (30-35)	12/7/2009	2	0.6	<128
SB-3 (35-40)	12/7/2009	2	0.4	<128
SB-3 (40-45)*	12/7/2009	2	1.0	<128
SB-4 (5-10)	12/7/2009	2	0.2	<128
SB-4 (10-15)	12/7/2009	2	2.0	244
SB-4 (15-20)	12/7/2009	2	1.4	128
SB-4 (20-25)*	12/7/2009	2	4.0	708
SB-4 (25-30)	12/7/2009	2	2.6	324
SB-4 (30-35)	12/7/2009	2	1.4	128
SB-4 (35-40)*	12/7/2009	2	2.2	244

Table 1
Chloride Field Screening Results
North Eunice Gas Plant Chlorides Investigation
Eunice, New Mexico

Location (Depth in Feet)	Date	AOC	Quantab Units	Estimated Chloride Concentration[1] (mg/L)
SB-1 (10-15)	12/10/2009	3	0.4	<128
SB-1 (15-20)	12/10/2009	3	0.4	<128
SB-1 (20-25)*	12/10/2009	3	0.8	<128
SB-1 (25-30)	12/10/2009	3	0.4	<128
SB-1 (30-35)	12/10/2009	3	0.4	<128
SB-1 (35-40)	12/10/2009	3	0.6	<128
SB-1 (40-45)*	12/10/2009	3	0.2	<128
SB-2 (10-15)	12/10/2009	3	0.4	<128
SB-2 (15-20)*	12/10/2009	3	0.6	<128
SB-2 (20-25)	12/10/2009	3	0.4	<128
SB-2 (25-30)	12/10/2009	3	0.6	<128
SB-2 (30-35)	12/10/2009	3	0.4	<128
SB-2 (35-40)	12/10/2009	3	0.4	<128
SB-2 (40-45)*	12/10/2009	3	0.2	<128
SB-3 (10-15)	12/10/2009	3	0.2	<128
SB-3 (15-20)	12/10/2009	3	0.4	<128
SB-3 (20-25)*	12/10/2009	3	0.6	<128
SB-3 (25-30)	12/10/2009	3	0.4	<128
SB-3 (30-35)	12/10/2009	3	0.4	<128
SB-3 (35-40)	12/10/2009	3	0.4	<128
SB-3 (40-45)*	12/10/2009	3	0.4	<128
SB-4 (10-15)	12/10/2009	3	0.4	<128
SB-4 (15-20)	12/10/2009	3	0.2	<128
SB-4 (20-25)	12/10/2009	3	0.2	<128
SB-4 (25-30)*	12/10/2009	3	0.4	<128
SB-4 (30-35)	12/10/2009	3	0.4	<128
SB-4 (35-40)	12/10/2009	3	0.2	<128
SB-4 (40-45)*	12/10/2009	3	0.2	<128
SB-1 (10-15)	12/9/2009	4	0.6	<128
SB-1 (15-20)	12/9/2009	4	0.6	<128
SB-1 (20-25)*	12/9/2009	4	0.8	<128
SB-1 (25-30)	12/9/2009	4	0.4	<128
SB-1 (30-35)	12/9/2009	4	0.2	<128
SB-1 (35-40)	12/9/2009	4	0.2	<128
SB-1 (40-45)*	12/9/2009	4	0.6	<128
SB-2 (10-15)*	12/9/2009	4	0.6	<128
SB-2 (15-20)*	12/9/2009	4	2.8	368
SB-2 (20-25)*	12/9/2009	4	0.8	<128
SB-2 (25-30)	12/9/2009	4	0.4	<128
SB-2 (30-35)	12/9/2009	4	0.6	<128
SB-2 (35-40)	12/9/2009	4	0.4	<128
SB-2 (40-45)	12/9/2009	4	0.4	<128
SB-2 (45-50)*	12/9/2009	4	0.8	<128

Table 1
Chloride Field Screening Results
North Eunice Gas Plant Chlorides Investigation
Eunice, New Mexico

Location (Depth in Feet)	Date	AOC	Quantab Units	Estimated Chloride Concentration[1] (mg/L)
SB-3 (10-15)	12/9/2009	4	0.4	<128
SB-3 (15-20)	12/9/2009	4	0.4	<128
SB-3 (20-25)*	12/9/2009	4	0.6	<128
SB-3 (25-30)	12/9/2009	4	0.6	<128
SB-3 (30-35)	12/9/2009	4	0.4	<128
SB-3 (35-40)	12/9/2009	4	0.4	<128
SB-3 (40-45)	12/9/2009	4	0.6	<128
SB-3 (45-50)*	12/9/2009	4	0.4	<128
SB-4 (10-15)	12/9/2009	4	0.2	<128
SB-4 (15-20)	12/9/2009	4	0.8	<128
SB-4 (20-25)	12/9/2009	4	1.2	<128
SB-4 (25-30)*	12/9/2009	4	2.0	212
SB-4 (30-35)	12/9/2009	4	0.8	<128
SB-4 (35-40)	12/9/2009	4	1.0	<128
SB-4 (40-45)*	12/9/2009	4	0.8	<128
SB-1 (10-15)	12/9/2009	5	1.2	<128
SB-1 (15-20)*	12/9/2009	5	3.0	416
SB-1 (20-25)	12/9/2009	5	2.4	280
SB-1 (25-30)	12/9/2009	5	0.8	<128
SB-1 (30-35)	12/9/2009	5	0.6	<128
SB-1 (35-40)	12/9/2009	5	1.0	<128
SB-1 (40-45)*	12/9/2009	5	0.8	<128
SB-2 (10-15)	12/11/2009	5	1.0	<128
SB-2 (15-20)*	12/11/2009	5	1.8	368
SB-2 (20-25)	12/11/2009	5	0.8	<128
SB-2 (25-30)	12/11/2009	5	1.6	152
SB-2 (30-35)	12/11/2009	5	0.6	<128
SB-2 (35-40)	12/11/2009	5	0.2	<128
SB-2 (40-45)	12/11/2009	5	0.2	<128
SB-2 (45-50)*	12/11/2009	5	0.4	<128
SB-3 (10-15)	12/11/2009	5	0.2	<128
SB-3 (15-20)*	12/11/2009	5	1.0	<128
SB-3 (20-25)	12/11/2009	5	0.6	<128
SB-3 (25-30)	12/11/2009	5	0.6	<128
SB-3 (30-35)	12/11/2009	5	0.4	<128
SB-3 (35-40)	12/11/2009	5	0.4	<128
SB-3 (40-45)	12/11/2009	5	0.6	<128
SB-3 (45-50)*	12/11/2009	5	0.6	<128

Table 1
Chloride Field Screening Results
North Eunice Gas Plant Chlorides Investigation
Eunice, New Mexico

Location (Depth in Feet)	Date	AOC	Quantab Units	Estimated Chloride Concentration[1] (mg/L)
SB-4 (10-15)*	12/11/2009	5	0.4	<128
SB-4 (15-20)*	12/11/2009	5	2.4	280
SB-4 (20-25)*	12/11/2009	5	1.4	<128
SB-4 (25-30)	12/11/2009	5	0.8	<128
SB-4 (30-35)	12/11/2009	5	0.2	<128
SB-4 (35-40)	12/11/2009	5	0.2	<128
SB-4 (40-45)	12/11/2009	5	0.4	<128
SB-4 (45-50)*	12/11/2009	5	0.4	<128
SB-1 (10-15)	12/10/2009	6	0.4	<128
SB-1 (15-20)	12/10/2009	6	0.4	<128
SB-1 (20-25)*	12/10/2009	6	1.4	128
SB-1 (25-30)*	12/10/2009	6	3.0	416
SB-1 (30-35)*	12/10/2009	6	1.8	180
SB-1 (35-40)	12/10/2009	6	0.4	<128
SB-1 (40-45)	12/10/2009	6	0.8	<128
SB-1 (45-50)	12/10/2009	6	0.4	<128
SB-1 (50-55)	12/10/2009	6	0.4	<128
SB-1 (55-60)*	12/10/2009	6	0.4	<128
SB-2 (10-15)	12/10/2009	6	0.4	<128
SB-2 (15-20)	12/10/2009	6	0.4	<128
SB-2 (20-25)	12/10/2009	6	0.6	<128
SB-2 (25-30)	12/10/2009	6	0.6	<128
SB-2 (30-35)	12/10/2009	6	1.0	<128
SB-2 (35-40)	12/10/2009	6	1.0	<128
SB-2 (40-45)	12/10/2009	6	0.8	<128
SB-2 (45-50)*	12/10/2009	6	1.2	<128
SB-2 (50-55)*	12/10/2009	6	0.4	<128
SB-3 (10-15)	12/11/2009	6	0.0	<128
SB-3 (15-20)	12/11/2009	6	1.8	180
SB-3 (20-25)*	12/11/2009	6	2.5	300
SB-3 (25-30)*	12/11/2009	6	4.0	708
SB-3 (30-35)*	12/11/2009	6	2.5	300
SB-3 (35-40)	12/11/2009	6	1.4	128
SB-3 (40-45)	12/11/2009	6	1.8	180
SB-3 (45-50)	12/11/2009	6	0.6	<128
SB-3 (50-55)	12/11/2009	6	0.4	<128
SB-3 (55-60)*	12/11/2009	6	0.8	<128

Table 1
Chloride Field Screening Results
North Eunice Gas Plant Chlorides Investigation
Eunice, New Mexico

Location (Depth in Feet)	Date	AOC	Quantab Units	Estimated Chloride Concentration[1] (mg/L)
SB-4 (10-15)	12/10/2009	6	0.6	<128
SB-4 (15-20)	12/10/2009	6	0.6	<128
SB-4 (20-25)	12/10/2009	6	0.4	<128
SB-4 (25-30)	12/10/2009	6	0.6	<128
SB-4 (30-35)*	12/10/2009	6	1.6	152
SB-4 (35-40)	12/10/2009	6	1.2	<128
SB-4 (40-45)	12/10/2009	6	0.8	<128
SB-4 (45-50)	12/10/2009	6	0.4	<128
SB-4 (50-55)*	12/10/2009	6	0.6	<128

NOTES:
All sample bottles used were from Lot #A9315
* = indicates sample depths analyzed for chlorides by Lancaster Labotatories
1. = Field screening tests were conducted using a soil/water ratio of 1:4; therefore, estimated chloride concentrations were derived by multiplying a value (mg/L) equivalent to the quantab result by 4. Estimated chloride concentrations are only applicable for quantab values between 1.4 and 7.4

TABLE 2
SUMMARY OF 2009 CHLORIDE INVESTIGATION ANALYTICAL RESULTS

TABLE 2
2009 SUMMARY OF CHLORIDE INVESTIGATION ANALYTICAL RESULTS
NORTH EUNICE GAS PLANT
LEA COUNTY, NEW MEXICO

Sample Location	Depth	Date	CHLORIDE
Standard Units			mg/kg
AOC-1 SB-1	15-20	12/8/2009	166
AOC-1 SB-1	55-60	12/8/2009	43.4
AOC-1 SB-2	10-15	12/8/2009	**573**
AOC-1 SB-2	15-20	12/8/2009	**1,060**
AOC-1 SB-2	20-25	12/8/2009	**778**
AOC-1 SB-2	55-60	12/8/2009	**251**
AOC-1 SB-3	15-20	12/8/2009	93.5
AOC-1 SB-3	55-60	12/8/2009	20.3
AOC-1 SB-4	15-20	12/8/2009	**3,320**
AOC-1 SB-4	20-25	12/8/2009	**6,430**
AOC-1 SB-4	25-30	12/8/2009	**4,980**
AOC-1 SB-4	55-60	12/8/2009	**1,030**
AOC-1 SB-5	25-30	12/8/2009	128
AOC-1 SB-5	55-60	12/8/2009	14.5
AOC-2 SB-1	15-20	12/7/2009	105
AOC-2 SB-1	40-45	12/7/2009	10.2
AOC-2 SB-2	20-25	12/7/2009	<10.4
AOC-2 SB-2	45-50	12/7/2009	20.8
AOC-2 SB-3	15-20	12/7/2009	78.6
AOC-2 SB-3	40-45	12/7/2009	126
AOC-2 SB-4	20-25	12/7/2009	128
AOC-2 SB-4	35-40	12/7/2009	147
AOC-3 SB-1	20-25	12/10/2009	<11
AOC-3 SB-1	40-45	12/10/2009	<10.4
AOC-3 SB-2	15-20	12/10/2009	<11.1
AOC-3 SB-2	40-45	12/10/2009	<10.3
AOC-3 SB-3	20-25	12/10/2009	<11.1
AOC-3 SB-3	40-45	12/10/2009	<10.4
AOC-3 SB-4	25-30	12/10/2009	<10.5
AOC-3 SB-4	40-45	12/10/2009	<10.5
AOC-4 SB-1	20-25	12/9/2009	49.4
AOC-4 SB-1	40-45	12/9/2009	35.6
AOC-4 SB-2	10-15	12/9/2009	14.1
AOC-4 SB-2	15-20	12/9/2009	**484**
AOC-4 SB-2	20-25	12/9/2009	88.4
AOC-4 SB-2	45-50	12/9/2009	22.4
AOC-4 SB-3	20-25	12/9/2009	24.2
AOC-4 SB-3	45-50	12/9/2009	17.9
AOC-4 SB-4	25-30	12/9/2009	183
AOC-4 SB-4	40-45	12/9/2009	98.1
AOC-5 SB-1	15-20	12/9/2009	226
AOC-5 SB-1	40-45	12/9/2009	36.8
AOC-5 SB-2	15-20	12/11/2009	163
AOC-5 SB-2	45-50	12/11/2009	34.5
AOC-5 SB-3	15-20	12/11/2009	187
AOC-5 SB-3	45-50	12/11/2009	45.6
AOC-5 SB-4	10-15	12/11/2009	30.7
AOC-5 SB-4	15-20	12/11/2009	**283**
AOC-5 SB-4	20-25	12/11/2009	237
AOC-5 SB-4	45-50	12/11/2009	59.5
AOC-6 SB-1	20-25	12/10/2009	150
AOC-6 SB-1	25-30	12/10/2009	**421**
AOC-6 SB-1	30-35	12/10/2009	207
AOC-6 SB-1	55-60	12/10/2009	20.7
AOC-6 SB-2	45-50	12/10/2009	95
AOC-6 SB-2	50-55	12/10/2009	56.8
AOC-6 SB-3	20-25	12/11/2009	**325**
AOC-6 SB-3	25-30	12/11/2009	**844**
AOC-6 SB-3	30-35	12/11/2009	**397**
AOC-6 SB-3	55-60	12/11/2009	63.9
AOC-6 SB-4	30-35	12/10/2009	141
AOC-6 SB-4	50-55	12/10/2009	30.4

Notes:
Bold = Detections exceeding the New Mexico Water Quality Control Commission (NM WQCC) Human Health or Domestic Water Supply Standards (if standards are available).
Sample Date followed by asterisk = Due to excessive foaming of the sample, normal reporting limits were not attained and preseverv ation requirements were not met.
NA = Not Analyzed
-- = Not Analyzed
< = less than - the number following the sign is the limit of quantitation, the smalest amount of analyte which can be reliably determined using the specific analytical test.
ND = Data gathered from previous report indicates the analytical result was "non-detect" with no method detection given.
* = Resampled on different date

APPENDIX A
DISCHARGE PERMIT (GW-004)
APRIL 17, 2008

New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division

April 17, 2008

Ms. Jenee Homer, Project Manager
Chevron Environmental Management Company
Upstream Business Unit
1400 Smith Street
Room 19001B
Houston, TX 77002

RE: Discharge Permit GW-004
Chevron Eunice North Gas Plant

Dear Ms. Homer:

Pursuant to Water Quality Control Commission (WQCC) Regulations 20.6.2.3104 - .3114 NMAC, the Oil Conservation Division (OCD) hereby approves the discharge permit for the **Chevron U.S.A., Inc.** (owner/operator) Eunice North Gas Plant (GW-004) located in the NE/4 - SE/4 of Section 28, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, under the conditions specified in the enclosed **Attachment To The Discharge Permit**. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 30 working days of receipt of this letter.**

Please be advised that approval of this permit does not relieve the owner/operator of responsibility if operations result in a release. Nor does it relieve the owner/operator of its responsibility to comply with any other governmental authority's rules and regulations.

If you have any questions, please contact Glenn von Gonten of my staff at 505-476-3488 or by email at glenn.vongonten@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge permit review.

Sincerely,

Wayne Price
Environmental Bureau Chief

LWP/gvg
Attachments-1
xc: OCD Hobbs Office

ATTACHMENT TO THE DISCHARGE PERMIT
CHEVRON U.S.A., INC. EUNICE NORTH GAS PLANT (GW-004)
DISCHARGE PERMIT APPROVAL CONDITIONS
APRIL 17, 2008

Please remit a check for $2600.00 made payable to Water Quality Management Fund:

Water Quality Management Fund
C/o: Oil Conservation Division
1220 South Saint Francis Drive
Santa Fe, New Mexico 87505

1. **Payment of Discharge Plan Fees:** All discharge permits are subject to WQCC Regulations. Every billable facility that submits a discharge permit application will be assessed a filing fee of $100.00, plus a flat fee (*see* WQCC Regulation 20.6.2.3114 NMAC). The Oil Conservation Division (OCD) has received the required $100.00 filing fee. ***The flat fee for "Abatement of ground water and vadose zone contamination at oil and gas sites is $2600.00. Please submit this amount along with the signed certification item 23 of this document after the final permit is issued in approximately 45 days. Checks should be made out to the New Mexico Water Quality Management Fund.***

2. **Permit Expiration, Renewal Conditions and Penalties:** Pursuant to WQCC Regulation 20.6.2.3109.H.4 NMAC, this permit is valid for a period of five years. **The permit will expire on March 16, 2011** and an application for renewal should be submitted no later than 120 days before that expiration date. Pursuant to WQCC Regulation 20.6.2.3106.F NMAC, if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved. ***Expired permits are a violation of the Water Quality Act (Chapter 74, Article 6, NMSA1978) and civil penalties may be assessed accordingly.***

3. **Permit Terms and Conditions:** Pursuant to WQCC Regulation 20.6.2.3104 NMAC, when a permit has been issued, the owner/operator must ensure that all discharges shall be consistent with the terms and conditions of the permit. In addition, all facilities shall abide by the applicable rules and regulations administered by the OCD pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-1 through 70-2-38.

