HITP - _9_

GENERAL CORRESPONDENCE

YEAR(S): _2009_

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. _____ dated 11/25/09

or cash received on _____ in the amount of $ 150 00

from New Mexico Gas Company

for HITP-9

Submitted by: Lawrence Rosacio Date: 12/2/09

Submitted to ASD by: Laura Rowe Date: 12/2/09

Received in ASD by: _____ Date: _____

Filing Fee _____ New Facility _____ Renewal _____

Modification _____ Other Temporary Permission Fee

Organization Code 521.07 Applicable FY 2004

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

New Mexico
GAS COMPANY

If you have any questions about this payment please contact:

NEW MEXICO GAS COMPANY
P O Box 97500 MS AC3
Accounts Payable
Albuquerque, NM 87199-7500

BANK #	CHECK DATE	VENDOR NO.	CHECK NO.
523	Nov/25/2009	0000011449	012884

INVOICE #	DATE	AMOUNT	DISC.	NET AMT	VOUCHER ID	REMARKS
WATERQUAL11202009	Nov/20/2009	150.00	0.00	150.00	00034845	

Total Gross Amount	Total Discounts	Total Paid Amount
$150.00	$0.00	$150.00

Jones, Brad A., EMNRD

From: Marcelle Fiedler [Marcelle.Fiedler@nmgco.com]
Sent: Wednesday, November 11, 2009 9:48 AM
To: Jones, Brad A., EMNRD
Subject: Use this one instead!!!
Attachments: OCD 3rd version.pdf

Importance: High

Sorry. On the letter I sent to you yesterday I forgot to take our PCB and TPH. Please use this letter instead.

Thanks

New Mexico
GAS COMPANY

CERTIFIED MAIL -7008 1830 0002 7428 7597
RETURN RECEIPT REQUESTED

November 10, 2009

Brad Jones
State of New Mexico - Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: New Mexico Gas Company Notice of Intent to discharge hydrostatic test water from the North Belen Interchange lowering project

Dear Mr. Jones,

New Mexico Gas Company (NMGC) is submitting their Notice of Intent to hydrostatically test two sections of the Los Lunas Mainline in Valencia County, New Mexico. Following the Oil Conservation Division Guidelines for Hydrostatic Test Dewatering, NMGC has provided the following information.

Summary of Activities
NMGC will hydrostatically test two sections of existing pipe (600 feet and 400 feet) of the Los Lunas Mainline, a 12 inch gas transmission line. Approximately 4,000 gallons of water from the City of Belen, a municipal water source, will be used for the test and collected at the project location. The water will be sent to a nationally accredited testing laboratory (NELAC) and undergo hazardous waste analysis. NMGC plans to conduct the test in December 2009. The test water should be removed from the site within one week from the start of the hydrostatic test.

Name and Address of Discharger
NMGC
Marcelle Fiedler, BC22
P.O. Box 97500
Albuquerque, NM 87199

Location and Legal Description of Test and Water Collection
The test water will be collected at the south end of the 400 foot section and the north end of the 600 foot section of the Los Lunas Mainline being tested, within the Nicolas Duran de Chavez Land Grant extrapolated Section 25, Township 6N, Range 1E. The project location can be found by driving south on I-25 from Albuquerque to exit 195, the first exit for Belen. The project is on the west side of the interstate and can be accessed from off the interstate. Enclosed are maps showing the location of the pipeline to be tested.

P.O. Box 97500 • Albuquerque, NM 87199-7500 • p: 888 NMGASCO • www.nmgco.com

After both hydrostatic tests are complete the water will be collected and sent to a nationally accredited testing laboratory (NELAC) for a hazardous waste analysis.

Maps

The following maps are included with this Notice of Intent:

- Overview of project area (topo map)
- Discharge site (topo and aerial map)
- Wells
- Floodplain map
- Geology of area
- Soils
- Land Ownership map
- Total Dissolved Solids map

Demonstration of Compliance with Siting Criteria

See attached Maps and Certification of Compliance with Siting Criteria completed by the NMGC Project Manager for demonstration of compliance with Siting Criteria for the locations where the water is collected from the pipe. The disposal location, Key Energy Services, is an OCD permitted facility.

Compliance with OCD's siting criteria for the 400 foot section are met because:

1. Hydrostatic test water collected in tanks will not be within 200 feet of any watercourse (see Discharge site map)
2. The nearest wells are more than 1,700 ft away from the discharge site and the discharge area is not within the 100 year floodplain (see Well Location and FEMA Flood plain maps)
3. There are no wetlands within 500 ft (see Certification of Compliance)
4. NMGC contacted the NM Bureau of Mines and Minerals about subsurface mines and email verification was submitted to NMGC that there are no mines in the area. (see attached email from Bureau of Mines)
5. There is one residence within 500 feet, but no schools, hospitals, or churches within 500 feet (see Discharge site map)

Compliance with OCD's siting criteria for the 600 foot section are met because:

1. Hydrostatic test water collected in tanks will not be within 200 feet of any watercourse (see Discharge site map)
2. The nearest wells are more than 1,400 ft away from the discharge site and the discharge area is not within the 100 year floodplain (see Well Location and FEMA Flood plain maps)
3. There are no wetlands within 500 ft (see Certification of Compliance)
4. NMGC contacted the NM Bureau of Mines and Minerals about subsurface mines and email verification was submitted to NMGC that there are no mines in the area. (see attached email from Bureau of Mines)
5. There are no residences, schools, hospitals, or churches within 500 feet (see Discharge site map)

Description of Activities

NMGC anticipates starting construction in December 2009. Approximately 2 weeks after construction begins, the hydrostatic testing will begin. The natural gas pipeline will be hydrostatically tested in two sections, 400 feet and 600 feet. The 400 foot section will be tested first using approximately 2,709 gallons of water from the City of Belen, a municipal source. The test water will be transferred by water truck to the 600 foot section to be reused for the second test. Plastic liner and drip trays will be placed under hoses and valves to collect drips and leaks when transferring water between sections. The second section will require an additional 1,152 gallons of water. Once hydrostatic testing starts, the tests will last 3-4 days and then the water will be stored in a holding tank for an additional 4 to 5 days while the water analysis is completed. When the results of the water analysis are received, the water will be hauled to Key for disposal, approximately 1 week after hydrostatic testing starts. NMGC anticipates that the water will be off site by approximately the end of December or one week from when the hydrostatic testing begins.

Method & Locations for Collection and Retention of Fluids & Solids

One 5,040 gallon tank will be used to hold the test water after testing both sections of pipe prior to transporting it to Key Energy Services Class 1 Injection Well. The test water will be transferred from the pipe into the tank by connecting a hose from the pipe directly to the tank. NMGC will use plastic liner or drip trays under hoses and valves to collect drips and leaks when transferring water. The holding tank will have secondary containment of hay bales and plastic. If water meets the OCD definition of Non-Hazardous/Non Exempt criteria, Key Energy Services, an OCD approved water hauler, will haul the water to their facility for disposal.

BMPs to Contain Discharge On Site & Control Erosion

Plastic liner and drip trays will be placed under hoses and valves to collect drips and leaks when transferring water between sections and when transferring water into the holding tank. The holding tank will have 1 and 1/3 secondary containment made with a plastic liner and hay bales.

Request for Alternate Treatment/Disposal

If the hydrostatic test water does not meet conditions for discharge to Key Energy Services injection well disposal, test water will be sent to a RCRA permitted TSDF for disposal.

Hydrostatic Test Water Sampling Plan

A hydrostatic test water sample will be collected from the 600 ft section of pipe after both sections of pipe are tested. The test water will be analyzed per the test methods found in 40 CFR 261 Subpart C. NMGC will expedite the laboratory analyses to minimize the storage time of the test water in the storage tank.

Disposal of Fluids & Solids

Hydrostatic test water

A representative sample of the hydrostatic test water will be collected from the 600 ft section of pipe after both sections of pipe are tested. Prior to disposal, the water will be analyzed for the following according to Test Methods for Evaluating a Solid Waste, EPA No. SW-846:

- Toxicity TCLP
    - Volatiles (EPA Method 8260)

    - Semi volatiles (EPA Method 8270)
    - Metals (RCRA 8 – EPA Method 6010/6020*)
    - Pesticides and herbicides
- Reactivity
- Corrosivity
- Ignitability

If the analytical results of the hydrostatic test water determine that the hydrostatic test water is a Non-Hazardous/Non-Exempt waste below the regulatory limits set forth in 40 CFR 261 Subpart C it will be sent to Key Energy Services Class 1 Injection Wells (Farmington, NM) for disposal. Key Energy is an OCD permitted facility.