4. **Owner/Operator Commitments:** The owner/operator shall abide by all commitments submitted in its November 8, 2005 discharge plan application, including attachments and subsequent amendments and these conditions for approval. Permit applications that reference previously approved plans on file with the division shall be incorporated in this permit and the owner/operator shall abide by all previous commitments of such plans and these conditions for approval.

5. **Modifications:** WQCC Regulations 20.6.2.3107.C and 20.6.2.3109 NMAC address possible future modifications of a permit. The owner/operator (discharger) shall notify the OCD of any facility expansion, production increase or process modification that would result in any significant modification in the discharge of water contaminants. The Division Director may require a permit modification if any water quality standard specified at 20.6.2.3103 NMAC is being or will be exceeded, or if a toxic pollutant as defined in WQCC Regulation 20.6.2.7 NMAC is present in ground water at any place of withdrawal for present or reasonably foreseeable future use, or that the Water Quality Standards for Interstate and Intrastate streams as specified in 20.6.4 NMAC are being or may be violated in surface water in New Mexico.

6. **Waste Disposal and Storage:** The owner/operator shall dispose of all wastes at an OCD-approved facility. Only oil field RCRA-exempt wastes may be disposed of by injection in a Class II well. RCRA non-hazardous, non-exempt oil field wastes may be disposed of at an OCD-approved facility upon proper waste determination pursuant to 40 CFR part 261. Any waste stream that is not listed in the discharge permit application must be approved by the OCD on a case-by-case basis.

A. **OCD Rule 712 Waste:** Pursuant to OCD Rule 712 (19.15.9.712 NMAC) disposal of certain non-domestic waste without notification to the OCD is allowed at NMED permitted solid waste facilities if the waste stream has been identified in the discharge permit and existing process knowledge of the waste stream does not change.

B. **Waste Storage:** The owner/operator shall store all waste in an impermeable bermed area, except waste generated during emergency response operations for up to 72 hours. All waste storage areas shall be identified in the discharge permit application. Any waste storage area not identified in the permit shall be approved on a case-by-case basis only. The owner/operator shall not store oil field waste on-site for more than 180 days unless approved by the OCD.

7. **Drum Storage:** The owner/operator must store all drums, including empty drums, containing materials other than fresh water on an impermeable pad with curbing. The owner/operator must store empty drums on their sides with the bungs in place and lined up on a horizontal plane. The owner/operator must store chemicals in other containers, such as tote tanks, sacks, or buckets on an impermeable pad with curbing.

8. **Process, Maintenance and Yard Areas:** The owner/operator shall either pave and curb or have some type of spill collection device incorporated into the design at all process, maintenance, and yard areas which show evidence that water contaminants from releases, leaks and spills have reached the ground surface.

9. **Above Ground Tanks:** The owner/operator shall ensure that all aboveground tanks have impermeable secondary containment (*e.g.*, liners and berms), which will contain a volume of at least one-third greater than the total volume of the largest tank or all interconnected tanks and shall

retrofit all existing tanks before the next discharge permit renewal. Tanks that contain fresh water or fluids that are gases at atmospheric temperature and pressure are exempt from this condition.

10. Labeling: The owner/operator shall clearly label all tanks, drums, and containers to identify their contents and other emergency notification information. The owner/operator may use a tank code numbering system that is incorporated into their emergency response plans.

11. Below-Grade Tanks/Sumps and Pits/Ponds.

A. All below-grade tanks and sumps must be approved by the OCD prior to installation and must incorporate secondary containment with leak detection into the design. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal. All existing below-grade tanks and sumps without secondary containment and leak detection must be tested annually or as specified herein. Systems that have secondary containment with leak detection shall have a monthly inspection of the leak detection system to determine if the primary containment is leaking. Small sumps or depressions in secondary containment systems used to facilitate fluid removal are exempt from these requirements if fluids are removed within 72 hours.

B. All pits and ponds, including modifications and retrofits, shall be designed by a certified registered professional engineer and approved by the OCD prior to installation. In general, all pits or ponds shall have approved hydrologic and geologic reports, location, foundation, liners, and secondary containment with leak detection, monitoring and closure plans. All pits or ponds shall be designed, constructed and operated so as to contain liquids and solids in a manner that will protect fresh water, public health, safety and the environment for the foreseeable future. The owner/operator shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal.

C. The owner/operator shall ensure that all exposed pits, including lined pits and open top tanks (8 feet in diameter or larger) shall be fenced, screened, netted, or otherwise rendered non-hazardous to wildlife, including migratory birds.

D. The owner/operator shall maintain the results of all tests and inspections at the facility covered by this discharge permit and available for OCD inspection. The owner/operator shall report the discovery of any system which is found to be leaking or has lost integrity to the OCD within 15 days. The owner/operator may propose various methods for testing such as pressure testing to 3 pounds per square inch greater than normal operating pressure and/or visual inspection of cleaned tanks and/or sumps, or other OCD-approved methods. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

12. Underground Process/Wastewater Lines:

A. The owner/operator shall test all underground process/wastewater pipelines at least once every five (5) years to demonstrate their mechanical integrity, except lines containing fresh water or fluids that are gases at atmospheric temperature and pressure. Pressure rated pipe shall be tested by pressuring up to one and one-half times the normal operating pressure, if possible, or for atmospheric drain systems, to 3 pounds per square inch greater than normal operating pressure, and pressure held for a minimum of 30 minutes with no more than a 1% loss/gain in pressure. The owner/operator may use other methods for testing if approved by the OCD.

B. The owner/operator shall maintain underground process and wastewater pipeline schematic diagrams or plans showing all drains, vents, risers, valves, underground piping, pipe type, rating, size, and approximate location. All new underground piping must be approved by the OCD prior to installation. The owner/operator shall report any leaks or loss of integrity to the OCD within 15 days of discovery. The owner/operator shall maintain the results of all tests at the facility covered by this discharge permit and they shall be available for OCD inspection. The owner/operator shall notify the OCD at least 72 hours prior to all testing.

13. **Class V Wells:** The owner/operator shall close all Class V wells (*e.g.*, septic systems, leach fields, dry wells, etc.) that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes unless it can be demonstrated that ground water will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD-regulated facilities that inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only must be permitted by the New Mexico Environment Department (NMED).

14. **Housekeeping:** The owner/operator shall inspect all systems designed for spill collection/prevention and leak detection at least monthly to ensure proper operation and to prevent over topping or system failure. All spill collection and/or secondary containment devices shall be emptied of fluids within 72 hours of discovery. The owner/operator shall maintain all records at the facility and available for OCD inspection.

15. **Spill Reporting:** The owner/operator shall report all unauthorized discharges, spills, leaks and releases and conduct corrective action pursuant to WQCC Regulation 20.5.12.1203 NMAC and OCD Rule 116 (19.15.3.116 NMAC). The owner/operator shall notify both the OCD District Office and the Santa Fe Office within 24 hours and file a written report within 15 days.

16. **OCD Inspections:** The OCD may place additional requirements on the facility and modify the permit conditions based on OCD inspections.

17. **Storm Water:** The owner/operator shall implement and maintain run-on and run-off plans and controls. The owner/operator shall not discharge any water contaminant that exceeds the WQCC standards specified in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) including any oil sheen in any stormwater run-off. The

owner/operator shall notify the OCD within 24 hours of discovery of any releases and shall take immediate corrective action(s) to stop the discharge.

18. Unauthorized Discharges: The owner/operator shall not allow or cause water pollution, discharge or release of any water contaminant that exceeds the WQCC standards listed in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) unless specifically listed in the permit application and approved herein. ***An unauthorized discharge is a violation of this permit.***

19. Vadose Zone and Water Pollution: The owner/operator shall address any contamination through the discharge permit process or pursuant to WQCC 20.6.2.4000 - .4116 NMAC (Prevention and Abatement of Water Pollution). The OCD may require the owner/operator to modify its permit for investigation, remediation, abatement, and monitoring requirements for any vadose zone or water pollution. Failure to perform any required investigation, remediation, abatement and submit subsequent reports will be a violation of the permit. The previously submitted investigation(s) and remediation plans (Stage 1 and Stage 2 Abatement Plans) were submitted pursuant to the discharge permit and all future discoveries of contamination will be addressed through the discharge permit. OCD will separately review and approve or approve with conditions any pending or future investigation or remediation work plans or reports.

20. Additional Site Specific Conditions:

A. The owner/operator shall submit a *Chlorides Investigation Workplan* to determine the possible sources of detected chlorides in vicinity of the Eunice North Gas Plant to OCD by July 18, 2008.

B. The owner/operator shall submit a *Hydrocarbon Remediation Workplan*, substantially meeting the requirements for Stage 2 Abatement Plan (see 20.6.2.4106.D NMAC) to address the remaining hydrocarbon contamination released from the Eunice North Gas Plant to OCD by July 18, 2008.

C. The owner/operator shall submit an annual ground water monitoring and abatement report to the OCD by April 15th of each year. The annual report shall contain the following information for all monitoring and remediation systems:

1. A description of the monitoring and remediation activities that occurred during the year, including conclusions and recommendations.

2. Summary tables listing laboratory analytic results of all ground water and soil samples. Any WQCC constituent found to exceed the groundwater standard shall be highlighted and noted in the annual report. Copies of the most recent years laboratory analytical data sheets shall also be submitted.

3. Annual water table potentiometric maps. A corrected water table elevation shall be determined for all wells containing phase-separated hydrocarbons. These maps shall show well locations, pertinent site features, and the direction and magnitude of the hydraulic gradient.

4. Semi-annual isopleth maps for the following constituents: total chromium (dissolved phase) and hexavalent chromium (dissolved phase); non-aqueous phase liquids; chlorides; TPH; and, BTEX.

5. Semi-annual geologic cross-sections (both dip and strike), using the geologic/lithologic logs from the monitor, recovery, and injection wells, depicting the concentrations for the following constituents: total chromium (dissolved phase) and hexavalent chromium (dissolved phase); non-aqueous phase liquids; chlorides; TPH; and, BTEX.

6. Estimate or measure of the volume of non-aqueous phase liquid recovered in the recovery wells during each quarter and the total recovered to date.

D. The owner/operator shall notify the OCD Santa Fe and local district office at least 2 weeks in advance of all scheduled activities so that the OCD has the opportunity to witness the events and split samples.

E. The owner/operator shall notify the NMOCD within 15 days of the discovery of separated-phase hydrocarbons or the exceedance of a WQCC standard in any monitor well where separate-phase hydrocarbons were not present or where contaminant concentrations did not exceed WQCC standards during the preceding monitoring event.

21. Transfer of Discharge Permit (WQCC 20.6.2.3111 NMAC): Prior to any transfer of ownership, control, or possession (whether by lease, conveyance or otherwise) of a facility with a discharge permit, the transfer or shall notify the transferee in writing of the existence of the discharge permit, and shall deliver or send by certified mail to OCD a copy of such written notification, together with a certification or other proof that such notification has in fact been received by the transferee. Upon receipt of such notification, the transferee shall have the duty to inquire into all of the provisions and requirements contained in such discharge permit, and the transferee shall be charged with notice of all such provisions and requirements as they appear of record in OCD's file or files concerning such discharge permit. The transferee (new owner/operator) shall sign and return an original copy of these permit conditions and provide a written commitment to comply with the terms and conditions of the previously approved discharge permit.

22. Closure Plan and Financial Assurance: Pursuant to 20.6.2.3107 NMAC an owner/operator shall notify OCD when any operations of the facility are to be discontinued for a period in excess of six months. Prior to closure, or as a condition of this permit, or request from the OCD, the operator will submit an approved closure plan, modified plan, and/or provide adequate financial assurance.

23. **Certification:** The **owner/operator**, by the officer whose signature appears below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained here. The **owner/operator** further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, safety, and the environment, change the conditions and requirements of this permit administratively.

Conditions accepted by: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

CHEVRON USA INC.
Company Name - print name above

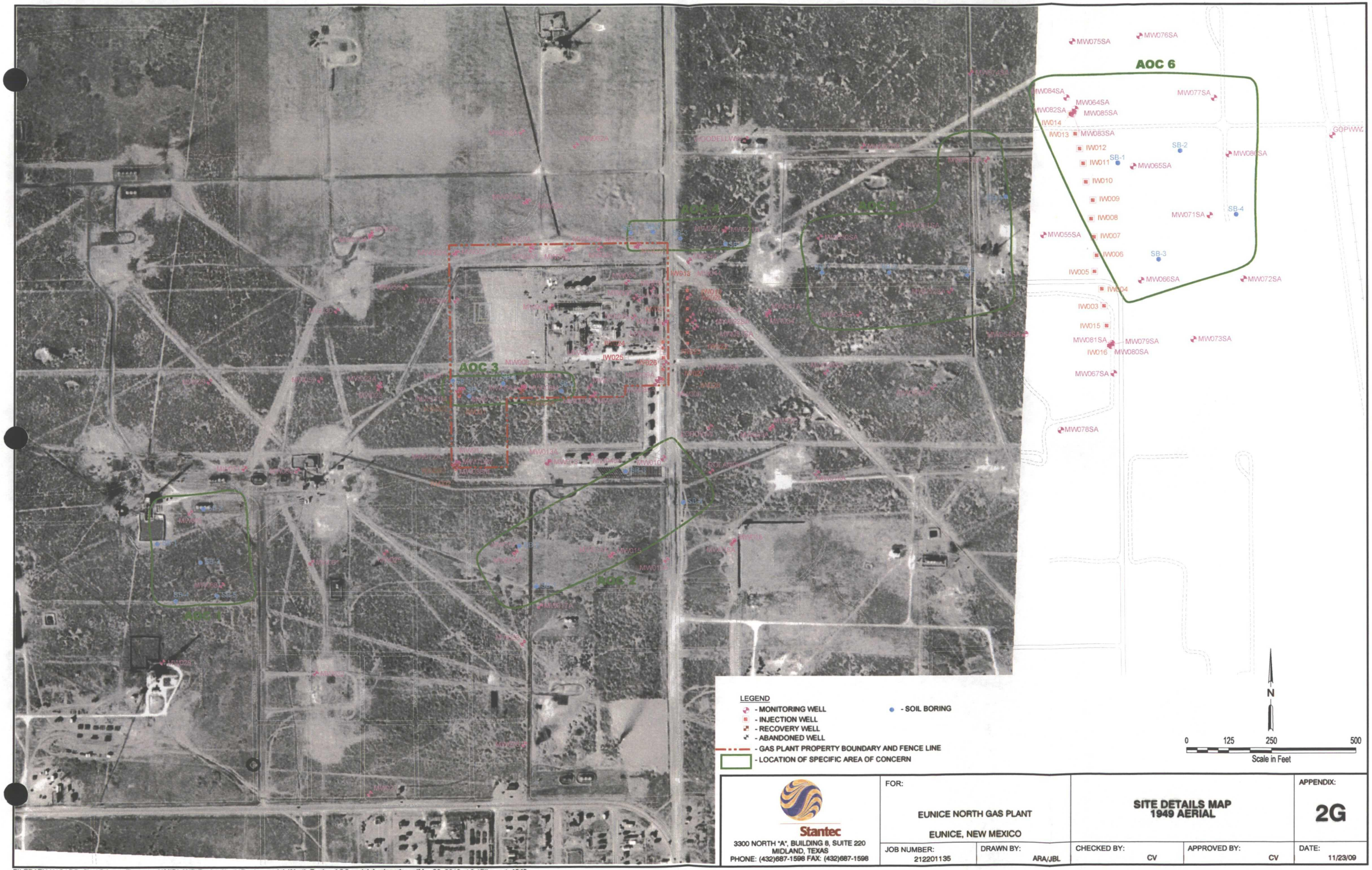
MICHAEL T. McDONALD
Company Representative - print name

Michael T. McDonald
Company Representative - Signature

HEALTH ENVIRONMENT & SAFETY MANAGER
Title ATTORNEY IN FACT

JUNE 12, 2008
Date

APPENDIX B
HISTORICAL AERIALS



Stantec
3300 NORTH "A", BUILDING 8, SUITE 220
MIDLAND, TEXAS
PHONE: (432)687-1598 FAX: (432)687-1598

FOR:
EUNICE NORTH GAS PLANT
EUNICE, NEW MEXICO

SITE DETAILS MAP
1949 AERIAL

APPENDIX: **2G**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212201135	ARA/JBL	CV	CV	11/23/09

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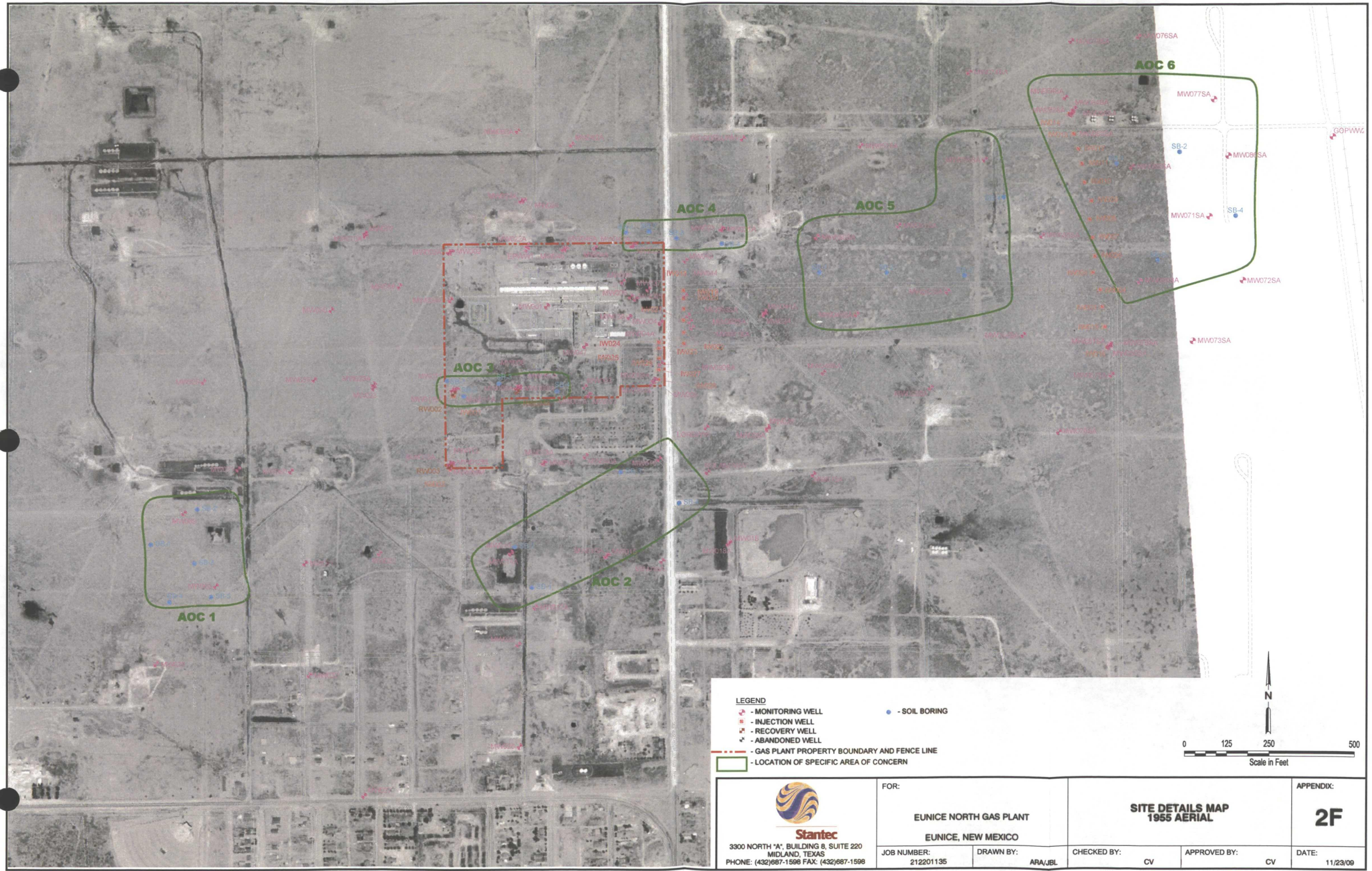

Stantec
3300 NORTH "A", BUILDING 8, SUITE 220
MIDLAND, TEXAS
PHONE: (432)687-1596 FAX: (432)687-1596

FOR:
EUNICE NORTH GAS PLANT
EUNICE, NEW MEXICO

SITE DETAILS MAP 1955 AERIAL

APPENDIX: 2F

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212201135	ARA/JBL	CV	CV	11/23/09

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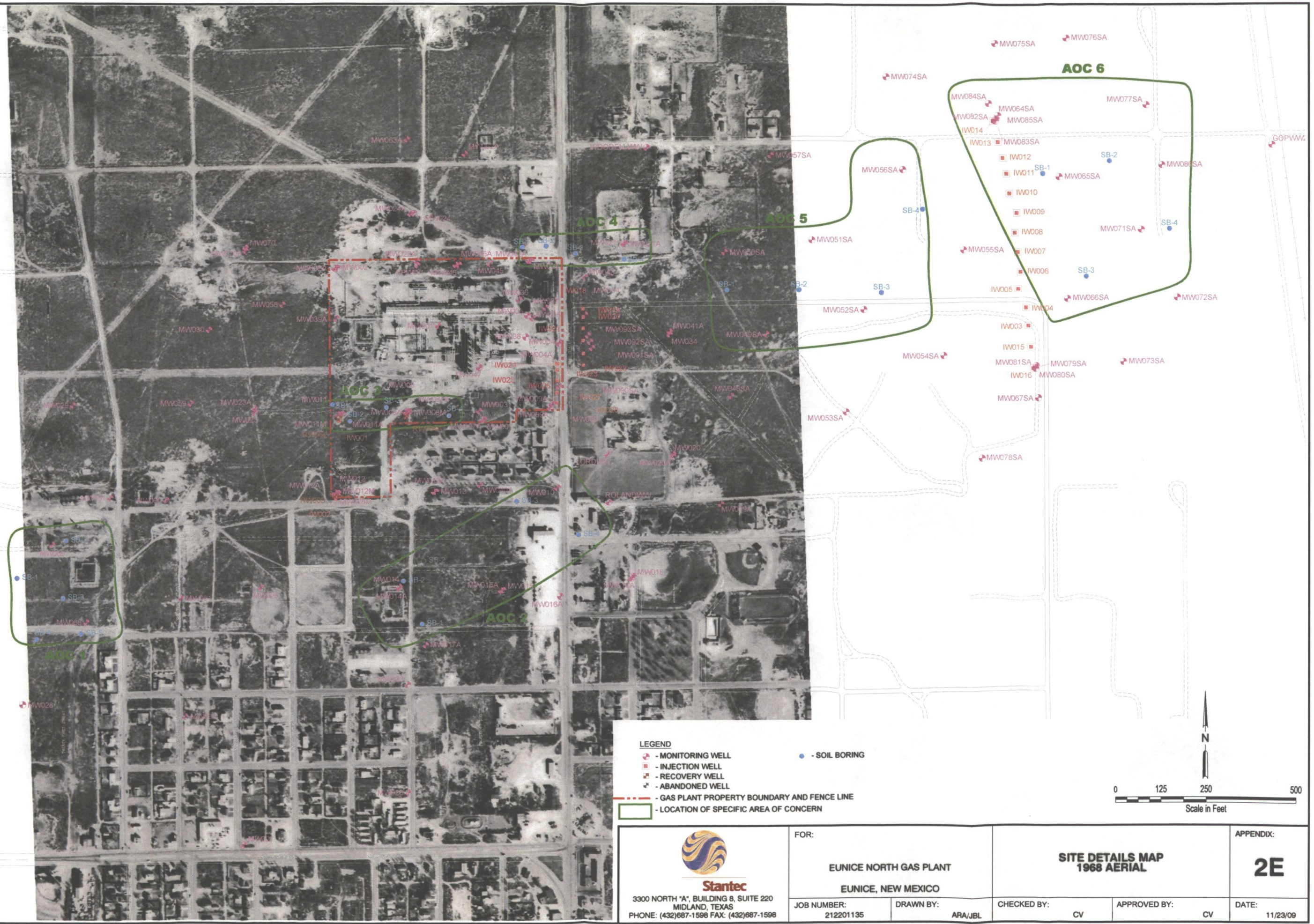

LEGEND

- MONITORING WELL
- INJECTION WELL
- RECOVERY WELL
- ABANDONED WELL
- SOIL BORING
- GAS PLANT PROPERTY BOUNDARY AND FENCE LINE
- LOCATION OF SPECIFIC AREA OF CONCERN

N

0 125 250 500

Scale in Feet

Stantec
3300 NORTH "A", BUILDING 8, SUITE 220
MIDLAND, TEXAS
PHONE: (432)687-1598 FAX: (432)687-1598

FOR: EUNICE NORTH GAS PLANT
EUNICE, NEW MEXICO

SITE DETAILS MAP
1968 AERIAL

APPENDIX: **2E**

JOB NUMBER:	DRAWN BY:	CHECKED BY:	APPROVED BY:	DATE:
212201135	ARA/JBL	CV	CV	11/23/09

FILEPATH:K:\CADD_files\Other_offices_work\MIDLAND\Eunice North\Eunice_aerials\North Eunice-AOC-aerial.dwg|aandrews|Mar 26, 2010 at 9:18|Layout: 1968

APPENDIX C
BORING LOGS

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO: **AOC 1 SB-1** PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/8/09** COMPLETED: **12/8/09**
INSTALLATION: STARTED **12/8/09** COMPLETED: **12/8/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE: **32° 26' 49.3"**
LONGITUDE: **103° 10' 8.4"**
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **NE**
BOREHOLE DEPTH (ft): **60**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			**SILT** ; brownish tan with red				0
5			Pink with white				5
10			White				10
15							15
20							20
25							25
30			Reddish				30
35							35
40			Dark reddish tan; No groundwater encountered				40
45							45
50							50
55							55

Hole terminated at 60 feet.

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/8/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO: **AOC 1 SB-2** PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/8/09** COMPLETED: **12/8/09**
INSTALLATION: STARTED **12/8/09** COMPLETED: **12/8/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE: **32° 26' 50.6"**
LONGITUDE: **103° 10' 7.2"**
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **NE**
BOREHOLE DEPTH (ft): **60**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			**SILT** ; red with tan; dry				0
5							5
10							10
15			White; dry				15
20							20
25			Tan with red				25
30							30
35							35
40			Light tan with red				40
45							45
50			Dark red with tan				50
55							55

Hole terminated at 60 feet.

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/8/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO: **AOC 1 SB-3** PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/8/09** COMPLETED: **12/8/09**
INSTALLATION: STARTED **12/8/09** COMPLETED: **12/8/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE: **32° 26' 47.3"**
LONGITUDE: **103° 10' 5.9"**
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **NE**
BOREHOLE DEPTH (ft): **60**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
			Reddish; dry; Some gravel present				
10			Red with white; dry; Caliche				10
20			Pinkish white; dry				20
35			Reddish; dry				35
55			Dark reddish				55

Hole terminated at 60 feet.

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO: **AOC 1 SB-4** PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/8/09** COMPLETED: **12/8/09**
INSTALLATION: STARTED **12/8/09** COMPLETED: **12/8/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE: **32° 26' 45.8"**
LONGITUDE: **103° 10' 5"**
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **NE**
BOREHOLE DEPTH (ft): **60**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
5			Reddish; Organic gravel present				5
10			Reddish; Possibly fill material				10
15							15
20							20
25			Pinkish white				25
30							30
35			Reddish white				35
40							40
45			Pinkish white				45
50							50
55			Dark red				55

Hole terminated at 60 feet.

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:
AOC 1 SB-5 PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/8/09** COMPLETED: **12/8/09**
INSTALLATION: STARTED **12/8/09** COMPLETED: **12/8/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE: **32° 26' 45.9"**
LONGITUDE: **103° 10' 5.5"**
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **NE**
BOREHOLE DEPTH (ft): **60**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): **---**
WELL CASING DIAMETER (in): **---**
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0–10			**SILT** ; red; Organic				
10–15			White; Caliche				
15–20			Reddish; dry				
20–30			Pinkish white; dry				
30–40			Tan with white; dry				
40–50			Dark red; dry				
50–60			Dark red; dry				

Hole terminated at 60 feet.

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:
AOC 2 SB-1 PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/7/09** COMPLETED: **12/7/09**
INSTALLATION: STARTED **12/7/09** COMPLETED: **12/7/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE: **32° 26' 45.8"**
LONGITUDE: **103° 9' 43.7"**
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **45** **12/7/09**
BOREHOLE DEPTH (ft): **45**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			**SANDY** ; reddish; Organic				0
5							5
10			White; dry				10
15			Pinkish white; dry				15
20							20
25							25
30			Reddish white; moist				30
35			Reddish; moist				35
40			Dark red; Groundwater encountered at 45 feet				40
45			Hole terminated at 45 feet.				45
50							50
55							55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:
AOC 2 SB-2 PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/7/09** COMPLETED: **12/7/09**
INSTALLATION: STARTED **12/7/09** COMPLETED: **12/7/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE: **32° 26' 48.1"**
LONGITUDE: **103° 9' 44.9"**
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **50** **12/7/09**
BOREHOLE DEPTH (ft): **50**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			**SANDY** ; reddish				0
5							5
10			White; dry				10
15							15
20			White; dry				20
25			White; dry				25
30			Reddish white; moist				30
35			Reddish white; moist				35
40							40
45			**SAND** ; dark red; Groundwater at 50 feet				45
50			Hole terminated at 50 feet.				50
55							55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:
AOC 2 SB-3 PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/7/09** COMPLETED: **12/7/09**
INSTALLATION: STARTED **12/7/09** COMPLETED: **12/7/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE: **32° 26' 52.8"**
LONGITUDE: **103° 9' 35.5"**
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **NE**
BOREHOLE DEPTH (ft): **45**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
			Reddish; Organic				
5			Caliche				5
10							10
15							15
20							20
25							25
30			**SANDY** ; reddish; loose; moist; Caliche				30
35							35
40			**SANDY** ; dark red; Groundwater encountered at 45 feet				40
45			Hole terminated at 45 feet.				45
50							50
55							55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO: **AOC 2 SB-4** PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/7/09** COMPLETED: **12/7/09**
INSTALLATION: STARTED **12/7/09** COMPLETED: **12/7/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE: **32° 26' 50.6"**
LONGITUDE: **103° 9' 33"**
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **45** **12/7/09**
BOREHOLE DEPTH (ft): **45**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			**SANDY** ; dark red				0
5							5
10							10
15							15
20							20
25							25
30							30
35							35
40							40
45			Hole terminated at 45 feet.				45
50							50
55							55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO: **AOC 3 SB-1** PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/10/09** COMPLETED: **12/10/09**
INSTALLATION: STARTED **12/10/09** COMPLETED: **12/10/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE:
LONGITUDE:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **NE**
BOREHOLE DEPTH (ft): **45**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			Dry; Sand and caliche mixture				0
5							5
10							10
12			White with pinkish; Caliche				12
15							15
20							20
23				■			23
25			Red with tan; Caliche				25
30							30
35							35
40							40
41			**SAND** ; dark red; moist				41
43				■			43
45			Hole terminated at 45 feet.				45
50							50
55							55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO: **AOC 3 SB-2** PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/10/09** COMPLETED: **12/10/09**
INSTALLATION: STARTED **12/10/09** COMPLETED: **12/10/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE:
LONGITUDE:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **45** **12/10/09**
BOREHOLE DEPTH (ft): **45**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0–10			Red with tan; Some sand present				
10–35			White with tan; Caliche				
35–45			**SAND** ; dark red; Groundwater encountered at 45 feet				
45			Hole terminated at 45 feet.				

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:
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Stantec

DRILLING: STARTED **12/10/09** COMPLETED: **12/10/09**
INSTALLATION: STARTED **12/10/09** COMPLETED: **12/10/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE:
LONGITUDE:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **NE**
BOREHOLE DEPTH (ft): **45**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			Red with tan; Some sand present				0
5							5
10			Tan with red; Some sand present				10
15			White with pinkish; Caliche				15
20							20
25			Tan with red; Sand and caliche				25
30			**SAND** ; dark red				30
35							35
40							40
45			Hole terminated at 45 feet.				45
50							50
55							55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO: **AOC 3 SB-4** PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/10/09** COMPLETED: **12/10/09**
INSTALLATION: STARTED **12/10/09** COMPLETED: **12/10/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft): EASTING (ft):
LATITUDE: LONGITUDE:
GROUND ELEV (ft): TOC ELEV (ft):
INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **45**
STATIC DTW (ft): **NE** WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			Red with tan; dry; Some sand present				0
5							5
10			White with pinkish; Caliche				10
15							15
20			Light red with tan; dry; sand and caliche mixture				20
25							25
30							30
35			**SAND** ; dark red with tan; moist				35
40							40
45			Hole terminated at 45 feet.				45
50							50
55							55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:

AOC 4 SB-1

Stantec

DRILLING: STARTED **12/9/09** COMPLETED: **12/9/09**
INSTALLATION: STARTED **12/9/09** COMPLETED: **12/9/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE: **32° 27' 6.2"**
LONGITUDE: **103° 9' 36.4"**
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **45** **12/9/09**
BOREHOLE DEPTH (ft): **45**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			**SILT** ; red with tan; dry; Organic soil				0
5							5
			Tan with pink				
10							10
			Dark red; Caliche				
15							15
20							20
			Tan with white; Caliche				
25							25
			Reddish tan; Caliche				
30							30
35			**SAND** ; dark red				35
40			**SAND** ; dark red; moist				40
45			Hole terminated at 45 feet.				45
50							50
55							55