Expected Quality & Volume of Discharge

The expected volume of the hydrostatic test discharge is approximately 3,861 gallons. NMGC plans to discharge the water at Key Energy Services Class 1 Injection Well. NMGC does not anticipate the water will contain any hazardous constituents above RCRA regulatory limits.

Geological Characteristics of Subsurface at Discharge Site

According to the NM Bureau of Geology Geologic Map of the Belen 7.5 minute Quadrangle, the project is within surficial deposits from the Holocene and late Pleistocene that consist of sandy and pebbly alluvium and local eolian sand sheets in generally low relief aprons and arroyo channels along valley margins. The sand is light brown to grayish orange, unconsolidated, well sorted (eolian) to poorly sorted (alluvium), subangular to subrounded, and composed dominantly of quartz. (Draft Geologic Map of the Belen 7.5 minute Quadrangle, Geoffrey Rawling, June 2003) Soils in the area are Bluepoint loamy fine sand, hummocky. The Bluepoint association is found in alluvial fans and terraces and is considered somewhat excessively drained. The parent material is mixed alluvium (NRCS soils data). The NM Bureau of Geology and Mineral geologic map may be found: http://geoinfo.nmt.edu/publications/maps/geologic/ofgm/home.cfm Information about soils was obtained from the NRCS web soil survey website: http://websoilsurvey.nrcs.usda.gov/app/

Depth & TDS Concentration of Ground Water Most Likely to be Affected by Discharge

According to State Engineer well records, May 2008, the nearest well is 1,700 feet from the 400 foot section collection location and 1,400 feet from the 600 foot collection location. The Valencia County Comprehensive Land Use Plan, 2005, includes a map of Areas of Concern where water may be vulnerable to contamination. The map shows the project location within an area where ground water is less than 100 feet deep and Total Dissolved solids are less than 2000 mg/L. (see enclosed maps)

ID of Landowners at and Adjacent to Discharge Site and Collection/Retention Site

A map is provided showing the landownership of the underlying and adjacent property owners of the Los Lunas Mainline. The underlying and adjacent landowner is private. This project is being done at the request of the underlying landowner and they have been notified about the project and hydrostatic test. (see attached copy of letter and proof of receipt)

Closing

In the event of a release associated with project activities, NMGC will comply with OCD's Release Notification and Corrective Action regulation NMAC 19.15.29 to remediate the spill as

soon as possible. In addition, per 20.6.2.1203, NMGC will notify OCD immediately of a release of any amount.

Once OCD rules this application as administratively complete, and if required, NMGC will provide notice of the permit application in the Albuquerque Journal following requirements in NMAC 20.6.2.3108. In addition, a sign will be placed at the location of the discharge and at the Wal-Mart at the North Belen exit (exit 195) near the intersection of the I-25 bypass and highway 314, providing a synopsis of the public notice. A check for $100 is enclosed for the filing fee. Thank you for your assistance. If additional information is required please notify me in writing. Please call me at (505) 697-3516 if you have any questions.

Sincerely,

Marcelle Fiedler
Senior Environmental Scientist
Attachment: Location maps

Certification of Compliance with Siting Criteria

I, Tim Duncan, Engineer with NMGC visited the project site in the field on October 15, 2009 and verified that the locations where NMGC will collect the hydrostatic test water from the pipe, meets the following siting criteria:

- 400 foot section of pipe collection location
  - No wells within 1,000 ft
  - No watercourses within 200 ft. There is a watercourse very close to the 200 ft boundary from the collection location.
  - No wetlands within 500ft
  - No school, hospital, institution or church within 500 ft. There is one permanent residence within 500 ft. it is located on the east side of the interstate

- 600 foot section of pipe collection location
  - No wells within 1,000 ft
  - No watercourses within 200 ft
  - No wetlands within 500ft
  - No permanent residence, school, hospital, institution or church within 500 ft.

My observations in the field match the enclosed map showing where NMGC plans to collect the water.

Tim Duncan	Engineer	10/28/09
Signature	Title	Date

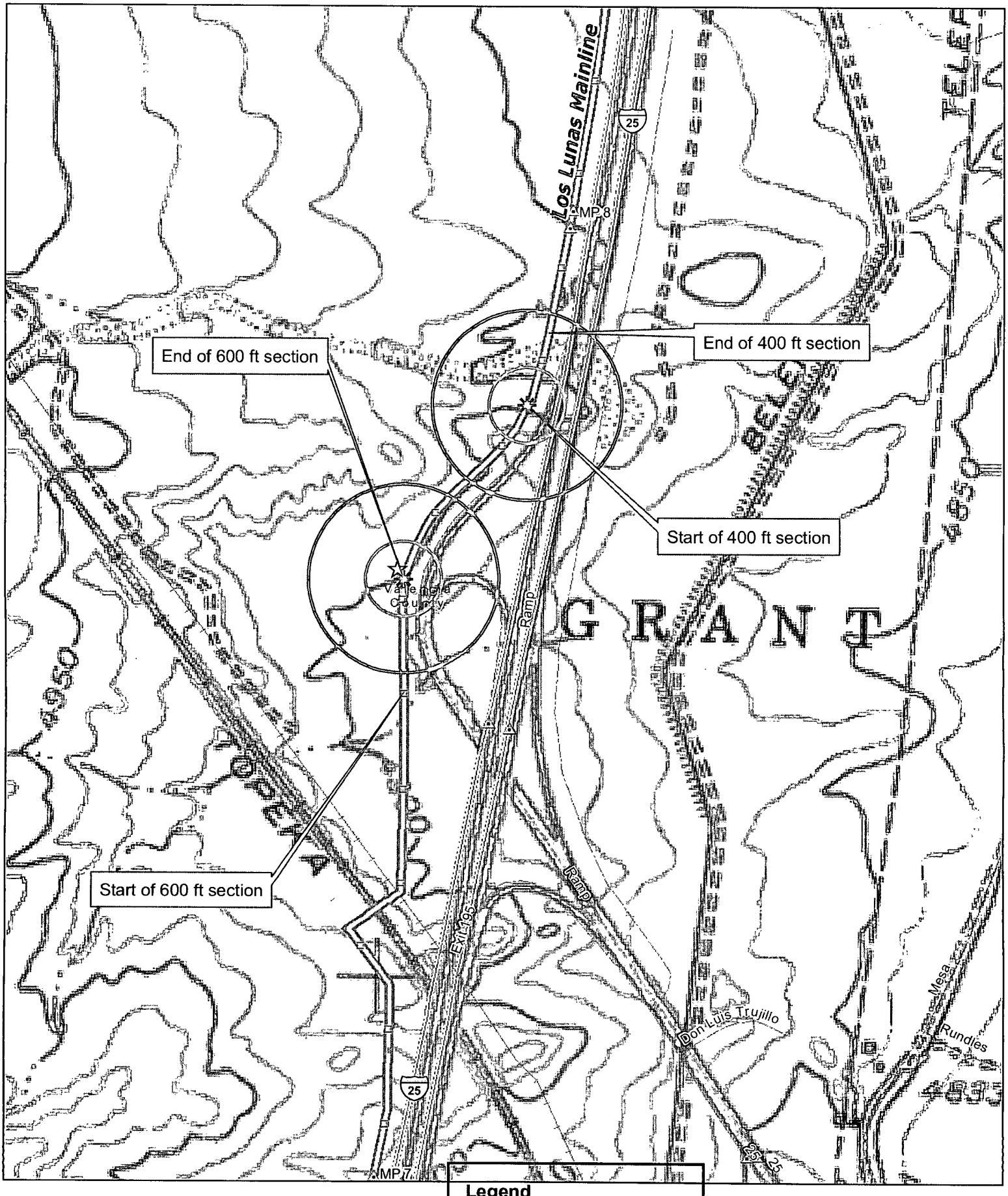
North Belen Interchange Lowerings
12" Los Lunas Mainline