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:
AOC 4 SB-2 PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/9/09** COMPLETED: **12/9/09**
INSTALLATION: STARTED **12/9/09** COMPLETED: **12/9/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE: **32° 27' 5.9"**
LONGITUDE: **103° 9' 35.5"**
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **50** **12/9/09**
BOREHOLE DEPTH (ft): **50**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			Red; dry				0
5							5
10							10
12			Red with tan; dry				12
15							15
17			Pinkish tan; dry				17
20							20
25							25
27			Tan with reddish white; dry				27
30							30
35							35
35			Dark red; dry				35
40							40
45							45
48			Dark red; moist; Groundwater encountered at 50 feet				48
50							50
50			Hole terminated at 50 feet.				50
55							55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:
AOC 4 SB-3 PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/9/09** COMPLETED: **12/9/09**
INSTALLATION: STARTED **12/9/09** COMPLETED: **12/9/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE: **32° 27' 6.1"**
LONGITUDE: **103° 9' 32.8"**
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **50** **12/9/09**
BOREHOLE DEPTH (ft): **50**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			Red with white; Caliche				0
5							5
10							10
15							15
20							20
25							25
30			Tan with white; dry				30
35							35
40			Red with tan; moist; Groundwater encountered at 50 feet				40
45							45
50			Hole terminated at 50 feet.				50
55							55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO: **AOC 4 SB-4** PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/9/09** COMPLETED: **12/9/09**
INSTALLATION: STARTED **12/9/09** COMPLETED: **12/9/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft): EASTING (ft):
LATITUDE: **32° 27' 5.6"** LONGITUDE: **103° 9' 30"**
GROUND ELEV (ft): TOC ELEV (ft):
INITIAL DTW (ft): **45 12/9/09** BOREHOLE DEPTH (ft): **45**
STATIC DTW (ft): **NE** WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			**SILT** ; red				0
5							5
10			Red; Caliche				10
15							15
20			Pinkish tan with white				20
25							25
30							30
35			**SAND** ; red; moist; Groundwater encountered at 45 feet				35
40							40
45			Hole terminated at 45 feet.				45
50							50
55							55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:
AOC 5 SB-1 PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/9/09** COMPLETED: **12/9/09**
INSTALLATION: STARTED **12/9/09** COMPLETED: **12/9/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE: **32° 27' 3.9"**
LONGITUDE: **103° 9' 73.4"**
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **45** **12/9/09**
BOREHOLE DEPTH (ft): **45**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			**SILT** ; red				0
5							5
10			White; Caliche				10
15							15
20							20
25							25
30			**SAND** ; red; Groundwater encountered at 45 feet				30
35							35
40							40
45			Hole terminated at 45 feet.				45
50							50
55							55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:
AOC 5 SB-2 PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/11/09** COMPLETED: **12/11/09**
INSTALLATION: STARTED **12/11/09** COMPLETED: **12/11/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE:
LONGITUDE:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **50** **12/11/09**
BOREHOLE DEPTH (ft): **50**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			Red with tan; dry; Dry				0
5							5
10			White with tan; Caliche				10
15							15
20			**SAND** ; red				20
25			White; Caliche				25
30							30
35							35
40			**SAND** ; red with tan; Groundwater encountered at 50 feet				40
45							45
50			Hole terminated at 50 feet.				50
55							55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:
AOC 5 SB-3 PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/11/09** COMPLETED: **12/11/09**
INSTALLATION: STARTED **12/11/09** COMPLETED: **12/11/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE:
LONGITUDE:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **NE**
BOREHOLE DEPTH (ft): **50**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			**SAND** ; red with tan				0
5							5
10			Tan with white; Caliche				10
15							15
20			White; Caliche				20
25							25
30			Tan with white; Caliche and sand				30
35							35
40			**SAND** ; red; moist				40
45							45
50			Hole terminated at 50 feet.				50
55							55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO:
AOC 5 SB-4 PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/11/09** COMPLETED: **12/11/09**
INSTALLATION: STARTED **12/11/09** COMPLETED: **12/11/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE:
LONGITUDE:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **NE**
BOREHOLE DEPTH (ft): **50**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			Red; dry; Sand and silt present				0
5							5
10							10
15			White with tan; dry; Caliche				15
20							20
25			White; Caliche				25
30							30
35			**SAND** ; red				35
40			Tan with white; Caliche				40
45			**SAND** ; red with tan				45
50			**SAND** ; red; moist				50
55			Hole terminated at 50 feet.				55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO: **AOC 6 SB-1** PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/10/09** COMPLETED: **12/10/09**
INSTALLATION: STARTED **12/10/09** COMPLETED: **12/10/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft): EASTING (ft):
LATITUDE: LONGITUDE:
GROUND ELEV (ft): TOC ELEV (ft):
INITIAL DTW (ft): **NE** BOREHOLE DEPTH (ft): **60**
STATIC DTW (ft): **NE** WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): --- BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward** CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			Red with tan; sand and caliche mixture				0
5							5
10			Tan with white; Caliche				10
15			White; Caliche				15
20			White with tan; Caliche				20
25							25
30							30
35							35
40							40
45			White with red; Caliche and sand mixture				45
50			**SAND** ; red; moist				50
55							55

Hole terminated at 60 feet.

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO: **AOC 6 SB-2** PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/10/09** COMPLETED: **12/10/09**
INSTALLATION: STARTED **12/10/09** COMPLETED: **12/10/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill rig**
DRILLING METHOD: **Air rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE:
LONGITUDE:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **NE**
BOREHOLE DEPTH (ft): **55**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			Red; some sand present				0
5							5
10			Red with white; Caliche				10
15			White; Caliche				15
20							20
25							25
30			Tan with white; Caliche and sand				30
35			White with tan; Caliche				35
40			White; Caliche				40
45			Red with tannish white; Sand and caliche				45
50			**SAND** ; dark red; moist				50
55			Hole terminated at 55 feet.				55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO: **AOC 6 SB-3** PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/11/09** COMPLETED: **12/11/09**
INSTALLATION: STARTED **12/11/09** COMPLETED: **12/11/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE:
LONGITUDE:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **NE**
BOREHOLE DEPTH (ft): **60**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
			SAND ; red				
5							5
10							10
			Tan with white; Caliche				
15							15
			White; Caliche				
20							20
25							25
			White with tan; Caliche and sand				
30							30
35							35
			SAND ; red; moist				
40							40
45							45
50							50
55							55

Hole terminated at 60 feet.

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

PROJECT: **North Eunice Gas Plant**
LOCATION: **Eunice, New Mexico**
PROJECT NUMBER:

WELL / PROBEHOLE / BOREHOLE NO: **AOC 6 SB-4** PAGE 1 OF 1

Stantec

DRILLING: STARTED **12/10/09** COMPLETED: **12/10/09**
INSTALLATION: STARTED **12/10/09** COMPLETED: **12/10/09**
DRILLING COMPANY: **Harrison & Cooper**
DRILLING EQUIPMENT: **Air Rotary Drill Rig**
DRILLING METHOD: **Air Rotary**
SAMPLING EQUIPMENT: **Shovels and plastic bags**

NORTHING (ft):
EASTING (ft):
LATITUDE:
LONGITUDE:
GROUND ELEV (ft):
TOC ELEV (ft):
INITIAL DTW (ft): **55** **12/10/09**
BOREHOLE DEPTH (ft): **55**
STATIC DTW (ft): **NE**
WELL DEPTH (ft): ---
WELL CASING DIAMETER (in): ---
BOREHOLE DIAMETER (in): **4**
LOGGED BY: **Danny Woodward**
CHECKED BY:

Time & Depth (feet)	Graphic Log	USCS	Description	Sample	Measured Recov. (feet)	Blow Count	Depth (feet)
0			Red with tan; Some sand present				0
5							5
10							10
12			Red with tan; Caliche				12
15							15
20							20
22			White with tan; Caliche				22
25							25
27			Tan with white; Caliche				27
30							30
33			White with tan; Caliche				33
35							35
40			Tan; sand and caliche				40
45			**SAND** ; tan with red				45
47			**SAND** ; dark red; moist; Groundwater encountered at 55 feet				47
50							50
53							53
55			Hole terminated at 55 feet.				55

GEO FORM 304 GINT BORING LOGS.GPJ SECOR INTL.GDT 1/11/10

APPENDIX D
LABORATORY ANALYTICAL REPORTS

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax:717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared for:

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

713-937-7973

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

December 30, 2009

Project: Eunice North Gas Plant

Samples arrived at the laboratory on Wednesday, December 16, 2009. The PO# for this group is 212201135.201.150 and the release number is EUNICE NORTH GP. The group number for this submittal is 1175503.

Client Sample Description	Lancaster Labs (LLI) #
AOC-2_SB-1_(15-20') Grab Soil Sample	5866107
AOC-2_SB-1_(40-45') Grab Soil Sample	5866108
AOC-2_SB-2_(20-25') Grab Soil Sample	5866109
AOC-2_SB-2_(45-50') Grab Soil Sample	5866110
AOC-2_SB-3_(15-20') Grab Soil Sample	5866111
AOC-2_SB-3_(40-45') Grab Soil Sample	5866112
AOC-2_SB-4_(20-25') Grab Soil Sample	5866113
AOC-2_SB-4_(35-40') Grab Soil Sample	5866114
AOC-1_SB-5_(25-30') Grab Soil Sample	5866115
AOC-1_SB-5_(55-60') Grab Soil Sample	5866116
AOC-1_SB-4_(20-25') Grab Soil Sample	5866117
AOC-1_SB-4_(55-60') Grab Soil Sample	5866118
AOC-1_SB-3_(15-20') Grab Soil Sample	5866119
AOC-1_SB-3_(55-60') Grab Soil Sample	5866120
AOC-1_SB-2_(15-20') Grab Soil Sample	5866121
AOC-1_SB-2_(55-60') Grab Soil Sample	5866122
AOC-1_SB-1_(15-20') Grab Soil Sample	5866123
AOC-1_SB-1_(55-60') Grab Soil Sample	5866124
AOC-5_SB-1_(15-20') Grab Soil Sample	5866125
AOC-5_SB-1_(40-45') Grab Soil Sample	5866126
AOC-4_SB-3_(20-25') Grab Soil Sample	5866127
AOC-4_SB-3_(45-50') Grab Soil Sample	5866128

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Analysis Report

AOC-4_SB-1_(20-25') Grab Soil Sample	5866129
AOC-4_SB-1_(40-45') Grab Soil Sample	5866130
AOC-4_SB-4_(25-30') Grab Soil Sample	5866131
AOC-4_SB-4_(40-45') Grab Soil Sample	5866132
AOC-4_SB-2_(15-20') Grab Soil Sample	5866133
AOC-4_SB-2_(45-50') Grab Soil Sample	5866134
AOC-6_SB-4_(30-35') Grab Soil Sample	5866135
AOC-6_SB-4_(50-55') Grab Soil Sample	5866136
AOC-6_SB-2_(45-50') Grab Soil Sample	5866137
AOC-6_SB-2_(50-55') Grab Soil Sample	5866138
AOC-3_SB-1_(20-25') Grab Soil Sample	5866139
AOC-3_SB-1_(40-45') Grab Soil Sample	5866140
AOC-3_SB-3_(20-25') Grab Soil Sample	5866141
AOC-3_SB-3_(40-45') Grab Soil Sample	5866142
AOC-3_SB-4_(25-30') Grab Soil Sample	5866143
AOC-3_SB-4_(40-45') Grab Soil Sample	5866144
AOC-6_SB-1_(25-30') Grab Soil Sample	5866145
AOC-6_SB-1_(55-60') Grab Soil Sample	5866146
AOC-5_SB-2_(45-50') Grab Soil Sample	5866147
AOC-5_SB-3_(15-20') Grab Soil Sample	5866148
AOC-5_SB-3_(45-50') Grab Soil Sample	5866149
AOC-6_SB-3_(25-30') Grab Soil Sample	5866150
AOC-6_SB-3_(55-60') Grab Soil Sample	5866151
DUP100 Grab Soil Sample	5866152
AOC-3_SB-2_(15-20') Grab Soil Sample	5866153
AOC-3_SB-2_(40-45') Grab Soil Sample	5866154
AOC-5_SB-4_(15-20') Grab Soil Sample	5866155
AOC-5_SB-4_(45-50') Grab Soil Sample	5866156
AOC-5_SB-2_(15-20') Grab Soil Sample	5866157
DUP101 Grab Soil Sample	5866158
DUP102 Grab Soil Sample	5866159
DUP103 Grab Soil Sample	5866160
DUP104 Grab Soil Sample	5866161
DUP105 Grab Soil Sample	5866162
DUP106 Grab Soil Sample	5866163
DUP107 Grab Soil Sample	5866164
DUP108 Grab Soil Sample	5866165

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO STANTEC International, Inc. Attn: Chad Vowell

Lancaster Laboratories

Analysis Report

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Questions? Contact your Client Services Representative
Wendy A Kozma at (717) 656-2300

Respectfully Submitted,

Robert Heisey

Robert Heisey
Senior Specialist

Lancaster Laboratories

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Analysis Report

Sample Description: AOC-2_SB-1_(15-20') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866107
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/07/2009 15:05 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	105	52.6	5
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	5.0	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201A	12/28/2009 09:12	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09355355201A	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001B	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-2_SB-1_(40-45') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866108
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/07/2009 15:25 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	< 10.2	10.2	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	2.0	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201A	12/26/2009 16:09	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09355355201A	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001B	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-2_SB-2_(20-25') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866109
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/07/2009 14:40 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	< 10.4	10.4	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	3.8	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201A	12/26/2009 16:55	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09355355201A	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001B	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-2_SB-2_(45-50') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866110
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/07/2009 14:57 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	20.8	10.4	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	3.8	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201A	12/26/2009 17:10	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09355355201A	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001B	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-2_SB-3_(15-20') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866111
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/07/2009 12:55 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

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Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	78.6	23.3	2
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	14.2	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201A	12/28/2009 09:58	Ashley M Adams	2
01352	Deionized Water Extraction	EPA 300.0	1	09355355201A	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001B	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-2_SB-3_(40-45') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866112
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/07/2009 13:20 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

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10235 W. Little York
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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	126	53.6	5
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	6.8	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201A	12/28/2009 10:13	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09355355201A	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001B	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-2_SB-4_(20-25') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866113
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/07/2009 13:48 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
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Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	128	53.1	5
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	5.8	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201A	12/28/2009 10:29	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09355355201A	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001B	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-2_SB-4_(35-40') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866114
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/07/2009 14:05 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	147	51.4	5
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	2.7	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201A	12/28/2009 10:44	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09355355201A	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001B	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-1_SB-5_(25-30') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866115
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 09:18 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
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Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	128	52.3	5
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	4.4	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201A	12/28/2009 11:00	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09355355201A	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001B	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-1_SB-5_(55-60') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866116
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 09:30 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	14.5	10.1	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	1.1	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201A	12/26/2009 18:43	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09355355201A	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001A	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-1_SB-4_(20-25') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866117
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 08:23 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	6,430	2,260	200
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	11.5	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	2	09355355201B	12/28/2009 11:15	Ashley M Adams	200
01352	Deionized Water Extraction	EPA 300.0	1	09355355201B	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001A	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-1_SB-4_(55-60') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866118
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 08:40 by BH

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

Account Number: 11842

STANTEC International, Inc.
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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	2,830	1,030	100
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	2.7	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	2	09355355201B	12/28/2009 12:32	Ashley M Adams	100
01352	Deionized Water Extraction	EPA 300.0	1	09355355201B	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001A	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-1_SB-3_(15-20') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866119
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 07:48 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	93.5	22.6	2
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	11.4	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201B	12/28/2009 12:48	Ashley M Adams	2
01352	Deionized Water Extraction	EPA 300.0	1	09355355201B	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001A	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-1_SB-3_(55-60') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866120
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 08:15 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	20.3	10.2	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	1.7	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201B	12/26/2009 20:46	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09355355201B	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001A	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-1_SB-2_(15-20') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866121
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 10:32 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	1,060	535	50
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	6.5	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201B	12/28/2009 13:03	Ashley M Adams	50
01352	Deionized Water Extraction	EPA 300.0	1	09355355201B	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001A	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-1_SB-2_(55-60') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866122
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 10:48 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	251	103	10
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	2.7	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201B	12/28/2009 13:19	Ashley M Adams	10
01352	Deionized Water Extraction	EPA 300.0	1	09355355201B	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001A	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

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Sample Description: AOC-1_SB-1_(15-20') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866123
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 10:02 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
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Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	166	54.3	5
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	7.9	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201B	12/28/2009 13:34	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09355355201B	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001A	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-1_SB-1_(55-60') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866124
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 10:20 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	43.4	10.2	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	2.2	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201B	12/26/2009 21:48	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09355355201B	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820001A	12/17/2009 17:44	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-5_SB-1_(15-20') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866125
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/09/2009 10:52 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	226	52.6	5
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	4.9	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an *as-received basis.*

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201B	12/28/2009 13:50	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09355355201B	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002B	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-5_SB-1_(40-45') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866126
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/09/2009 11:10 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	36.8	10.5	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	5.1	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09355355201B	12/26/2009 22:19	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09355355201B	12/21/2009 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002B	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-4_SB-3_(20-25') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866127
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/09/2009 09:06 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	24.2	10.4	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	4.1	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201A	12/26/2009 23:36	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201A	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002B	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-4_SB-3_(45-50') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866128
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/09/2009 09:22 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	17.9	10.5	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	4.7	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201A	12/27/2009 00:23	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201A	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002B	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-4_SB-1_(20-25') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866129
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/09/2009 08:08 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	49.4	10.6	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	5.7	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201A	12/27/2009 00:38	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201A	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002B	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-4_SB-1_(40-45') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866130
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/09/2009 08:20 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	35.6	10.5	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	4.6	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201A	12/27/2009 00:54	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201A	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002B	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-4_SB-4_(25-30') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866131
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/09/2009 09:40 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	183	54.8	5
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	8.7	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201A	12/28/2009 14:05	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09356356201A	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002B	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-4_SB-4_(40-45') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866132
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/09/2009 09:50 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	98.1	51.4	5
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	2.8	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201A	12/28/2009 14:20	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09356356201A	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002B	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-4_SB-2_(15-20') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866133
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/09/2009 08:34 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	484	111	10
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	10.1	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201A	12/28/2009 14:36	Ashley M Adams	10
01352	Deionized Water Extraction	EPA 300.0	1	09356356201A	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002B	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-4_SB-2_(45-50') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866134
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/09/2009 08:55 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	22.4	10.9	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	8.1	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201A	12/27/2009 02:26	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201A	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002A	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-6_SB-4_(30-35') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866135
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 12:14 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	141	57.9	5
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	13.6	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201A	12/28/2009 15:22	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09356356201A	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002A	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-6_SB-4_(50-55') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866136
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 12:30 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	30.4	10.8	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	7.4	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201A	12/27/2009 02:57	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201A	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002A	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

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Sample Description: AOC-6_SB-2_(45-50') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866137
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 11:48 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	95.0	21.9	2
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	8.5	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201B	12/28/2009 15:38	Ashley M Adams	2
01352	Deionized Water Extraction	EPA 300.0	1	09356356201B	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002A	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-6_SB-2_(50-55') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866138
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 11:50 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	56.8	11.2	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	10.5	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201B	12/27/2009 03:59	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201B	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002A	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-3_SB-1_(20-25') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866139
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 10:10 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	< 11.0	11.0	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	8.9	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201B	12/27/2009 04:14	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201B	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002A	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-3_SB-1_(40-45') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866140
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 10:20 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
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Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	< 10.4	10.4	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	4.3	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201B	12/27/2009 04:30	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201B	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002A	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-3_SB-3_(20-25') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866141
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 08:38 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	< 11.1	11.1	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	9.7	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201B	12/27/2009 05:16	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201B	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002A	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-3_SB-3_(40-45') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866142
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 08:48 by BH

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

Account Number: 11842

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	< 10.4	10.4	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	3.9	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201B	12/27/2009 05:32	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201B	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820002A	12/17/2009 17:30	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-3_SB-4_(25-30') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866143
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 09:15 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	< 10.5	10.5	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	5.1	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201B	12/27/2009 05:47	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201B	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-3_SB-4_(40-45') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866144
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 09:30 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	< 10.5	10.5	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	4.4	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201B	12/27/2009 06:02	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201B	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-6_SB-1_(25-30') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866145
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 11:12 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
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Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	421	112	10
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	10.5	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201B	12/28/2009 16:24	Ashley M Adams	10
01352	Deionized Water Extraction	EPA 300.0	1	09356356201B	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-6_SB-1_(55-60') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866146
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 11:26 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	20.7	10.8	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	7.8	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09356356201B	12/27/2009 06:33	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09356356201B	12/22/2009 12:35	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-5_SB-2_(45-50') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866147
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/11/2009 08:08 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
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Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	34.5	10.4	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	3.8	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201A	12/27/2009 07:20	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09357357201A	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-5_SB-3_(15-20') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866148
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/11/2009 08:52 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
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Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	187	53.1	5
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	5.9	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201A	12/28/2009 16:39	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09357357201A	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-5_SB-3_(45-50') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866149
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/11/2009 09:08 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
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CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	45.6	10.7	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	6.4	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201A	12/27/2009 08:52	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09357357201A	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-6_SB-3_(25-30') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866150
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/11/2009 09:25 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	844	231	20
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	13.6	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201A	12/28/2009 16:55	Ashley M Adams	20
01352	Deionized Water Extraction	EPA 300.0	1	09357357201A	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-6_SB-3_(55-60') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866151
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/11/2009 09:44 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
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Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	63.9	22.1	2
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	9.3	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201A	12/28/2009 17:10	Ashley M Adams	2
01352	Deionized Water Extraction	EPA 300.0	1	09357357201A	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: DUP100 Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866152
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: n.a.

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	151	51.3	5
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	2.6	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201A	12/28/2009 17:26	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09357357201A	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-3_SB-2_(15-20') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866153
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 10:32 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	< 11.1	11.1	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	10.2	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201A	12/27/2009 09:54	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09357357201A	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-3_SB-2_(40-45') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866154
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 10:48 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	< 10.3	10.3	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	2.6	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201A	12/27/2009 10:09	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09357357201A	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-5_SB-4_(15-20') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866155
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/11/2009 08:22 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	283	105	10
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	4.7	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201A	12/28/2009 17:41	Ashley M Adams	10
01352	Deionized Water Extraction	EPA 300.0	1	09357357201A	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-5_SB-4_(45-50') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866156
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/11/2009 08:38 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	59.5	10.6	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	5.8	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201A	12/27/2009 10:40	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09357357201A	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-5_SB-2_(15-20') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866157
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: 12/11/2009 07:52 by BH

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	163	52.9	5
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	5.5	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201B	12/28/2009 18:27	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09357357201B	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09351820003A	12/17/2009 15:41	Scott W Freisher	1

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Analysis Report

Sample Description: DUP101 Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866158
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: n.a.

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	105	51.3	5
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	2.6	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201B	12/28/2009 19:14	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	09357357201B	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09352820005B	12/18/2009 17:16	Scott W Freisher	1

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Analysis Report

Sample Description: DUP102 Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866159
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: n.a.

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
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Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	34.6	10.2	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	1.9	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201B	12/27/2009 12:28	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09357357201B	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09352820005B	12/18/2009 17:16	Scott W Freisher	1

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Analysis Report

Sample Description: DUP103 Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866160
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: n.a.

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	39.7	10.5	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	4.6	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201B	12/27/2009 12:44	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09357357201B	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09352820005B	12/18/2009 17:16	Scott W Freisher	1

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Analysis Report

Sample Description: DUP104 Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866161
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: n.a.

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	< 10.3	10.3	1
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	2.8	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201B	12/27/2009 12:59	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09357357201B	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09352820005B	12/18/2009 17:16	Scott W Freisher	1

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Analysis Report

Sample Description: DUP105 Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866162
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: n.a.

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	60.9	21.2	2
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	5.6	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201B	12/28/2009 19:29	Ashley M Adams	2
01352	Deionized Water Extraction	EPA 300.0	1	09357357201B	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09352820005B	12/18/2009 17:16	Scott W Freisher	1

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Analysis Report

Sample Description: DUP106 Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866163
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: n.a.

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	30.5	10.4	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	3.9	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201B	12/27/2009 13:30	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09357357201B	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09352820005B	12/18/2009 17:16	Scott W Freisher	1

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Analysis Report

Sample Description: DUP107 Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866164
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: n.a.

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	55.4	10.7	1
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	6.4	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201B	12/27/2009 13:46	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	09357357201B	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09352820005B	12/18/2009 17:16	Scott W Freisher	1

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Analysis Report

Sample Description: DUP108 Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5866165
LLI Group # 1175503
NM

Project Name: Eunice North Gas Plant

Collected: n.a.

Account Number: 11842

Submitted: 12/16/2009 09:35
Reported: 12/30/2009 at 12:19
Discard: 01/30/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	67.6	22.0	2
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	9.1	0.50	1

"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	09357357201B	12/28/2009 19:45	Ashley M Adams	2
01352	Deionized Water Extraction	EPA 300.0	1	09357357201B	12/23/2009 13:40	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	09352820005B	12/18/2009 17:16	Scott W Freisher	1

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Analysis Report

Quality Control Summary

Client Name: STANTEC International, Inc. Group Number: 1175503
Reported: 12/30/09 at 12:19 PM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 09355355201A	Sample number(s): 5866107-5866116							
Chloride by IC (solid)	< 10.0	10.0	mg/kg	104		90-110		
Batch number: 09355355201B	Sample number(s): 5866117-5866126							
Chloride by IC (solid)	< 10.0	10.0	mg/kg	104		90-110		
Batch number: 09356356201A	Sample number(s): 5866127-5866136							
Chloride by IC (solid)	< 10.0	10.0	mg/kg	104		90-110		
Batch number: 09356356201B	Sample number(s): 5866137-5866146							
Chloride by IC (solid)	< 10.0	10.0	mg/kg	104		90-110		
Batch number: 09357357201A	Sample number(s): 5866147-5866156							
Chloride by IC (solid)	< 10.0	10.0	mg/kg	109		90-110		
Batch number: 09357357201B	Sample number(s): 5866157-5866165							
Chloride by IC (solid)	< 10.0	10.0	mg/kg	109		90-110		
Batch number: 09351820001A	Sample number(s): 5866116-5866124							
Moisture				100		99-101		
Batch number: 09351820001B	Sample number(s): 5866107-5866115							
Moisture				100		99-101		
Batch number: 09351820002A	Sample number(s): 5866134-5866142							
Moisture				100		99-101		
Batch number: 09351820002B	Sample number(s): 5866125-5866133							
Moisture				100		99-101		
Batch number: 09351820003A	Sample number(s): 5866143-5866157							
Moisture				100		99-101		
Batch number: 09352820005B	Sample number(s): 5866158-5866165							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: STANTEC International, Inc. Group Number: 1175503
Reported: 12/30/09 at 12:19 PM

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 09355355201A Chloride by IC (solid)	Sample number(s): 5866107-5866116 153 (2)		90-110			UNSPK: 5866107 99.3	BKG: 5866107 89.1	11 (1)	20
Batch number: 09355355201B Chloride by IC (solid)	Sample number(s): 5866117-5866126 -2964 (2)		90-110			UNSPK: 5866117 5,690	BKG: 5866117 5,230	8 (1)	20
Batch number: 09356356201A Chloride by IC (solid)	Sample number(s): 5866127-5866136 105		90-110			UNSPK: 5866127 23.2	BKG: 5866127 18.8	21* (1)	20
Batch number: 09356356201B Chloride by IC (solid)	Sample number(s): 5866137-5866146 129 (2)		90-110			UNSPK: 5866137 87.0	BKG: 5866137 84.0	3 (1)	20
Batch number: 09357357201A Chloride by IC (solid)	Sample number(s): 5866147-5866156 94		90-110			UNSPK: 5866147 33.1	BKG: 5866147 31.6	5 (1)	20
Batch number: 09357357201B Chloride by IC (solid)	Sample number(s): 5866157-5866165 342 (2)		90-110			UNSPK: 5866157 155	BKG: 5866157 216	33* (1)	20
Batch number: 09351820001A Moisture	Sample number(s): 5866116-5866124					BKG: P850961 14.4	13.9	3	15
Batch number: 09351820001B Moisture	Sample number(s): 5866107-5866115					BKG: P850962 9.0	9.7	8	15
Batch number: 09351820002A Moisture	Sample number(s): 5866134-5866142					BKG: P851975 19.4	19.4	0	15
Batch number: 09351820002B Moisture	Sample number(s): 5866125-5866133					BKG: P851977 15.4	15.7	2	15
Batch number: 09351820003A Moisture	Sample number(s): 5866143-5866157					BKG: P861173 56.2	62.3	10	15
Batch number: 09352820005B Moisture	Sample number(s): 5866158-5866165					BKG: P866154 2.9	2.7	8	15

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories

Page 1 of 11

For Lancaster Laboratories use only

Acct. # 11842 Group# 1175503 Sample # 5866107-65

COC # 224968

Please print. Instructions on reverse side correspond with circled numbers. Cooler temp 3.0-3.7°C

(1) Client: CVX - (Stantec) Acct. #:

Project Name/#: Eunice North PWSID #:

Project Manager: ~~Jennifer Hunter~~ Chad Vowell P.O.#:

Sampler: Barry Hart + Daniel Woodward Quote #:

Name of state where samples were collected: NM

For Lab Use Only
FSC:
SCR#: 84372

(5) Analyses Requested — Preservation Codes

(6) Preservation Codes
H=HCl T=Thiosulfate
N=HNO3 B=NaOH
S=H2SO4 O=Other

(2) Sample Identification	Date Collected	Time Collected	(3) Matrix	(4) # of Containers	Cl- EPA Method 300.0	Remarks
AOC-2 SB-1 (10-15')	12/7/09	1503	X	X	H	
AOC-2 SB-1 (15-20')	12/7/09	1505			X	H - hold samples pending ~~further~~ results AW
AOC-2 SB-1 (20-25')	12/7/09	1510			H	
AOC-2 SB-1 (40-45')	12/7/09	1525			X	
AOC-2 SB-2 (15-20')	12/7/09	1437			H	
AOC-2 SB-2 (20-25')	12/7/09	1440			X	
AOC-2 SB-2 (25-30')	12/7/09	1445			H	
AOC-2 SB-2 (45-50')	12/7/09	1457			X	
AOC-2 SB-3 (10-15)	12/7/09	1250			H	
AOC-2 SB-3 (15-20)	12/7/09	1255			X	

(7) **Turnaround Time Requested** (TAT) (please circle): (Normal) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: 713 937 7973 Fax #:
E-mail address: ChadVowell@Stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
TX TRRP-13
MA MCP CT RCP
SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? (Yes) No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/9/09	1005			
[signature]	12/14/09	1000			
[signature]	12/14/09	1645			
			[signature]	12/16/09	935

(9)

Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2300 Fax: (717) 656-6766
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

2102.03

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

Page 2 of 11

For Lancaster Laboratories use only

Acct. # 11842 Group# 1175503 Sample # 58606107-65

COC # 224977

Please print. Instructions on reverse side correspond with circled numbers. Cooler temp 3.0-3.7°C

(1) Client: CVX (Stantec) Acct. #:

Project Name/#: Eunice North PWSID #:

Project Manager: Chad Vowell P.O.#:

Sampler: B. Hart + D. Woodward Quote #:

Name of state where samples were collected: NM

For Lab Use Only
FSC:
SCR#:

(5) Analyses Requested

(2) Sample Identification	Date Collected	Time Collected	(3) Matrix	(4) # of Containers	Preservation Codes	Remarks
AOC-2 SB-3 (20-25')	12/7/09	1258	X	X	H	*H - Hold Pending Results
AOC-2 SB-3 (40-45')	12/7/09	1320			X	
AOC-2 SB-4 (15-20')	12/7/09	1340			H	
AOC-2 SB-4 (20-25')	12/7/09	1348			X	
AOC-2 SB-4 (25-30')	12/7/09	1355			H	
AOC-2 SB-4 (35-40')	12/7/09	1405			X	
AOC-1 SB-5 (20-25')	12/8/09	915			H	
AOC-1 SB-5 (25-30')		918			X	
AOC-1 SB-5 (30-35')		920			H	
AOC-1 SB-5 (55-60')	↓	930	↓	↓	X	

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

Remarks

(6)

(7) **Turnaround Time Requested** (TAT) (please circle): (Normal) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address: cvowell chad.vowell@stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
TX TRRP-13
MA MCP CT RCP
SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? (Yes) No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/14/09	1000			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	12/16/09	935

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. # 11842 Group# 1175503 Sample # 5866107-65

COC # 224976

Please print. Instructions on reverse side correspond with circled numbers. Cooler temp 3.0-3.7°C

(1) Client: CVX (Stantec) Acct. #:

Project Name/#: Eunice North PWSID #:

Project Manager: Chad Vowell P.O.#:

Sampler: B Hart + D. Woodward Quote #:

Name of state where samples were collected: NM

(5) Preservation Codes

For Lab Use Only
FSC:
SCR#:

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

(6)

(2)			(3)		(4)		
	Date Collected	Time Collected			Cl- EPA (300.0)		Remarks
AOC-1 SB-4 (15-20')	12/8/09	822	X	X	H		H - Hold Pending Results
AOC-1 SB-4 (20-25')		823			X		
AOC-1 SB-4 (25-30')		825			H		
AOC-1 SB-4 (55-60')		840			X		
AOC-1 SB-3 (10-15')		745			H		
AOC-1 SB-3 (15-20')		748			X		
AOC-1 SB-3 (20-25')		750			H		
AOC-1 SB-3 (55-60')		815			X		
AOC-1 SB-2 (10-15')		1030			H		
AOC-1 SB-2 (15-20')	"	1032	V	V	X		

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address: chad.vowell@stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
TX TRRP-13
MA MCP CT RCP
SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/14/09	1000			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	12/16/09	935

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. # 11842 Group# 1175503 Sample # 58666107-65

COC # 224975

Please print. Instructions on reverse side correspond with circled numbers. Cooler temp 3.0-3.7°C

(1) Client: CVX (Stantec) Acct. #:

Project Name/#: Eunice North PWSID #:

Project Manager: Chad Vowell P.O.#:

Sampler: B. Hart + D. Woodward Quote #:

Name of state where samples were collected: NM

For Lab Use Only
FSC:
SCR#:

(5) Analyses Requested

(2) Sample Identification	Date Collected	Time Collected	(3) Matrix	(4) # of Containers	Preservation Codes	Cl - EPA 300.0								(6) Remarks
AOC-1 SB-2 (20-25')	12/8/09		X	X	H									H - Hold Pending Results
AOC-1 SB-2 (55-60')					X									
AOC-1 SB-1 (10-15')					H									
AOC-1 SB-1 (15-20')					X									
AOC-1 SB-1 (20-25')					H									
AOC-1 SB-1 (55-60')					X									
AOC-5 SB-1 (10-15')	12/9/09				H									
AOC-5 SB-1 (15-20')					X									
AOC-5 SB-1 (20-25')					H									
AOC-5 SB-1 (40-45')					X									

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

Remarks

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)

Date results are needed:

Rush results requested by (please circle): Phone Fax E-mail

Phone #: Fax #:

E-mail address: Chad.Vowell@stantec.com

(8) **Data Package Options** (please circle if required)

Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
TX TRRP-13
MA MCP CT RCP

SDG Complete? Yes No

Site-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate volume.)

Internal COC Required? Yes / No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/14/09	1000			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	12/14/09	935

Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. # 11842 Group# 1175503 Sample # 586610T-65

COC # 224974

Please print. Instructions on reverse side correspond with circled numbers. Cooler temp 3.0-3.7°C

(1) Client: CVX (Stantec) Acct. #:

Project Name/#: Eunice North PWSID #:

Project Manager: Chad Vowell P.O.#:

Sampler: B. Hart & D. Woodward Quote #:

Name of state where samples were collected: NM

For Lab Use Only
FSC:
SCR#:

(5) Analysis Requested — Preservation Codes

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

(6)

(2)	(3)	(4)	Cl- EPA (300.0)	Remarks
AOC-4 SB-3 (15-20')	12/9/09	904	H	H-Hold Pending Results
AOC-4 SB-3 (20-25')		906	X	
AOC-4 SB-3 (25-30')		908	H	
AOC-4 SB-3 (45-50')		922	X	
AOC-4 SB-1 (15-20')		802	H	
AOC-4 SB-1 (20-25')		808	X	
AOC-4 SB-1 (25-30')		810	H	
AOC-4 SB-1 (40-45')		820	X	
AOC-4 SB-4 (20-25')		935	H	
AOC-4 SB-4 (25-30')		940	X	

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address: chad.vowell@stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
TX TRRP-13
MA MCP CT RCP
SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
B. Hart	12/14/09	1000			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	12/16/09	535

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. # 11842 Group# 1175503 Sample # 5866107-65

COC # 224973

Please print. Instructions on reverse side correspond with circled numbers. Cooler temp 3.0-3.7°C

For Lab Use Only
FSC:
SCR#:

(1) Client: CVX (Stantec) Acct. #:
Project Name/#: Ennie North PWSID #:
Project Manager: Chad Vowell P.O.#:
Sampler: B. Hart & P. Woodward Quote #:
Name of state where samples were collected: NM

(4) Matrix

(5) Analyses Requested — Preservation Codes

Cl- EPA (300.0)

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

(6)

(2) Customer Sample Identification	Sample Date	Sample Time	(3) Matrix	Cl- EPA (300.0)	Remarks
AOC-4 SB-4 (30-35')	12/9/09	943	X	H	H - Hold Pending Results
AOC-4 SB-4 (40-45')	12/9/09	950		X	
AOC-4 SB-2 (10-15')		830		H	
AOC-4 SB-2 (15-20')		834		X	
AOC-4 SB-2 (20-25')		836		H	
AOC-4 SB-2 (45-50')		855		X	
AOC-6 SB-4 (25-30')	12/10/09	1210		H	
AOC-6 SB-4 (30-35')		1214		X	
AOC-6 SB-4 (35-40)		1218		H	
AOC-6 SB-4 (50-55')		1230		X	

(7) **Turnaround Time Requested** (TAT) (please circle): (Normal) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address: Ch d.Vowell@stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
TX TRRP-13
MA MCP CT RCP
SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? (Yes) No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/14/09	1002			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	12/16/09	935

Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories

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For Lancaster Laboratories use only

Acct. # 11842 Group# 1175503 Sample # 58606107-65

COC # 224972

Please print. Instructions on reverse side correspond with circled numbers. Cooler temp 3.0-3.7°C

(1) Client: CVX (Stantec) Acct. #:

Project Name/#: Eunice North PWSID #:

Project Manager: Chad Vowell P.O.#:

Sampler: D. Woodward + B. Hart Quote #:

Name of state where samples were collected: NM

For Lab Use Only
FSC:
SCR#:

(5) Analysis Requested — Preservation Codes

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

(6)

(2)	Collection Date	Collection Time	(3)	(4) Matrix	Cl- EPA 300.0	Remarks
AOC-6 SB-2 (40-45')	12/10/09	1145	X	X	H	H - Hold Pending Results
AOC-6 SB-2 (45-50')		1148			X	
AOC-6 SB-2 (50-55')		1150			X	
AOC-3 SB-2 DUP SB-1 (15-20')		1008			H	
AOC-3 SB-1 (20-25')		1010			X	
AOC-3 SB-1 (25-30')		1012			H	
AOC-3 SB-1 (40-45')		1020			X	
AOC-3 SB-3 (15-20')		836			H	
AOC-3 SB-3 (20-25')		838			X	
AOC-3 SB-3 (25-30')		840	V	V	H	

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address: Chad.Vowell@Stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
TX TRRP-13
MA MCP CT RCP
SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
	12/14/09	1000			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	12/16/09	935

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories Page 8 of 11

For Lancaster Laboratories use only
Acct. # 11842 Group# 1175503 Sample # 5866107-65

COC # 224971

Please print. Instructions on reverse side correspond with circled numbers.