0.1 0 0.1 0.2
Miles

Legend

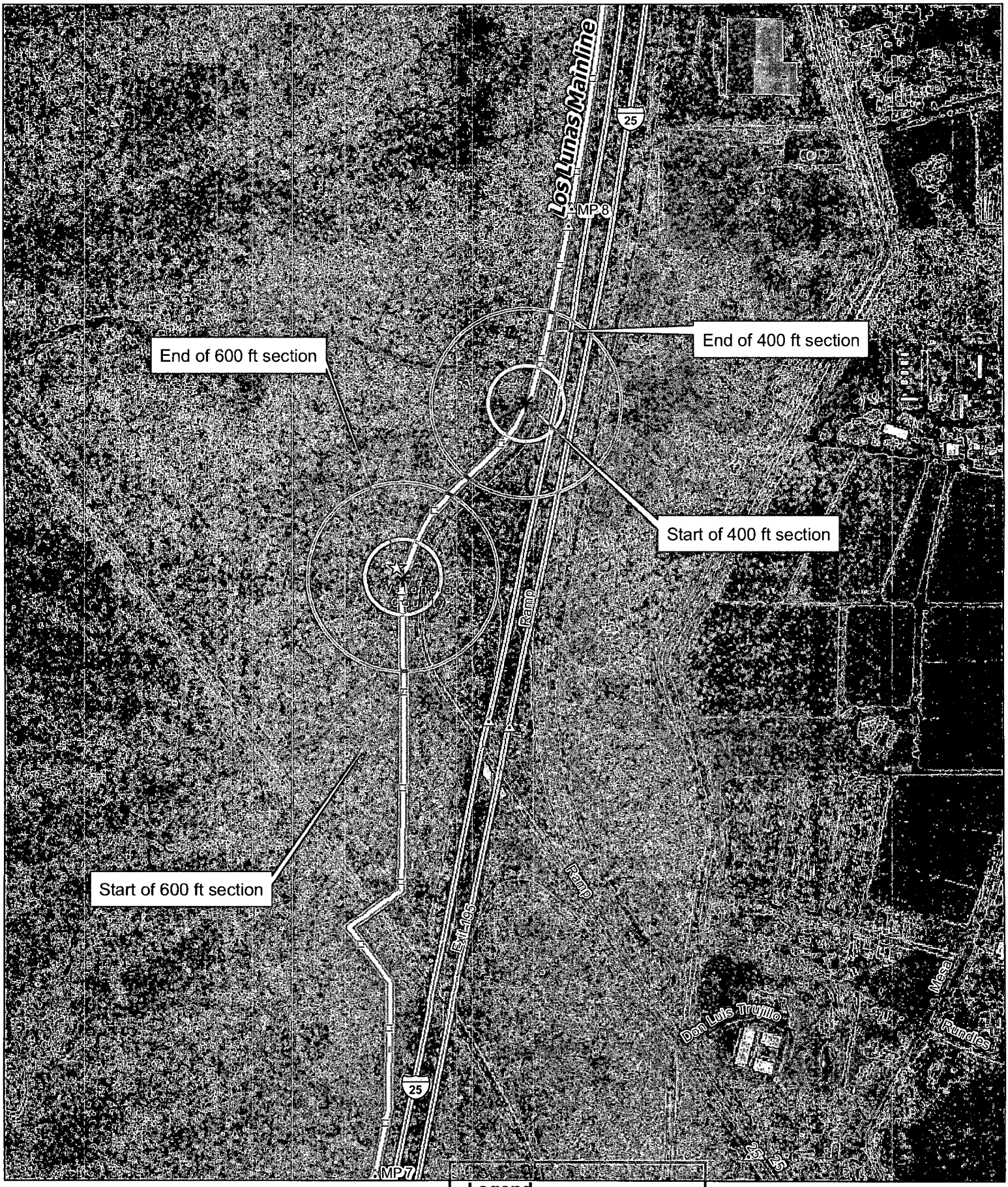
- ☆ Holding tank
- ✱ Collection Location

Overview Map



North Belen Interchange Lowerings
12" Los Lunas Mainline

Discharge Site Map



Legend

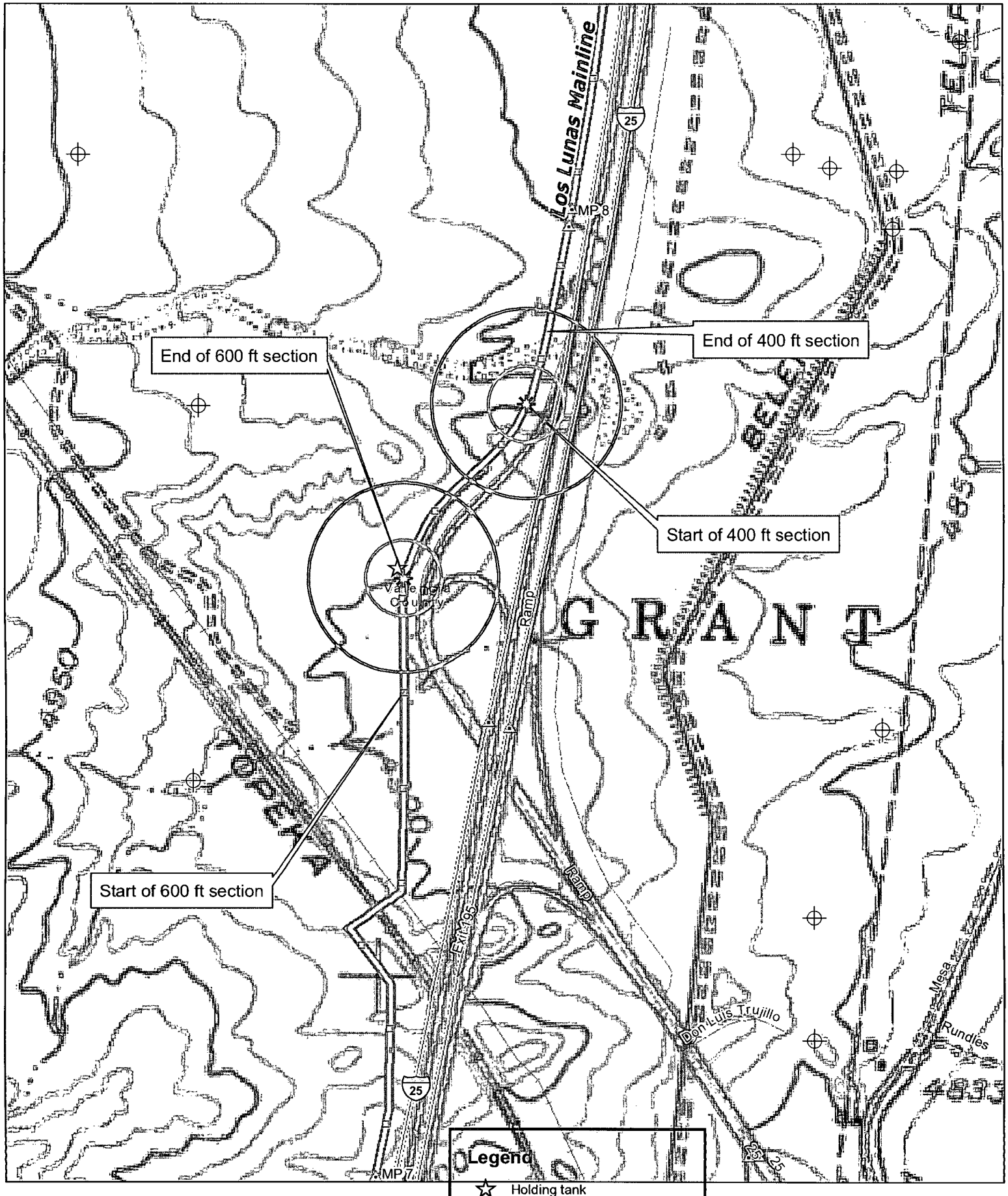
- ☆ Holding tank
- ✱ Collection Location
- CollectionLocation_200Buffer
- CollectionLocation_500Buffer