Cooler temp 3.0-3.7°C

For Lab Use Only
FSC:
SCR#:

1 Client: CVX (Stantec) Acct. #:
Project Name/#: Eunice North PWSID #:
Project Manager: Chad Vowell P.O.#:
Sampler: D. Woodward + B. Hart Quote #:
Name of state where samples were collected: NM

5 Analyses Requested — Preservation Codes

6 Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

2 Sample Identification	Date Collected	Time Collected	3		4					Cl⁻ EPA (300.0)	Remarks
AOC-3 SB-3 (40-45')	12/10/09	848	X		X					X	H- Hold Pending Results
AOC-3 SB-4 (20-25')	|	912	|		|					H	
AOC-3 SB-4 (25-30')	|	915	|		|					X	
AOC-3 SB-4 (30-35')	|	918	|		|					H	
AOC-3 SB-4 (40-45')	|	930	|		|					X	
AOC-6 SB-1 (20-25')	|	1108	|		|					H	
AOC-6 SB-1 (25-30')	|	1112	|		|					X	
AOC-6 SB-1 (30-35')	|	1114	|		|					H	
AOC-6 SB-1 (55-60')	|	1126	|		|					X	
AOC-3 SB-2 (10-15')	|	1030	|		|					H	

7 **Turnaround Time Requested** (TAT) (please circle): Normal (circled) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address: chad.vowell@stantec.com

8 **Data Package Options** (please circle if required)
Type I (validation/NJ Reg) TX TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? Yes (circled) No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

9

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/14/09	1000			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	12/16/09	535

Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. # 11842 Group# 1175503 Sample # 58606107-65

COC # 224969

Please print. Instructions on reverse side correspond with circled numbers. Cooler temp 3.0-3.7°C

(1) Client: CVX (Stantec) Acct. #:

Project Name/#: Eunice North PWSID #:

Project Manager: ~~Jenci Hosler~~ Chad Vowell P.O.#:

Sampler: Barry Hart & Daniel Woodward Quote #:

Name of state where samples were collected: NM

For Lab Use Only
FSC:
SCR#:

(5) Preservation Codes

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

(6)

(2)			(3)	(4)	(5)	Remarks
					Cl- EPA 300.0	
AOC-5 SB-2 (45-50')	12/11/09	808	X	X	X	H-Hold Pending Results
AOC-5 SB-3 (10-15')	12/11/09	850			H	
AOC-5 SB-3 (15-20')		852			X	
AOC-5 SB-3 (20-25')		854			H	
AOC-5 SB-3 (45-50')		908			X	
AOC-6 SB-3 (20-25')		921			H	
AOC-6 SB-3 (25-30')		925			X	
AOC-6 SB-3 (30-35')		928			H	
AOC-6 SB-3 (55-60')	↓	944			X	
DUP 100	—	—	↓	↓	X	

(7) **Turnaround Time Requested** (TAT) (please circle): (Normal) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax (E-mail)
Phone #: Fax #:
E-mail address: chad.vowell@stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
TX TRRP-13
MA MCP CT RCP
SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? (Yes) No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/14/09	1000			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	12/14/09	931

(9)

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. # 11842 Group# 1175503 Sample # 58606107-65

COC # 224970

Please print. Instructions on reverse side correspond with circled numbers.

Cooler temp 3.0-3.7°C

(1) Client: CVX (Stantec) Acct. #:

Project Name/#: Eunice North PWSID #:

Project Manager: Chad Vowell P.O.#:

Sampler: B. Hart + D. Woodward Quote #:

Name of state where samples were collected: NM

For Lab Use Only
FSC:
SCR#:

(4) Matrix

(5) Analyses Requested — Preservation Codes

Cl- EPA 300.0

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

(6)

(2) Sample Identification	Date Collected	Time Collected	(3) # of containers	Matrix	Cl- EPA 300.0	Remarks
AOC-3 SB-2 (15-20')	12/10/09	1032	X	X	X	H-Hold Pending Results
AOC-3 SB-2 (20-25')	↓	1034			H	
AOC-3 SB-2 (40-45')	↓	1048			X	
AOC-5 SB-4 (10-15')	12/11/09	820			H	
AOC-5 SB-4 (15-20')		822			X	
AOC-5 SB-4 (20-25')		824			H	
AOC-5 SB-4 (45-50')		838			X	
AOC-5 SB-2 (10-15')		750			H	
AOC-5 SB-2 (15-20')		752			X	
AOC-5 SB-2 (20-25')	↓	754	↓	↓	H	

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address: Chad.Vowell@stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
TX TRRP-13
MA MCP CT RCP
SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? Yes / No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

(9) Relinquished by:	Date	Time	Received by:	Date	Time
	12/14/09	1000			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	12/16/09	935

Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories

Page 11 of 11

For Lancaster Laboratories use only

Acct. # 11842 Group# 1175503 Sample # 5866107-65

COC # 224978

Please print. Instructions on reverse side correspond with circled numbers. Cooler temp 3.0-3.7°C

For Lab Use Only
FSC:
SCR#:

(1)
Client: CVX (Stantec) Acct. #:
Project Name/#: Eunice North PWSID #:
Project Manager: Chad Vowell P.O.#:
Sampler: B. Hart + D. Woodward Quote #:
Name of state where samples were collected: NM

(2) (3) (4) (5) Analyses Requested (6)

Preservation Codes: H=HCl, T=Thiosulfate, N=HNO_3, B=NaOH, S=H_2SO_4, O=Other

Sample Identification [illegible]	Date Collected	Time Collected	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Cl⁻ EPA 300.0									Remarks
DUP 101	—	—	X		X				X									H-Hold Pending Results
DUP 102	—	—	↓		↓				↓									
DUP 103	—	—																
DUP 104	—	—																
DUP 105	—	—																
DUP 106	—	—																
DUP 107	—	—																
DUP 108	—	—	↓		↓				↓									

(7) **Turnaround Time Requested** (TAT) (please circle): Normal (circled) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address: Chad.Vowell@stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg) TX TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? Yes (circled) No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/14/09	1000			
			[signature]	12/16/09	535

Lancaster Laboratories, Inc., 2425 New Holland Pike, Lancaster, PA 17601 (717) 656-2300 Fax: (717) 656-6766
Copies: White and yellow should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client.

2102.03

Lancaster Laboratories
Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

< less than – The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quatitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY – In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL LANCASTER LABORATORIES BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF LANCASTER LABORATORIES AND (B) WHETHER LANCASTER LABORATORIES HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Lancaster Laboratories which includes any conditions that vary from the Standard Terms and Conditions of Lancaster Laboratories and we hereby object to any conflicting terms contained in any acceptance or order submitted by client.

Lancaster Laboratories

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Analysis Report

ANALYTICAL RESULTS

Prepared for:

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

713-937-7973

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

January 18, 2010

Project: Eunice North Gas Plant

Samples arrived at the laboratory on Thursday, January 07, 2010. The PO# for this group is 89CH.49526.08 and the release number is EUNICE NORTH GP. The group number for this submittal is 1177697.

Client Sample Description	Lancaster Labs (LLI) #
AOC-1_SB-4_(15-20') Grab Soil Sample	5878162
AOC-1_SB-4_(25-30') Grab Soil Sample	5878163
AOC-1_SB-2_(10-15') Grab Soil Sample	5878164
AOC-1_SB-2_(20-25') Grab Soil Sample	5878165
AOC-4_SB-2_(10-15') Grab Soil Sample	5878166
AOC-4_SB-2_(20-25') Grab Soil Sample	5878167
AOC-6_SB-1_(20-25') Grab Soil Sample	5878168
AOC-6_SB-1_(30-35') Grab Soil Sample	5878169
AOC-6_SB-3_(20-25') Grab Soil Sample	5878170
AOC-6_SB-3_(30-35') Grab Soil Sample	5878171

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Chad Vowell
ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Steve Bell
ELECTRONIC	STANTEC	Attn: Daniel Woodward

Lancaster Laboratories

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Analysis Report

COPY TO

Questions? Contact your Client Services Representative
Wendy A Kozma at (717) 656-2300

Respectfully Submitted,

Robert Heisey

Robert Heisey
Senior Specialist

Lancaster Laboratories

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Analysis Report

Sample Description: AOC-1_SB-4_(15-20') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5878162
LLI Group # 1177697
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 08:22 by BH

Account Number: 11842

Submitted: 01/07/2010 13:36
Reported: 01/18/2010 at 15:04
Discard: 02/18/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	3,320	1,130	100
	The holding time was not met. The client was notified and approved proceeding with the analysis.				
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	11.7	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

This sample was originally submitted to the laboratory on 12/16/09 at 09:35. We received authorization for further testing on 01/07/10.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	10012012201A	01/15/2010 12:36	Ashley M Adams	100
01352	Deionized Water Extraction	EPA 300.0	1	10012012201A	01/12/2010 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	10013820001B	01/13/2010 14:26	Scott W Freisher	1

Lancaster Laboratories

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Analysis Report

Sample Description: AOC-1_SB-4_(25-30') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5878163
LLI Group # 1177697
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 08:25 by BH

Account Number: 11842

Submitted: 01/07/2010 13:36
Reported: 01/18/2010 at 15:04
Discard: 02/18/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	4,980	1,070	100
	The holding time was not met. The client was notified and approved proceeding with the analysis.				
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	6.9	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

This sample was originally submitted to the laboratory on 12/16/09 at 09:35. We received authorization for further testing on 01/07/10.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	10012012201A	01/15/2010 13:23	Ashley M Adams	100
01352	Deionized Water Extraction	EPA 300.0	1	10012012201A	01/12/2010 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	10013820001B	01/13/2010 14:26	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-1_SB-2_(10-15') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5878164
LLI Group # 1177697
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 10:30 by BH

Account Number: 11842

Submitted: 01/07/2010 13:36
Reported: 01/18/2010 at 15:04
Discard: 02/18/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	573	211	20
	The holding time was not met. The client was notified and approved proceeding with the analysis.				
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	5.3	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

This sample was originally submitted to the laboratory on 12/16/09 at 09:35. We received authorization for further testing on 01/07/10.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	10012012201A	01/15/2010 13:38	Ashley M Adams	20
01352	Deionized Water Extraction	EPA 300.0	1	10012012201A	01/12/2010 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	10013820001B	01/13/2010 14:26	Scott W Freisher	1

Lancaster Laboratories

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Analysis Report

Sample Description: AOC-1_SB-2_(20-25') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5878165
LLI Group # 1177697
NM

Project Name: Eunice North Gas Plant

Collected: 12/08/2009 10:34 by BH

Account Number: 11842

Submitted: 01/07/2010 13:36
Reported: 01/18/2010 at 15:04
Discard: 02/18/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	778	212	20
	The holding time was not met. The client was notified and approved proceeding with the analysis.				
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	5.6	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

This sample was originally submitted to the laboratory on 12/16/09 at 09:35. We received authorization for further testing on 01/07/10.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	10012012201A	01/15/2010 13:54	Ashley M Adams	20
01352	Deionized Water Extraction	EPA 300.0	1	10012012201A	01/12/2010 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	10013820001B	01/13/2010 14:26	Scott W Freisher	1

Lancaster Laboratories

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Analysis Report

Sample Description: AOC-4_SB-2_(10-15') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5878166
LLI Group # 1177697
NM

Project Name: Eunice North Gas Plant

Collected: 12/09/2009 08:30 by BH

Account Number: 11842

Submitted: 01/07/2010 13:36
Reported: 01/18/2010 at 15:04
Discard: 02/18/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	14.1	10.4	1
	The holding time was not met. The client was notified and approved proceeding with the analysis.				
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	3.7	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

This sample was originally submitted to the laboratory on 12/16/09 at 09:35. We received authorization for further testing on 01/07/10.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	10012012201A	01/13/2010 14:08	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	10012012201A	01/12/2010 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	10013820001B	01/13/2010 14:26	Scott W Freisher	1

Lancaster Laboratories

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Analysis Report

Sample Description: AOC-4_SB-2_(20-25') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5878167
LLI Group # 1177697
NM

Project Name: Eunice North Gas Plant

Collected: 12/09/2009 08:36 by BH

Account Number: 11842

Submitted: 01/07/2010 13:36
Reported: 01/18/2010 at 15:04
Discard: 02/18/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	88.4	21.1	2
	The holding time was not met. The client was notified and approved proceeding with the analysis.				
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	5.3	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

This sample was originally submitted to the laboratory on 12/16/09 at 09:35. We received authorization for further testing on 01/07/10.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	10012012201A	01/15/2010 14:10	Ashley M Adams	2
01352	Deionized Water Extraction	EPA 300.0	1	10012012201A	01/12/2010 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	10013820001B	01/13/2010 14:26	Scott W Freisher	1

Lancaster Laboratories

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Analysis Report

Sample Description: AOC-6_SB-1_(20-25') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5878168
LLI Group # 1177697
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 11:08 by BH

Account Number: 11842

Submitted: 01/07/2010 13:36
Reported: 01/18/2010 at 15:04
Discard: 02/18/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	150	51.9	5
	The holding time was not met. The client was notified and approved proceeding with the analysis.				
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	3.7	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

This sample was originally submitted to the laboratory on 12/16/09 at 09:35. We received authorization for further testing on 01/07/10.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	10012012201A	01/15/2010 14:26	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	10012012201A	01/12/2010 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	10013820001B	01/13/2010 14:26	Scott W Freisher	1

Lancaster Laboratories

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Analysis Report

Sample Description: AOC-6_SB-1_(30-35') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5878169
LLI Group # 1177697
NM

Project Name: Eunice North Gas Plant

Collected: 12/10/2009 11:14 by BH

Account Number: 11842

Submitted: 01/07/2010 13:36
Reported: 01/18/2010 at 15:04
Discard: 02/18/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	207	56.3	5
	The holding time was not met. The client was notified and approved proceeding with the analysis.				
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	11.2	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

This sample was originally submitted to the laboratory on 12/16/09 at 09:35. We received authorization for further testing on 01/07/10.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	10012012201A	01/15/2010 14:42	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	10012012201A	01/12/2010 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	10013820001B	01/13/2010 14:26	Scott W Freisher	1

Lancaster Laboratories

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Analysis Report

Sample Description: AOC-6_SB-3_(20-25') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5878170
LLI Group # 1177697
NM

Project Name: Eunice North Gas Plant

Collected: 12/11/2009 09:21 by BH

Account Number: 11842

Submitted: 01/07/2010 13:36
Reported: 01/18/2010 at 15:04
Discard: 02/18/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	325	109	10
	The holding time was not met. The client was notified and approved proceeding with the analysis.				
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	8.4	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

This sample was originally submitted to the laboratory on 12/16/09 at 09:35. We received authorization for further testing on 01/07/10.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	10012012201A	01/15/2010 14:58	Ashley M Adams	10
01352	Deionized Water Extraction	EPA 300.0	1	10012012201A	01/12/2010 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	10013820001B	01/13/2010 14:26	Scott W Freisher	1

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Analysis Report

Sample Description: AOC-6_SB-3_(30-35') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5878171
LLI Group # 1177697
NM

Project Name: Eunice North Gas Plant

Collected: 12/11/2009 09:28 by BH

Account Number: 11842

Submitted: 01/07/2010 13:36
Reported: 01/18/2010 at 15:04
Discard: 02/18/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	397	114	10
	The holding time was not met. The client was notified and approved proceeding with the analysis.				
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	12.0	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

This sample was originally submitted to the laboratory on 12/16/09 at 09:35. We received authorization for further testing on 01/07/10.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	10012012201B	01/15/2010 15:46	Ashley M Adams	10
01352	Deionized Water Extraction	EPA 300.0	1	10012012201B	01/12/2010 13:30	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	10013820001B	01/13/2010 14:26	Scott W Freisher	1