North Belen Interchange Lowerings
12" Los Lunas Mainline

320 0 320 640

Feet

Discharge Site Map

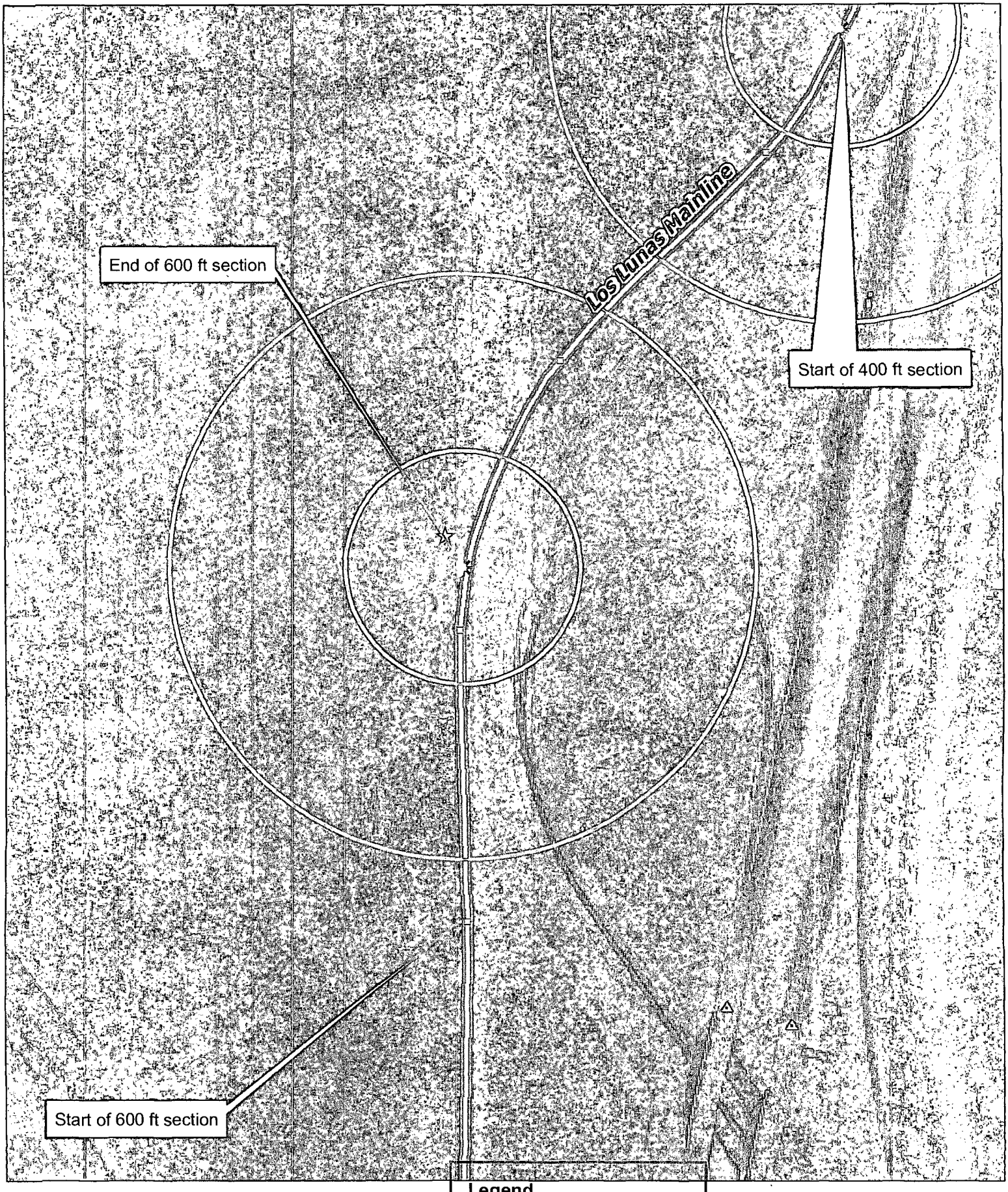


North Belen Interchange Lowerings
12" Los Lunas Mainline

320 0 320 640

Feet

Well Location Map



North Belen Interchange Lowerings
12" Los Lunas Mainline

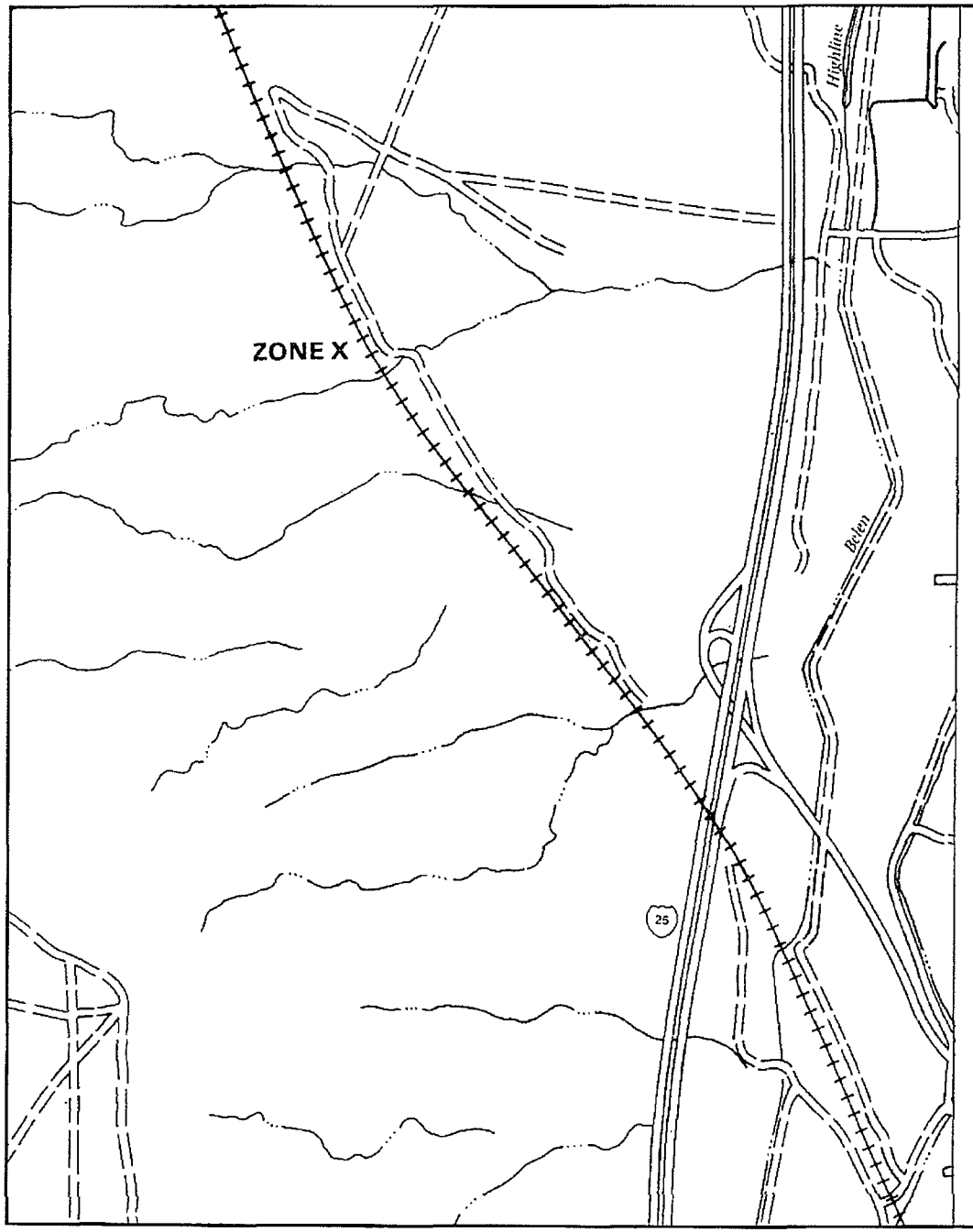
100 0 100 200

Feet

Legend

- Holding tank
- Collection Location
- CollectionLocation_200Buffer
- CollectionLocation_500Buffer

Tank Location Map



insurance agent or call the National Flood Insurance Prog

N

APPROXIMATE SCALE

2000 0

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

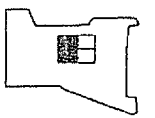
FLOOD INSURANCE RATE MAP

VALENCIA COUNTY, NEW MEXICO

UNINCORPORATED AREAS

PANEL 200 OF 375

(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

COMMUNITY-PANEL NUMBER

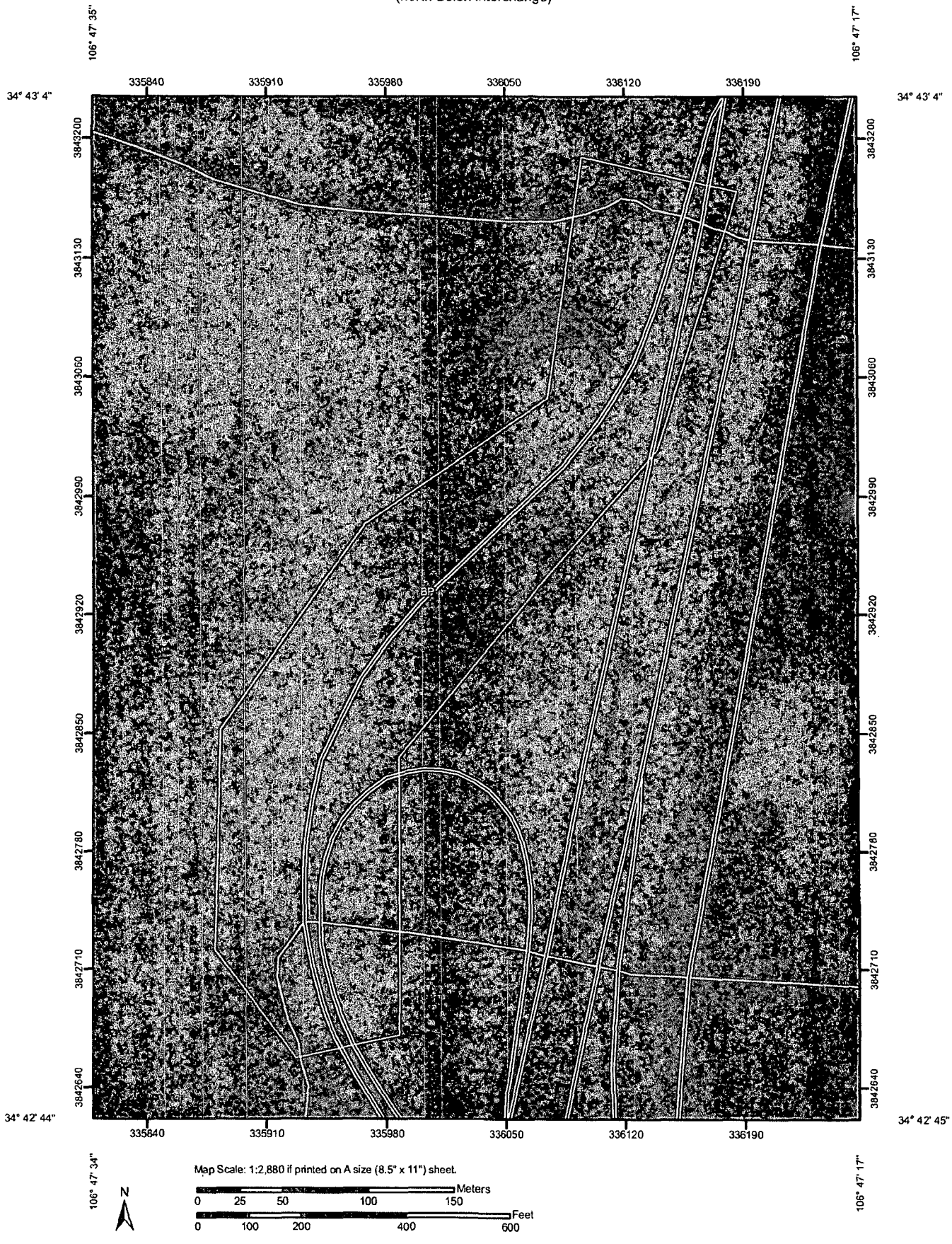
350086 0200 D

MAP REVISED:

FEBRUARY 9, 2000

Federal Emergency Management Agency

Soil Map—Valencia County, New Mexico, Eastern Part
(north Belen interchange)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features
- Cities

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:2,880 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 13N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Valencia County, New Mexico, Eastern Part
Survey Area Data: Version 9, Feb 23, 2009

Date(s) aerial images were photographed: 10/6/1996

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Valencia County, New Mexico, Eastern Part (NM612)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BP	Bluepoint loamy fine sand, hummocky	13.2	100.0%
Totals for Area of Interest		**13.2**	**100.0%**

Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief, Generated)

Valencia County, New Mexico, Eastern Part

Map Unit: BP—Bluepoint loamy fine sand, hummocky

Component: Bluepoint (90%)

The Bluepoint component makes up 90 percent of the map unit. Slopes are 1 to 9 percent. This component is on alluvial fans, alluvial plains. The parent material consists of mixed alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This component is in the R042XA054NM Deep Sand ecological site. Nonirrigated land capability classification is 7s. Irrigated land capability classification is 3s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Data Source Information

Soil Survey Area: Valencia County, New Mexico, Eastern Part
Survey Area Data: Version 9, Feb 23, 2009

Valencia County, New Mexico, Eastern Part

BP—Bluepoint loamy fine sand, hummocky

Map Unit Setting

Elevation: 4,900 to 6,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 57 to 60 degrees F
Frost-free period: 170 to 210 days

Map Unit Composition

Bluepoint and similar soils: 90 percent

Description of Bluepoint

Setting

Landform: Alluvial fans, stream terraces
Landform position (three-dimensional): Tread, rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed alluvium

Properties and qualities

Slope: 1 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Low (about 4.3 inches)

Interpretive groups

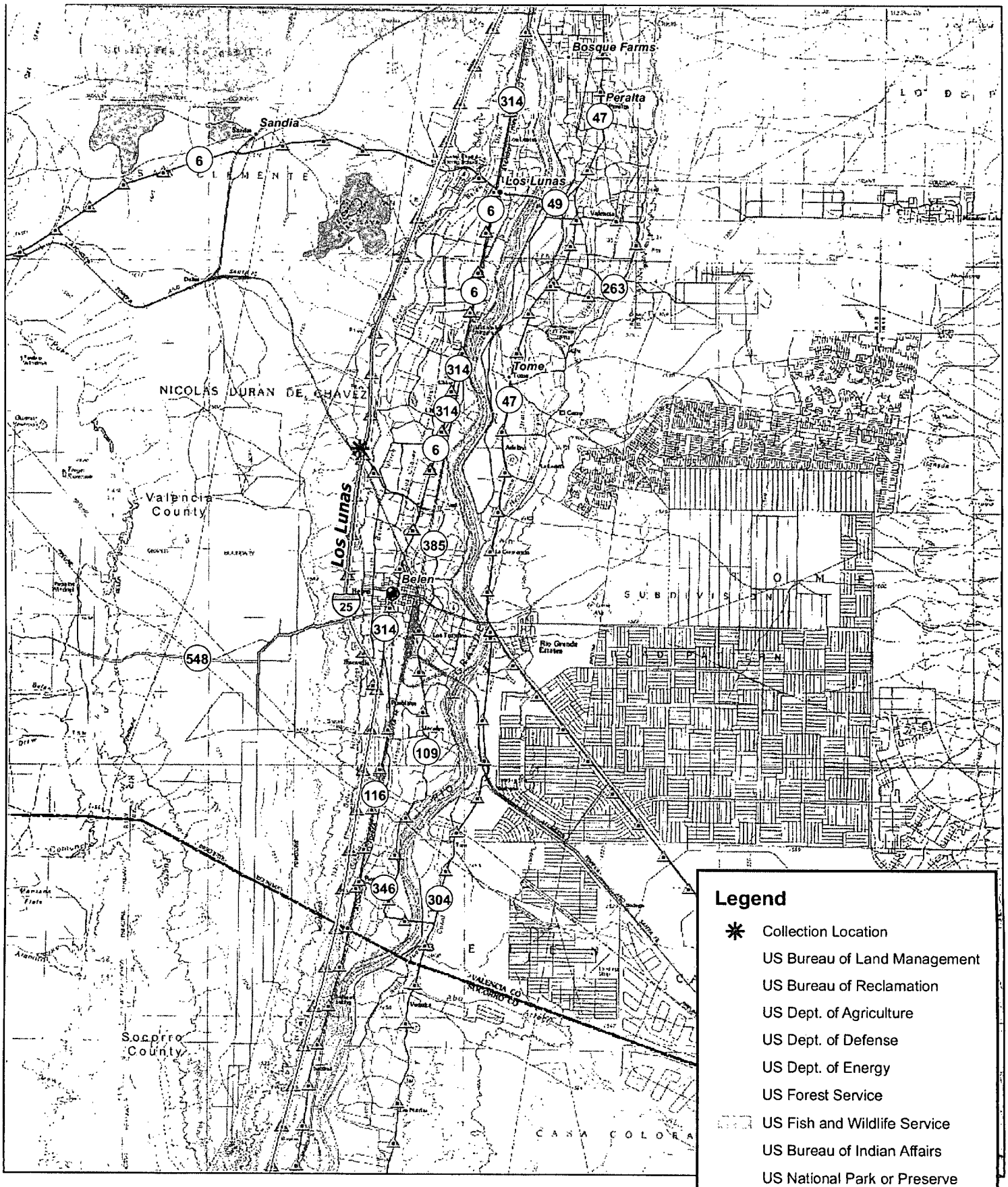
Land capability classification (irrigated): 3s
Land capability (nonirrigated): 7s
Ecological site: Deep Sand (R042XA054NM)

Typical profile

0 to 12 inches: Loamy fine sand
12 to 60 inches: Loamy sand

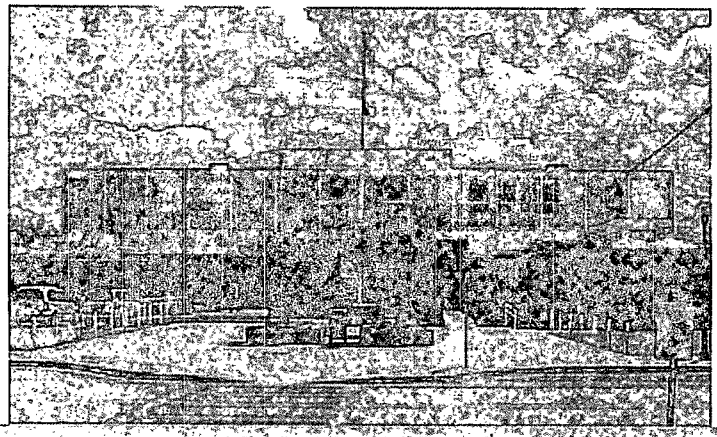
Data Source Information

Soil Survey Area: Valencia County, New Mexico, Eastern Part
Survey Area Data: Version 9, Feb 23, 2009