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Analysis Report

Quality Control Summary

Client Name: STANTEC International, Inc.
Reported: 01/18/10 at 03:04 PM

Group Number: 1177697

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10012012201A	Sample number(s): 5878162-5878170							
Chloride by IC (solid)	< 10.0	10.0	mg/kg	94		90-110		
Batch number: 10012012201B	Sample number(s): 5878171							
Chloride by IC (solid)	< 10.0	10.0	mg/kg	94		90-110		
Batch number: 10013820001B	Sample number(s): 5878162-5878171							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10012012201A	Sample number(s): 5878162-5878170 UNSPK: 5878162 BKG: 5878162								
Chloride by IC (solid)	2489 (2)		90-110			2,930	2,990	2 (1)	20
Batch number: 10012012201B	Sample number(s): 5878171 UNSPK: 5878171 BKG: 5878171								
Chloride by IC (solid)	-222 (2)		90-110			350	298	16 (1)	20
Batch number: 10013820001B	Sample number(s): 5878162-5878171 BKG: 5878169								
Moisture						11.2	10.9	2	15

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. # 11842 Group# 1177697 Sample # 5878162-71

COC # 224976

Please print. Instructions on reverse side correspond with circled numbers. Cooler temp 3.0-3.7°C

(1) Client: CVX (Stantec) Acct. #:

Project Name/#: Eunice North PWSID #:

Project Manager: Chad Vowell P.O.#:

Sampler: B Hart + D. Woodward Quote #:

Name of state where samples were collected: NM

(3) (4) (5) Preservation Codes

For Lab Use Only
FSC:
SCR#:

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

(6)

(2)				Cl- EPA (300.0)	Remarks
AOC-1 SB-4 (15-20')	12/8/09	822	X X	H	H - Hold Pending Results
AOC-1 SB-4 (20-25')		823		X	
AOC-1 SB-4 (25-30')		825		H	
AOC-1 SB-4 (55-60')		840		X	
AOC-1 SB-3 (10-15')		745		H	
AOC-1 SB-3 (15-20')		748		X	
AOC-1 SB-3 (20-25')		750		H	
AOC-1 SB-3 (55-60')		815		X	
AOC-1 SB-2 (10-15')		1030		H	
AOC-1 SB-2 (15-20')	↓	1032	↓ ↓	X	

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address: chad.vowell@stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
TX TRRP-13
MA MCP CT RCP
SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

Relinquished by:	Date	Time	Received by:	Date	Time (9)
[signature]	12/14/09	1000			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	12/16/09	935

Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. # 11842 Group# 1177697 Sample # 5878162-71

COC # 224975

Please print. Instructions on reverse side correspond with circled numbers. Cooler temp 3.0-3.7°C

(1) *Client: CVX (Stantec) Acct. #:

Project Name/#: Eunice North PWSID #:

Project Manager: Chad Vowell P.O.#:

Sampler: B. Hart + D. Woodward Quote #:

Name of state where samples were collected: NM

(3)

(4) (5) Preservation Codes

Cl - EPA 300.0

For Lab Use Only
FSC:
SCR#:

(6) Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

Time per bottle wak 1/8/10

(2)

							Remarks
AOC-1 SB-2 (20-25')	12/8/09	1034	X	X	H		H-Hold Pending Results
AOC-1 SB-2 (55-60')					X		
AOC-1 SB-1 (10-15')					H		
AOC-1 SB-1 (15-20')					X		
AOC-1 SB-1 (20-25')					H		
AOC-1 SB-1 (55-60')					X		
AOC-5 SB-1 (10-15')	12/9/09				H		
AOC-5 SB-1 (15-20')					X		
AOC-5 SB-1 (20-25')					H		
AOC-5 SB-1 (40-45')					X		

(7) **Turnaround Time Requested** (TAT) (please circle): Normal Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail
Phone #: Fax #:
E-mail address: ChadVowell@stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)
TX TRRP-13
MA MCP CT RCP
SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? Yes No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

Relinquished by:	Date	Time	Received by:	Date	Time (9)
[signature]	12/14/09	1000			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	12/15/09	935

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

For Lancaster Laboratories use only

Acct. # 11842 Group# 1177697 Sample # 5878162-71

COC # 224973

Please print. Instructions on reverse side correspond with circled numbers. cooler temp 3.0-3.7°C

(1) Client: CVX (Stantec) Acct. #:

Project Name/#: Eunice North PWSID #:

Project Manager: Chad Vowell P.O.#:

Sampler: B. Hart + P. Woodward Quote #:

Name of state where samples were collected: NM

(3) (4) (5) Preservation Codes

For Lab Use Only
FSC:
SCR#:

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

(6)

(2)						Cl- EPA (300.0)	Remarks
AOC-4	SB-4 (30-35')	12/9/09	943	X	X	H	H - Hold Pending Results
AOC-4	SB-4 (40-45')	12/9/09	950			X	
AOC-4	SB-2 (10-15')		830			H	
AOC-4	SB-2 (15-20')		834			X	
AOC-4	SB-2 (20-25')		836			H	
AOC-4	SB-2 (45-50')		855			X	
AOC-6	SB-4 (25-30')	12/10/09	1210			H	
AOC-6	SB-4 (30-35')		1214			X	
AOC-6	SB-4 (35-40')		1218			H	
AOC-6	SB-4 (50-55')		1230	V	V	X	

(7) **Turnaround Time Requested** (TAT) (please circle): (Normal) Rush

(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)

Date results are needed:

Rush results requested by (please circle): Phone Fax E-mail

Phone #: Fax #:

E-mail address: Shad.Vowell@stantec.com

(8) **Data Package Options** (please circle if required)

Type I (validation/NJ Reg)
Type II (Tier II)
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

TX TRRP-13
MA MCP CT RCP

SDG Complete? Yes No

Site-specific QC (MS/MSD/Dup)? (Yes) No

(If yes, indicate QC sample and submit triplicate volume.)

Internal COC Required? Yes / No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/14/09	1052			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	12/16/09	935

Analysis Request/Environmental Services Chain of Custody

Lancaster Laboratories Page 8 of 11

For Lancaster Laboratories use only
Acct. # 11842 Group# 1177697 Sample # 5878162-71

COC # 224971

Please print. Instructions on reverse side correspond with circled numbers.

Cooler temp 3.0-3.7°C

For Lab Use Only
FSC: ______
SCR#: ______

(1)
Client: CVX (Stantec) Acct. #: ______
Project Name/#: Eunice North PWSID #: ______
Project Manager: Chad Vowell P.O.#: ______
Sampler: D. Woodward + B. Hart Quote #: ______
Name of state where samples were collected: NM

(2) (3) (4) (5) Preservation Codes (6)

Preservation Codes
H=HCl T=Thiosulfate
N=HNO_3 B=NaOH
S=H_2SO_4 O=Other

Sample	Date	Time	(3)		(4)	Cl⁻ EPA (300.0)	Remarks
AOC-3 SB-#3 DL (40-45')	12/10/09	848	X		X	X	H- Hold Pending Results
AOC-3 SB-4 (20-25')		912				H	
AOC-3 SB-4 (25-30')		915				X	
AOC-3 SB-4 (30-35')		918				H	
AOC-3 SB-4 (40-45')		930				X	
AOC-6 SB-1 (20-25')		1108				H	
AOC-6 SB-1 (25-30')		1112				X	
AOC-6 SB-1 (30-35')		1114				H	
AOC-6 SB-1 (55-60')		1126				X	
AOC-3 SB-2 (10-15)		1030				H	

(7) **Turnaround Time Requested** (TAT) (please circle): Normal (circled) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed: ______
Rush results requested by (please circle): Phone Fax E-mail
Phone #: ______ Fax #: ______
E-mail address: cdvowell@stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg) TX TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? Yes (circled) No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No ______

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/14/09	1000			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	12/16/09	935

Analysis Request/ Environmental Services Chain of Custody

Lancaster Laboratories

Page 9 of 11

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Acct. # 11842 Group# 1177697 Sample # 5878162-71

COC # 224969

Please print. Instructions on reverse side correspond with circled numbers.

Cooler temp 3.0-3.7°C

For Lab Use Only
FSC:
SCR#:

(1)
Client: CVX (Stantec) Acct. #:
Project Name/#: Eunice North PWSID #:
Project Manager: ~~Jenee Homer~~ Chad Vowell P.O.#:
Sampler: Barry Hart & Daniel Woodward Quote #:
Name of state where samples were collected: NM

Preservation Codes: H=HCl, T=Thiosulfate, N=HNO_3, B=NaOH, S=H_2SO_4, O=Other

(2) Sample	Date	Time	(3)		(4)	Cl⁻ EPA 300.0	Remarks
AOC-5 SB-2 (45-50')	12/11/09	808	X		X	X	H-Hold Pending Results
AOC-5 SB-3 (10-15')	12/11/09	850	|		|	H	
AOC-5 SB-3 (15-20')	|	852				X	
AOC-5 SB-3 (20-25')		854				H	
AOC-5 SB-3 (45-50')		908				X	
AOC-6 SB-3 (20-25')		921				H	
AOC-6 SB-3 (25-30')		925				X	
AOC-6 SB-3 (30-35')		928				H	
AOC-6 SB-3 (55-60')	↓	944				X	
DUP 100	—	—	↓		↓	X	

(7) **Turnaround Time Requested** (TAT) (please circle): (Normal) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax (E-mail)
Phone #: Fax #:
E-mail address: chad.vowell@stantec.com

(8) **Data Package Options** (please circle if required)

		SDG Complete?
Type I (validation/NJ Reg)	TX TRRP-13	Yes No
Type II (Tier II)	MA MCP CT RCP	
Type III (Reduced NJ)	Site-specific QC (MS/MSD/Dup)? (Yes) No	
Type IV (CLP SOW)	(If yes, indicate QC sample and submit triplicate volume.)	
Type VI (Raw Data Only)	Internal COC Required? Yes / No	

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/14/09	1000			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	12/16/09	931

Lancaster Laboratories
Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

< less than – The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quatitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

ANALYTICAL RESULTS

Prepared for:

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

713-937-7973

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

February 02, 2010

Project: Eunice North Gas Plant

Samples arrived at the laboratory on Friday, January 22, 2010. The PO# for this group is 89CH.49526.08 and the release number is EUNICE NORTH GP. The group number for this submittal is 1179740.

Client Sample Description	Lancaster Labs (LLI) #
AOC-5 SB-4(10-15') Grab Soil Sample	5890220
AOC-5 SB-4(20-25') Grab Soil Sample	5890221

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Chad Vowell
ELECTRONIC COPY TO	STANTEC International, Inc.	Attn: Steve Bell
ELECTRONIC COPY TO	STANTEC	Attn: Daniel Woodward

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Analysis Report

Questions? Contact your Client Services Representative
Wendy A Kozma at (717) 656-2300

Respectfully Submitted,

Robert Heisey

Robert Heisey
Senior Specialist

Lancaster Laboratories

2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 •717-656-2300 Fax:717-656-2681• www.lancasterlabs.com

Analysis Report

Sample Description: AOC-5 SB-4(10-15') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5890220
LLI Group # 1179740
NM

Project Name: Eunice North Gas Plant

Collected: 12/11/2009 08:20 by BH

Account Number: 11842

Submitted: 01/22/2010 17:00
Reported: 02/02/2010 at 11:32
Discard: 03/05/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

5S410

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		**mg/kg**	**mg/kg**	
07333	Chloride by IC (solid)	16887-00-6	30.7	10.3	1
	The sample was analyzed outside of the 28 day holding time for Chloride.				
Wet Chemistry	**SM20 2540 G**		**%**	**%**	
00111	Moisture	n.a.	3.0	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

This sample was originally submitted to the laboratory on 12/16/09 at 09:35. We received authorization for further testing on 01/22/10.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	10026026201A	01/27/2010 11:30	Ashley M Adams	1
01352	Deionized Water Extraction	EPA 300.0	1	10026026201A	01/26/2010 13:20	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	10026820005A	01/26/2010 14:01	Scott W Freisher	1

Lancaster Laboratories

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Analysis Report

Sample Description: AOC-5 SB-4(20-25') Grab Soil Sample
Eunice North Gas Plant

LLI Sample # SW 5890221
LLI Group # 1179740
NM

Project Name: Eunice North Gas Plant

Collected: 12/11/2009 08:24 by BH

Account Number: 11842

Submitted: 01/22/2010 17:00
Reported: 02/02/2010 at 11:32
Discard: 03/05/2010

STANTEC International, Inc.
10235 W. Little York
Ste 400
Houston TX 77040

5S420

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Limit of Quantitation	Dilution Factor
Wet Chemistry	**EPA 300.0**		mg/kg	mg/kg	
07333	Chloride by IC (solid)	16887-00-6	237	53.2	5
	The sample was analyzed outside of the 28 day holding time for Chloride.				
Wet Chemistry	**SM20 2540 G**		%	%	
00111	Moisture	n.a.	6.0	0.50	1
	"Moisture" represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported above is on an as-received basis.				

General Sample Comments

This sample was originally submitted to the laboratory on 12/16/09 at 09:35. We received authorization for further testing on 01/22/10.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07333	Chloride by IC (solid)	EPA 300.0	1	10026026201A	01/27/2010 12:28	Ashley M Adams	5
01352	Deionized Water Extraction	EPA 300.0	1	10026026201A	01/26/2010 13:20	Nancy J Shoop	1
00111	Moisture	SM20 2540 G	1	10026820005A	01/26/2010 14:01	Scott W Freisher	1

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Analysis Report

Quality Control Summary

Client Name: STANTEC International, Inc. Group Number: 1179740
Reported: 02/02/10 at 11:32 AM

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Laboratory Compliance Quality Control

Analysis Name	Blank Result	Blank LOQ	Report Units	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 10026026201A	Sample number(s): 5890220-5890221							
Chloride by IC (solid)	< 10.0	10.0	mg/kg	104		90-110		
Batch number: 10026820005A	Sample number(s): 5890220-5890221							
Moisture				100		99-101		

Sample Matrix Quality Control

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike
Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	MS %REC	MSD %REC	MS/MSD Limits	RPD	RPD MAX	BKG Conc	DUP Conc	DUP RPD	Dup RPD Max
Batch number: 10026026201A	Sample number(s): 5890220-5890221 UNSPK: 5890220 BKG: 5890220								
Chloride by IC (solid)	91		90-110			29.7	26.8	11 (1)	20
Batch number: 10026820005A	Sample number(s): 5890220-5890221 BKG: P890907								
Moisture						13.2	12.9	3	15

*- Outside of specification
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Analysis Request/ Environmental Services Chain of Custody

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Page 10 of 11

For Lancaster Laboratories use only

Acct. # 11842 Group# 1179740 Sample # 5890220-21

COC # 224970

Cooler temp 3.0-3.7°C

Please print. Instructions on reverse side correspond with circled numbers.

For Lab Use Only
FSC:
SCR#:

(1) Client: CVX (stantec) Acct. #:
Project Name/#: Eunice North PWSID #:
Project Manager: Chad Vowell P.O.#:
Sampler: B. Hart + D. Woodward Quote #:
Name of state where samples were collected: NM

(2) (3) (4) (5) Preservation Codes (6)

Preservation Codes
H=HCl T=Thiosulfate
$N=HNO_3$ B=NaOH
$S=H_2SO_4$ O=Other

Sample	Date	Time							Cl⁻ EPA (300.0)	Remarks
AOC-3 SB-2 (15-20')	12/10/09	1032	X		X				X	H-Hold Pending Results
AOC-3 SB-2 (20-25')	↓	1034							H	
AOC-3 SB-2 (40-45')	↓	1048							X	
AOC-5 SB-4 (10-15')	12/11/09	820							H	
AOC-5 SB-4 (15-20')		822							X	
AOC-5 SB-4 (20-25')		824							H	
AOC-5 SB-4 (45-50')		838							X	
AOC-5 SB-2 (10-15')		750							H	
AOC-5 SB-2 (15-20')		752							X	
AOC-5 SB-2 (20-25')	↓	754	↓		↓				H	

(7) **Turnaround Time Requested** (TAT) (please circle): Normal (circled) Rush
(Rush TAT is subject to Lancaster Laboratories approval and surcharge.)
Date results are needed:
Rush results requested by (please circle): Phone Fax E-mail (circled)
Phone #: Fax #:
E-mail address: chadvowell@stantec.com

(8) **Data Package Options** (please circle if required)
Type I (validation/NJ Reg) TX TRRP-13
Type II (Tier II) MA MCP CT RCP
Type III (Reduced NJ)
Type IV (CLP SOW)
Type VI (Raw Data Only)

SDG Complete? Yes No
Site-specific QC (MS/MSD/Dup)? Yes (circled) No
(If yes, indicate QC sample and submit triplicate volume.)
Internal COC Required? Yes / No

(9)

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/14/09	1000			
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by:	Date	Time
Relinquished by:	Date	Time	Received by: [signature]	12/16/09	535

Lancaster Laboratories
Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

N.D.	none detected	**BMQL**	Below Minimum Quantitation Level
TNTC	Too Numerous To Count	**MPN**	Most Probable Number
IU	International Units	**CP Units**	cobalt-chloroplatinate units
umhos/cm	micromhos/cm	**NTU**	nephelometric turbidity units
C	degrees Celsius	**F**	degrees Fahrenheit
Cal	(diet) calories	**lb.**	pound(s)
meq	milliequivalents	**kg**	kilogram(s)
g	gram(s)	**mg**	milligram(s)
ug	microgram(s)	**l**	liter(s)
ml	milliliter(s)	**ul**	microliter(s)
m3	cubic meter(s)	**fib >5 um/ml**	fibers greater than 5 microns in length per ml

< less than – The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

ppm parts per million – One ppm is equivalent to one milligram per kilogram (mg/kg), or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter of gas per liter of gas.

ppb parts per billion

Dry weight basis Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture.

U.S. EPA data qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quatitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
J	Estimated value
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike amount not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC unless otherwise noted under the individual analysis.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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APPENDIX E
FIELD NOTES

12/7/09

~~1530 Arrive @ Site, Review HASP/[illegible] doc. PPE~~

~~1600 Begin collecting Pb sample from NE-most location. Record information in material log/sampling log.~~

0600 MOB to Midland office, grab supplies, leave for Eunice Site @ 0700

0900 Meet @ CVX field office in Eunice work on H+S

1100 Called Jenée, started hand auger operations b/c Hydrovac equip. was frozen & hand auger only went down to 4' bgs. Used SWA @ 1100 MST. Broke for lunch
Air Rotary has carosel. Drillers do not handle pipe.

1230 Safety tailgate meeting

1245 Began drilling

12/7/09

1330 Began drilling AOC 2 SB-4 penetrated to depth of 45' bgs. GW was encountered could not use hydrovac, as the pipes were frozen. Used hand auger to clear borehole to a depth of 6' bgs.

1430 Mobed to AOC 2 SB-2 Hand augered to depth of 6' bgs. We were >50' from overhead power line. Completed boring and refilled borehole @ 1455.

1457 Mob to SB-1 AOC-2

1500 Begin SB-1 AOC-2 use hand auger to depth of 5' we were located >15' E of overhead power lines. penetrated to a depth of 45' bgs where a GW was encountered.

1530 cleaned up and mobbed out.

12/7/09

SB-1

	Time	AOC-2 SB-1	Quantab Units	(mg/L) ppm	x4 (mg/L)
	1500	5-10	0.2	N/A	N/A
H	1503	10-15	0.8		
*	1505	15-20	1.1		
H	1510	20-25	0.9		
	1515	25-30	0.5		
	1518	30-35	0.4		
	1521	35-40	0.3		
*	1525	40-45	0.6	↓	↓
		Lot A9315			

AOC-2 SB-2

	Time		Quantab Units	(mg/L)	x4 (mg/L)
	1430	5-10	0.4		
	1435	10-15	0.4		
H	1437	15-20	0.2		
*	1440	20-25	0.3		
H	1445	25-30	0.4		
	1447	30-35	0.4		
	1450	35-40	0.5		
	1455	40-45 Lot A9315	0.4		
*	1457	45-50 ~~Lot A9315~~ Lot A9315	0.6		

12/7/09

AOC-2 SB-3

Time			Quantab Unit (mg/L)	x4 (mg/L)
1247		5-10	0.6	
1250	H	10-15	0.6	
1255	*	15-20	0.9	
1258	H	20-25	0.4	
1305		25-30	0.5	
1308		30-35	0.6	
1315		35-40	0.4	
1320	*	40-45	1.0	

LOT A9315

AOC-2 SB-4

			Quantab Unit (mg/L)	x4 (mg/L)
1330		5-10	0.2	
1335		10-15	2.0	61	244
1340	H	15-20	1.4	32	128
1348	*	20-25	4.0	177	708
1355	H	25-30	2.6	81	324
1400		30-35	1.4	32	128
1405	*	35-40	2.2	61	244 * DUP100

2PO-45

Lot A9315 USE BY: 8/2011

Time (MST) 12/8/09

600	700	Mobed to Eunice conducted safety Meeting
745	845	Began drilling activity at AOC-1 SB-3. Cleared borehole to a depth of 6' with hand auger. Met resistance at ~6'.
750	850	Began Air Rotary drilling. Penetrated to a depth of 60' bgs
815	915	completed borehole at ~8:15 MST filed hole. Mobed to next site
820	920	AOC-1 SB-4 began hand auger activity. Cleared borehole to a depth of 6' bgs. Moved borehole ~10N of marked loc.
830	930	Began air Rotary Drilling Penetrated to a depth of 60' bgs @ 9:45 MST No GW was hit.

Time (MST)	12/8/09
~~900~~ 1000	SBs AOC-1 Began hand augering borehole clearance activity to a depth of ~6' where we met resistance
~~905~~ 1005	Began air rotary drilling. Moved location approximately 8' N of marked location
930	Penetrated to a depth of ~60' bgs No water was encountered Mobed to next Location
1000	Arrive in position at SB-1 AOC-1 Utilize hand auger to clear borehole to a depth of ~6' bgs
1005	Begin rotary air drilling
1020	Penetrated to a depth of ~60' bgs

12/8

SB2

1030 Began hand auger borehole clearance cleared down to a depth of 6' prior to commencing drilling activity

1045 Completed borehole to d depth of 60' bgs

SB-5 AOC-1

Time		Depth	Quantab (mg/L)	(x4 mg/L)
905		5-10	0.4	N/A
908		10-15	1.4	32
910		15-20	1.2	N/A
915	H	20-25	1.6	38
918	*	25-30	1.<	38
920	H	30-35	1.4	32
922		35-40	0.4	N/A
924		40-45	1.2	N/A
926		45-50	1.6	38
928		50-55	1.0	N/A
930	*	55-60	1.4	32

12/8/09

SB-4 AOC-1

Time		Depth	Quantab	mg/L	x4 mg/L
820		10-15	2.0	~~2.0~~ 53	212
822	"	15-20	8.0	~~8.0~~ > 633	> 2532
823	*	20-25	9.2	> 633	> 2532
825	"	25-30	8.8	> 633	> 2532
826		30-35	7.8	> 633	> 2532
828		35-40	7.4	633	2532
832		40-45	7.6	> 633	> 2532
834		45-50	7.6	> 633	> 2532
836		50-55	7.4	633	2532
840	*	55-60	7.6	> 633	> 2532

* 0-10 was too rocky to sample

Lot A9315 8/2011

SB-3 AOC-1

745	H	10-15	1.8	45	180
748	*	15-20	2.8	53	212
750	H	20-25	1.4	32	128
753		25-30	1.6	38	152
755		30-35	1.8	45	180
758		35-40	1.0	N/A	N/A
[illegible]		40-45	1.2	N/A	N/A
810		45-50	1.6	38	152
812		50-55	1.4	32	128
815	*	55-60	0.8	N/A	N/A

12/8/09

SB-2 AOC-1

Time		Depth	Quantab	mg/L	x4 mg/L
1030	H	10-15	3.8	161	644
1032	*	15-20	4.6	231	924
1034	*	20-25	4.4	212	848
1036		25-30	3.0	104	416
1038		30-35	2.0	53	212
1040		35-40	2.2	61	244
1042		40-45	2.2	61	244
1044		45-50	2.0	53	212
1046		50-55	1.6	38	152
1048	*	55-60	1.4	32	128

DUP-101

* 10-15 through 40-45 were analyzed by LOT A9315 8/2011

* 45-50 thru 55-60 were analyzed by different bottle

SB-1 AOC-1 LOT A9315

1000	H	10-15	0.2	N/A	N/A
1002	*	15-20	1.8	45	180
1004	H	20-25	1.4	32	128
1006		25-30	0.8	N/A	N/A
1008		30-35	1.0	N/A	
1010		35-40	0.6	N/A	
1012		40-45	0.8	N/A	
1015		45-50	0.8	N/A	
1018		50-55	0.6	N/A	
1020	*	55-60	0.4	N/A	

DUP-102

12/9/09

Time MST	AOC-4 SB-1
	* Prior to commencing work, Target & Wilcox were notified
800	Begin borehole clearance w/hand auger. Penetrated 6' bgs
	Began Air Rotary drilling activities
	penetrated to a depth of 45' bgs
820	where GW was encountered.
	located ~25' from overhead line
830	AOC-4 SB-2
	Begin borehole clearance w/hand auger. Penetrated to a depth of 6' bgs.
	Began Air Rotary drilling activities

12/9/09

Time MST	SB-3 AOC-4
900	Begin borehole clearance activities utilizing a hand auger.
	No overhead or underground utilities
	posed a problem for work activity.
	Proceeded to penetrate with air rotary
925	to a depth of ~50' bgs.
	Mobed to next site.
930	SB-4 AOC-4
	Begin borehole clearance activities utilizing a hand auger.
	A pump-Pumping jacks were located to the North + south of the boring location at distances of ~40' & 150', respectively.
	No overhead & underground lines
	posed a visual threat to the safety of this work. There was a gas line ~6' South of the original boring location. We called the CVX landman, Hollace Cox, and moved 10' north. No problems were encountered. Penetrate to a depth of 45' bgs, where GW was encountered

12/9/09

Time MST

1045 SB-1 AOC-5

Began clearing Borehole with hand auger.

Location was out of visual range from overhead & underground utilities.

Penetrated to a max depth of 45' bgs, where GW was encountered completed boring & finished drilling activity for the day.

Mobed off site @ 1130 MST

SB-1 AOC-5 12/9/09

Time	Depth	Quanlab	mg/L	µg/L
H 1049	10-15	1.2	N/A	<128
* 1052	15-20	3.0	104	416
H 1054	20-25	2.4	70	280
1056	25-30	0.8	N/A	<128
1100	30-35	0.6		
1105	35-40	1.0		
* 1110	40-45	0.8		

Lot A9315

AOC-4 SB-3

Time	Depth	Quanlab	mg/L	µg/L
900	10-15	0.4	<32	<128
904 H	15-20	0.4		
908 *	20-25	0.6		
938 H	25-30	0.6		
912	30-35	0.4		
915	35-40	0.4		
918	40-45	0.6		
922 *	45-50	0.4		

Lot A9315

12/9/09

AOC-4 SB-1

	Depth	Quantab	mg/L	x4 mg/L
[illegible]	10-15	0.6	<32	<128
802 H	15-20	0.6		
808 *	20-25	0.8		
810 H	25-30	0.4		
812	30-35	0.2		
815	35-40	0.2		
820 *	40-45	0.6		

AOC-4 SB-4

Time	Depth	Quantab	mg/L	x4 mg/L
930	10-15	0.2	<32	<128
932	15-20	0.8	<32	<128
935 H	20-25	1.2	<32	<128
940 *	25-30	2.0	53	212
943 H	30-35	0.8	<32	<128
948	35-40	1.0	<32	<128
950 *	40-45	0.8	<32	<128

LOT: A9315

12/9/09

AOC-4 SB-2

Time		Depth	Quantab		mg/L	x4 mg/L
830	H	10-15	~~0.8~~ ~~0.2~~	0.6	<32	<128
834	*	15-20	~~2.8~~	2.8	92	368
836	H	20-25	~~1.2~~	0.8	<32	<128
840		20-30	~~2.0~~	0.4	<32	
845		30-35	~~0.8~~	0.6	<32	
848		35-40	~~1.0~~	0.4	<32	
850		40-45	~~0.8~~	0.4	<32	
855	*	45-50	~~2.0~~	0.8	<32	

DUP103

LOT: A9315

12/10/09

830 (6' bgs) AOC-3 SB-3
Began borehole clearance with hand auger. Two Targa employees were present and checked all AOC-3 boring locations for underground utilities.
Began air rotary drilling.
Penetrated to a total depth of 45' bgs, where GW was encountered.

900 AOC-3 SB-4
Began borehole clearance activities with hand auger to a depth of 6' bgs.
All underground utilities were visually not an issue. Targa employee swept the area w/ a high powered line locater.
Began air rotary drilling.
Penetrated to a total depth of 45' bgs, where GW was encountered.

11/12/09

10.45 While moving out of SB-4 the drill rig was almost stuck. The drillers were able to mobilize with a 3/4 ton truck + chain. The hydrolic legs were used to balance the rig while they shovelled dirt inside the sunken tires. The rig was easily freed, we discussed the importance of remaining out of the line of fire if the chain was to snap (the chain was triple looped to alleviate pressure). The whole incident took ten minutes and the rig was free. The area we traversed was ~~unavoidable~~ through an unavoidable section of the plant. We had priorly walked the site and discussed the loose soil, but felt comfortable knowing the hydrolic legs would prevent the rig from being bogged down.

17

12/10/09

AOC-3 SB-1
Began borehole clearance activities with a hand auger to depth of 6' bgs.
Targa noted we were ~6' from some underground lines so the location was moved ~15' NE from the original location.
Air Rotary drilling commenced, penetrating to a depth of 45' bgs where GW was encountered.

1025 AOC-3 SB-2
Begin borehole clearance activities with a hand auger to a depth of 6' bgs.
Targa noted we were clear of all underground lines.
Air Rotary drilling commenced, penetrating to a depth of 45' bgs, where GW was encountered.

12/10/09

1100 AOC-6 SB-1
We could not access the original location. We moved SB-1 ~150' E by NE toward MW065A
Cleared borehole with hand auger to a depth of 6' bgs
Begin drilling.
Penetrated to a depth of 60'
We were close to GW as indicated by the sand at the terminus of the borehole however GW was not encountered @ ~60' bgs

1130 AOC-6 SB-2
We moved the location 6' N as the original location was on an incline, inaccessible to the drill rig.
Cleared borehole 6' bgs with a hand auger
Begin drilling
Penetrated to a depth of 55' bgs where GW was encountered

12/10/09

1200 AOC-6 SB-4

Began borehole clearance to a depth of 6' bgs w/ Hand Auger. Moved original location ~10' E to avoid close proximity to underground liner, marked by one call. Hollace Cox agreed with the move and was not concerned that we were had become too far East. Began air rotary drilling. Penetrated to a depth of ~55' bgs where GW was encountered.

12/10/09

AOC-6 SB-4

Time	Depth	Quantity	mg/L	x4 mg/L
1200	10-15	0.6	<32	<128
1205	15-20	0.6	<32	
1208	20-25	0.4	<32	
1210 H	25-30	0.6	<32	
1214 *	30-35	1.6	38	
1218 H	35-40	1.2	<32	
1222	40-45	0.8	<32	
1224	45-50	0.4	<32	
1230 *	50-55	0.6	<32	

Lot A93315

AOC-6 SB-2

Time	Depth	Quantity	mg/L	x4 mg/L
1130	10-15	0.4	<32	<128
1132	15-20	0.4	<32	
1135	20-25	0.6	<32	
1138	25-30	0.6	<32	
1140	30-35	1.0	<32	
1142	35-40	1.0	<32	
1145 H	40-45 H	0.8	<32	
1146 *	45-50 *	1.2	<32	
1149 *	50-55 *	0.4	<32	

12/10/09

AOC-3 SB-1

Time		Depth	Quantab	mg/L	x4 mg/L
1005		10-15	0.4	<32	<128
1008	H	15-20	0.4		
1010	*	20-25	0.8		
1012	H	25-30	0.4		
1015		30-35	0.4		
1018		35-40	0.6		
1020	*	40-45	0.2		

AOC-3 SB-3

Time		Depth	Quantab	mg/L	x4 mg/L
834		10-15	0.2	<32	<128
836	H	15-20	0.4		
838	*	20-25	0.6		
840	H	25-30	0.4		
842		30-35	0.4		
844		35-40	0.4		
848	*	40-45	0.4		

12/10/09

AOC-3 SB-4

Time		Depth	Quantab	mg/L	x4 mg/L
905		10-15	0.4	<32	<128
910		15-20	0.2		
912	H	20-25	0.2		
915	*	25-30	0.4		
918	H	30-35	0.4		
922		35-40	0.2		
930	*	40-45	0.2		

AOC-6 SB-1

Time		Depth	Quantab	mg/L	x4 mg/L
1103		10-15	0.4	<32	<128
1105		15-20	0.4	<32	<128
1108	H	20-25	1.4	32	128
1112	*	25-30	3.0	104	416
1114	H	30-35	1.8	45	180
1116		35-40	0.4	<32	<128
1118		40-45	0.8		
1121		45-50	0.4		
1124		50-55	0.4		
1126	*	55-60	0.4		

12/10/09

AOC-3 SB-2

	Depth	Quanta6	mg/L	x4 mg/L
1030 H	10-15	0.4	<32	<128
1032 *	15-20	0.6		
1034 H	20-25	0.4		
1036	25-30	0.6		
1040	30-35	0.4		
1044	35-40	0.4		
1048 *	40-45	0.2		
				DUP 10/5
	Lot	19315	8/2011	

12/11/09

745 SB-2 AOC-5

Began borehole clearance to a depth of 6' bgs with hand auger

Began air rotary drilling.

The original location was moved approximately ~15' NE of the as the inclined terrain encumbered the mobility of the drill Rig and risked the possibility of becoming stuck.

Penetrated to a total depth of 50' bgs where GW was encountered

12/11/09

815 AOC-5 SB-4
Began clearance to 6' bgs with hand auger
No overhead or underground obstructions were visually observed.
Began air rotary drilling.
Penetrated to a depth of approximately 50' bgs, where GW was encountered.

12/11/09

845 SB-3 AOC-5
Began borehole clearance activity to a total depth of 6' bgs.
The location was accessible b/c the CVX Land man, Hollace Cox, had a crew cut the fence directly south of the boring location and built a temporary caliche bridge over the bar ditch, allowing the drill rig to pass through and sample the location without the risk of becoming stuck.
Began Rotary Air drilling.
Penetrated to a depth of ~50' bgs, where GW was encountered.

12/10/09

AOC-6 SB-3

910 SB-3 AOC-6

Began borehole clearance activities with hand auger to a depth of 6' bgs.

Range

Holace Cox opened the gate SW of the boring location, allowing easy access for the drill rig.

Began Air Rotary drilling activities.

Penetrated to ~60' bgs but did not hit GW

AOC-5 SB-4

Time	Depth		Quantab	mg/L	x4 mg/L
820	10-15	H	0.4	<32	
822	15-20	*	2.4	70	
824	20-25	H	1.4	32	
828	25-30		0.6	<32	
830	30-35		0.2		
834	35-40		0.2		
836	40-45		0.4		
838	45-50	*	0.4	↓	DUP105

Lot A9315

AOC-5 SB-2

Time	Depth		Quantab	mg/L	x4 mg/L
750	10-15	H	1.0	<32	<128
752	15-20	*	1.8	45	
754	20-25	H	0.8	<32	<128
756	25-30		1.6	38	
758	30-35		0.6	<32	<128
800	35-40		0.2		
805	40-45		0.2		
808	45-50	*	0.4	↓	↓ DUP106

AOC-5 SB-3

Time	Depth		Quantab	mg/L	x4 mg/L
850	10-15	H	0.2		
852	15-20	*	1.0		
854	20-25	H	0.6		
856	25-30		0.6		
858	30-35		0.4		
900	35-40		0.4		
905	40-45		0.6		
908	45-50	*	0.6		DUP107

AOC-6 SB-3

Time	Depth		Quantab	mg/L	x4 mg/L
915	10-15		0.0		
918	15-20		1.8		
921	20-25	H	2.5		
925	25-30	*	4.0		
928	30-35	H	2.5		
932	35-40		1.4		
935	40-45		1.8		
938	45-50		0.6		
940	50-55		0.4		
944	55-60	*	0.8		DUP108