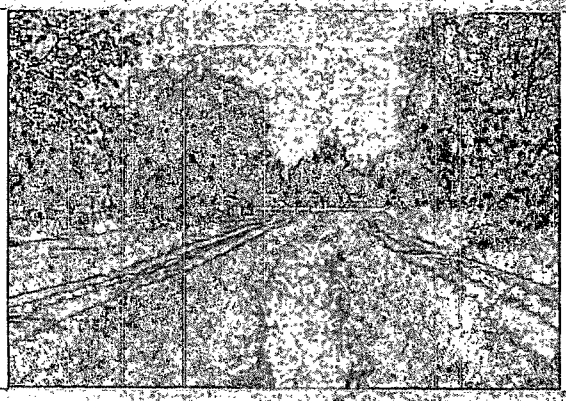


North Belen Interchange Lowerings
12" Los Lunas Mainline

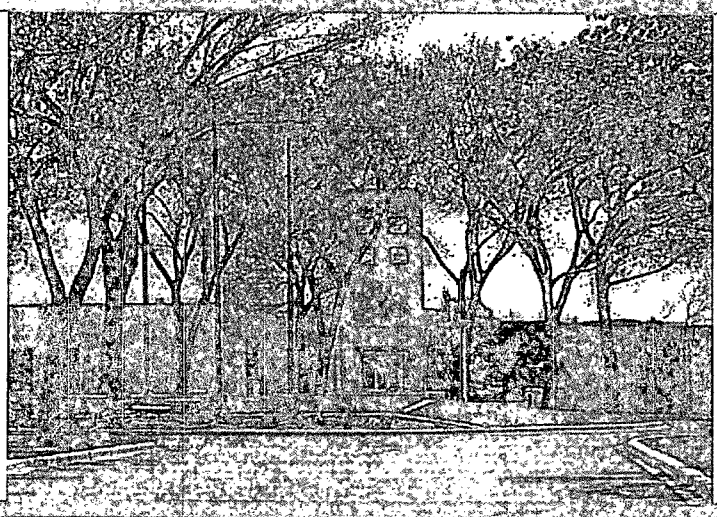
Land Ownership Map



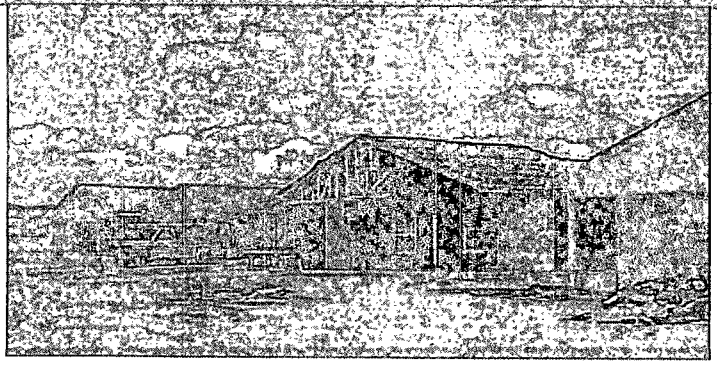
Valencia County



Comprehensive



Land Use Plan



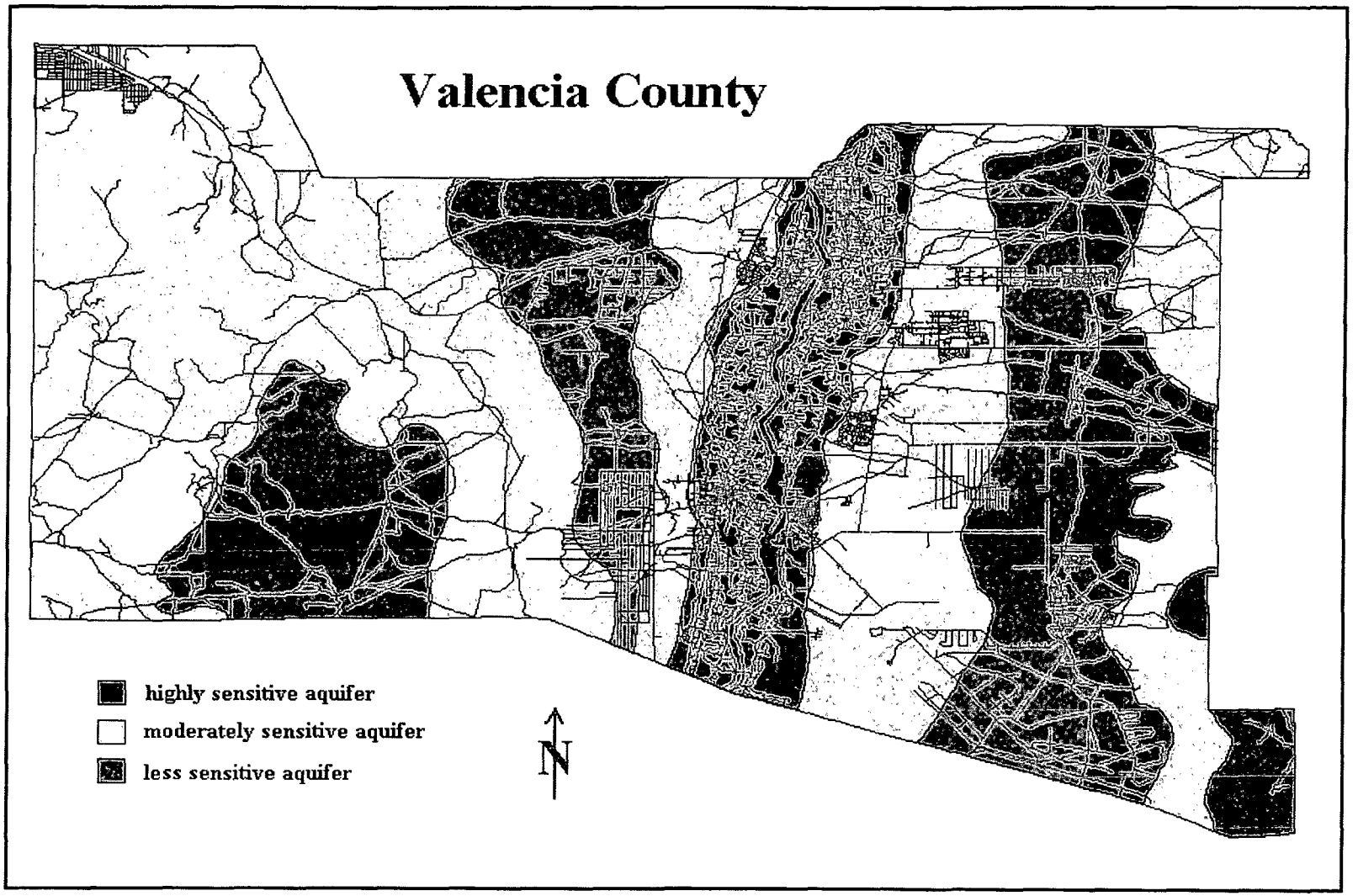
Adopted by the
County Commission
October 7, 2005

Valencia County residents rely on good quality ground water (underground water) as their primary source of drinking water. This source of water is found in aquifers which are water bearing layers of permeable rock, sand, or gravel beneath the surface of the land. Ground water becomes contaminated when contaminants move through soil and aquifers faster than natural processes can reduce them to acceptable levels (McQuillan, Parker, and Richards, 2000). The sources of ground water contamination are many, with the chief contributors being septic tanks, dairy and other animal wastes, commercial fertilizers, leaking underground storage tanks, and spills and leaks from above ground storage tanks, pipelines, and traffic accidents. The New Mexico Environment Department (NMED) has identified 65 past and current leaks from storage tanks in Valencia County that are either cleaned up or are currently being monitored or investigated. Storage tank leaks have been identified in Belen, Bosque Farms, Los Lunas, Jarales, and Peralta.

Septic tanks are especially problematic because in New Mexico they have contaminated more acre-feet of ground water and more public and private water supply wells than all other sources combined. An estimated 208,000 septic-tank systems and cesspools discharge about 78 million gallons of wastewater per day in New Mexico. Lot size is a critical factor in determining the amount of natural attenuation that occurs between the location where septic effluents are discharged, and the nearest down-gradient point of ground water withdrawal, and thus the potential for water well contamination. In New Mexico, residential developments with average lot sizes up to 0.84 acre (including roadways) have caused ground water contamination in excess of allowable standards (McQuillan, 2004).

The New Mexico Environment Department has recently tightened up regulations controlling septic tanks and other household sewage treatment and disposal systems. The new rules, approved April 6, 2005, apply a three-quarter acre minimum on undeveloped lots whose depth to ground water is less than 100 feet regardless of the plat date, and bring all undeveloped lots to current standards (Valencia County News Bulletin, 2005). Before the new standards were approved, regulations allowed septic tank installation on lots smaller than three-quarters of an acre if the lot was platted before February 1, 1990.

A map (Figure 20) showing Areas of Concern (AOCs) where waters of the State may be vulnerable to contamination from septic tank discharges has been compiled by the New Mexico Environment Department (NMED). This map shows areas in Valencia County with ground water less than 100 feet deep, and with 2000 mg/L or less Total Dissolved Solids (TDS). The County currently has no measures in the zoning or subdivision regulations that protect wellheads or recharge areas. The County should investigate adopting some regulations to protect the ground water.



July 2005

Figure 20
Liquid Waste Program
Aquifer Mapping - Areas of Concern

Mid-Region
Council of Governments
809 Copper Ave. NW
Albuquerque, NM 87102
505-247-1750

Source: NM Environment Department, Lee Wilson and Assoc., Aquifer Vulnerability Maps

Marcelle Fiedler

From: Moiola, Lloyd, EMNRD [lloyd.moiola@state.nm.us]
Sent: Friday, October 09, 2009 8:16 AM
To: Marcelle Fiedler
Subject: RE: Request for information about subsurface mines

Marcelle,

Your project area appears to be on unplatted grant lands, however based on Mining and Minerals Division Abandoned Mine Land Program records, we do not find any mines on that area of the Belen quadrangle. Please let me know if you need information about subsurface mines on future projects.

Thanks,

Lloyd Moiola

From: Marcelle Fiedler [mailto:Marcelle.Fiedler@nmgco.com]
Sent: Thursday, October 08, 2009 4:37 PM
To: Moiola, Lloyd, EMNRD
Cc: Mark Sikelianos
Subject: Request for information about subsurface mines

Lloyd
Last year you helped us confirm that there were no subsurface mines in an area where we did a hydrostatic test on our gas pipeline. I wonder if you can check for subsurface mines at a different location for another project. this is a requirement of the Oil conservation Division for our permit application.

This project location is in Section 25 T 6 N R1 E on the Belen USGS quad

if you need more information please let me know. 697-3516
Thanks so much!
Marcelle

Marcelle Fiedler
NMGC
7120 Wyoming, Blvd. NE, Suite 20
Albuquerque, NM 87109
Phone: 505-697-3516
cell: 505-220-1056
Fax: 505-697-4481 or 4497

Mailing address:
PO Box 97500
Albuquerque, NM 87199-7500

marcelle.fiedler@nmgco.com

New Mexico
GAS COMPANY

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

October 28, 2009

James Wood
New Mexico Development Partners, LP
6501 Americas Parkway NE, Suite 1075
Albuquerque, NM 87110

RE: Belen Interchange gas pipeline lowerings

Dear Mr. Wood:

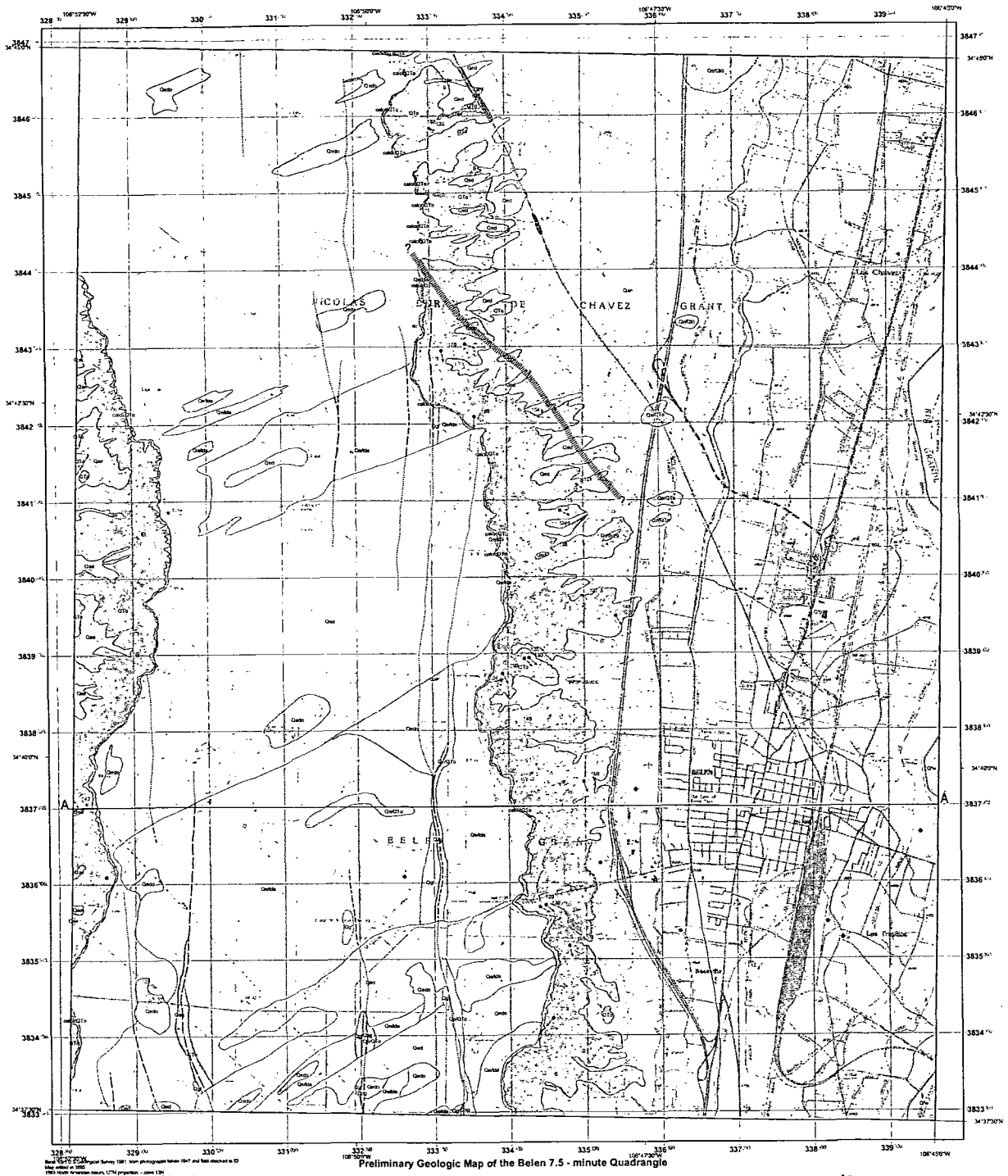
NMGC is writing to notify you of NMGC's plans to hydrostatically test two sections of existing pipe (600 feet and 400 feet) of the Los Lunas Mainline, a 12 inch gas transmission line in December 2009. Approximately 4,000 gallons of water from the City of Belen, a municipal water source, will be used for the test and collected at the project location. Once the test is complete, the water will be hauled to Key Energy Services in Farmington for disposal.

The test water will be collected at the south end of the 400 foot section and the north end of the 600 foot section of the Los Lunas Mainline being tested, within the Nicolas Duran de Chavez Land Grant extrapolated Section 25, Township 6N, Range 1E. The project location can be located by driving south on I-25 from Albuquerque to exit 195, the first exit for Belen. The project is on the west side of the interstate and can be accessed from off the interstate.

Please feel free to contact me if you have any questions. I can be reached at 505-697-3516.

Sincerely,

Marcelle Fiedler
Senior Environmental Scientist
New Mexico Gas Company
PO Box 97500, BC 22
Albuquerque, NM 87199



Preliminary Geologic Map of the Belen 7.5 - minute Quadrangle

by
Geoffrey C. Rawling

June 2003

1:24,000

0 0.25 0.5 1 1.5 2 miles
0 0.25 0.5 1 1.5 2 kilometers

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Magnetic Declination
June 2003
10° 10' East
At Map Center

DRAFT
NMBGMR OF-GM 00

This work was performed under the STATEMAP component of the USGS National Cooperative Geologic Mapping Program. Funding for geological mapping was provided by the U.S. Geological Survey and the New Mexico Bureau of Geology and Mineral Resources, a division of New Mexico Tech

New Mexico Bureau of Geology
New Mexico Tech
801 Leroy Place
Socorro, NM 87801-4796

[505] 835-5420
http://geoinfo.nmt.edu

This and other maps are available in PDF format from:
http://geoinfo.nmt.edu/publications/maps/

or contact:
NMBGMR Publications – [505] 835-5410
NMBGMR Geologic Information Center – [505] 835-5145

EXPLANATION OF MAP UNITS

Rock colors are by comparison with Goddard et al. (1948). Mapping of surficial deposits on Llano de Albuquerque based largely on air photo interpretation and geomorphic position, and locally field checked.

Anthropogenic Deposits

af Artificial fill for highway and railroad grades

Surficial Deposits

Qfw Historic floodway of the Rio Grande. Includes active channel and adjacent floodplain contained between manmade barriers such as levees and irrigation and drainage ditches. Channel consists of pebbly sand in ripple and small dune bedforms, and larger bars. Laminated sand, silt, and clay form waning-flow deposits. Less than 5 m thick. Correlative to the Los Padillas formation of latest Pleistocene-Holocene age, together with Qfp (Connell and Love, 2001)

Qfp Historic floodplain of the Rio Grande between valley margins and artificial barriers such as levees and irrigation ditches. Consist of sand, silt, and clay. Commonly disturbed by agricultural fields and housing developments. Up to 30 m thick. Interfingers with and is overlain by Qae at valley margins. Correlative to the Los Padillas formation of latest Pleistocene-Holocene age, together with Qfw (Connell and Love, 2001).

Qed Late Holocene eolian deposits with recent dune form development. Deposits are light brown (5YR 6/4) to grayish orange (10YR 7/4) to dark yellowish orange (10YR 6/6), unconsolidated, very fine to medium grained, moderately well rounded to well rounded sand composed largely of quartz. Contains scattered pebbles. Forms dunes up to 2m in height. In the northern half of the map area, unit contains local areas of sand sheets (unit Qe)

Qeds Holocene eolian deposits with older dune form development. Composition is similar to Qed. Commonly buried by or reworked into Qed. Equivalent to unit Qeds of Love (2000).

Qe Holocene eolian deposits with subdued or no dune forms. Dominantly sand sheets. Deposit consists of light brown (5YR6/4 to 5YR 5/6), fine to very fine grained, rounded to subrounded sand composed largely of quartz. Locally pebbly due to bioturbation (?). Unit typically has one or more episodes of soil development beneath the surface. Up to 2 m thick. Qef indicates where overlies adjacent unit.

Qe/Qda sand sheets on the Llano de Albuquerque geomorphic surface (described below)

Qe/Qfd sand sheets and subdued dunes on probable Los Duranes formation of middle Pleistocene age (Connell and Love, 2001), which consists of up to 40 m of fining-upward sequences of gravel, crossbedded sand, and parallel bedded sand, silt, and clay.

Qe/QTo discontinuous eolian mantle and local exposures of calcic soil at the top of the Arroyo Ojito Formation (described below) on fault scarps on the Llano de Albuquerque; isolated exposures along I-25 in the middle of the quadrangle are thin (≤ 1m) eolian mantle on probable Arroyo Ojito Formation.

Qae Holocene and late Pleistocene sandy and pebbly alluvium and local eolian sand sheets in generally low relief aprons and arroyo channels along valley margins. Sand is light brown (5YR 6/4) to grayish orange (10YR 7/4), unconsolidated, well sorted (eolian) to poorly sorted (alluvium), subangular to subrounded, and composed dominantly of quartz. Up to 8 m thick. Interfingers with and overlies Qfp

Qaf Late Quaternary alluvial, eolian, and playa deposits along graben-floor drainages. Deposits are sand, silty clay, and clay. Up to 2 m (?) thick.

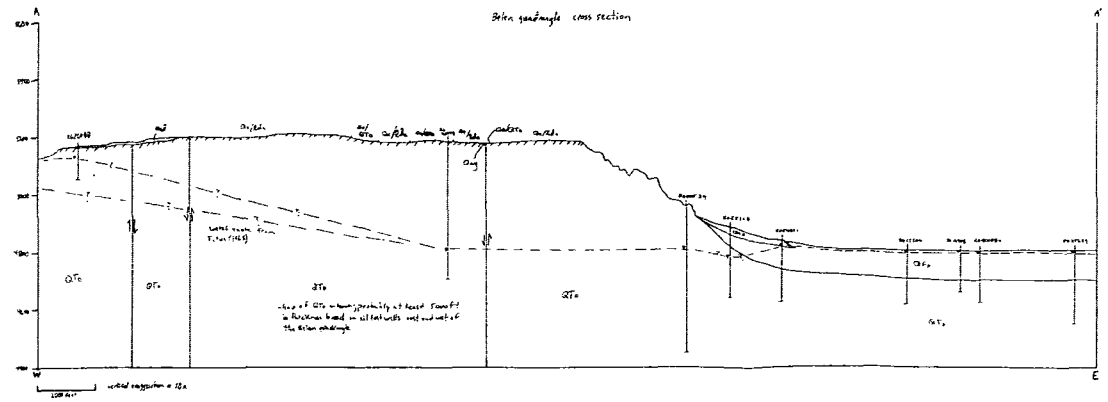
Qag Late Quaternary sandy eolian (?) aprons downslope from faults on scarps cutting Llano de Albuquerque. Deposits generally similar to Qe. 1 to 2 m (?) thick.

Arroyo Ojito Formation

QTo Late Tertiary and early Quaternary (?) basin fill of Santa Fe Group deposited by ancestral Rio Puerco and inter-channel eolian and pedogenic processes. Sediments consists of gravel, pebbly sand, sand, silt, and clay. Sand, fine sand, and silt beds are thin to thick bedded, light brown (5YR 5/6) to grayish orange (10YR 7/4) to dark yellowish orange (10YR 6/6), and composed of rounded to subangular grains. Clay beds are thin to thick bedded and light brown (5YR 6/4) to grayish orange (10YR 7/4) to moderate yellowish brown (10YR 5/4). Interchannel deposits commonly have laterally extensive soils characterized by rubification, clay concentrations, and carbonate nodules. Gravel beds have trough crossbedding, are typically scoured into underlying finer grained deposits, and generally weather into slopes where not cemented. Gravels are dominated by red and black chert, tan, brown, and red sandstone, and lesser amounts of Precambrian granite, multicolored Precambrian quartzite, and intermediate intrusive and extrusive volcanic rocks. Pedernal chert and petrified wood are typically present in sparse amounts. The gravel clast population and paleocurrent indicators indicate derivation from generally southeast flowing streams coming off of the Colorado plateau. The presence of Grants obsidian (indicated by the hachured lines) indicates sediment derived in part from the ancestral Rio San Jose drainage. At least 1500m thick based on oil test wells to east and west of the Belen quadrangle (as reported in Titus, 1963). Equivalent to units QTsl of Love et al (1998) and TQsp of Love (2000). Top of unit is the Llano de Albuquerque (lda), a geomorphic surface of maximum basin aggradation that forms the mesa of the same name in the western half of the quadrangle. The Llano de Albuquerque surface underlies units Qe/lda, Qed, Qe/do, and Qgf. In the Belen area, the Llano de Albuquerque surface is between 1.2 and 2.7 Ma, but is most likely older than 1.6 Ma (see discussion in Love et al., 2001). Beneath the surface is a white (N9) to bluish white (5B9/11), 2-3 m thick, stage III+ - V calcic soil (Machette, 1982; Birkeland, 1999), delineated by northeast-trending hachures on the map where exposed, and on the cross section.

MAP AND CROSS SECTION SYMBOLS

- Approximately located contact, queried where uncertain
- Normal fault, ball and bar on downthrown side, dashed where approximately located, dotted where buried
- Bedding attitude (dip and dip direction)
- Horizontal bedding
- Paleocurrent direction, with type of indicator noted: t indicates axis of trough cross bed; i indicates imbricated gravel. Ball is at measurement point
- Axis of elongate concretion. Ball is at measurement point.
- Approximate northward extent of clasts of Grants obsidian, indicating influence of Rio San Jose on gravel composition in QTo
- Water well with NM State Engineer Office W.A.T.E.R.S. database reference number
- A—A' Line of cross section



New Mexico
GAS COMPANY

RECEIVED
2009 OCT 30 AM 10 14

CERTIFIED MAIL -7008 1830 0002 7428 7597
RETURN RECEIPT REQUESTED

October 29, 2009

Brad Jones
State of New Mexico - Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: New Mexico Gas Company Notice of Intent to discharge hydrostatic test water from the North Belen Interchange lowering project

Dear Mr. Jones,

New Mexico Gas Company (NMGC) is submitting their Notice of Intent to hydrostatically test two sections of the Los Lunas Mainline in Valencia County, New Mexico. Following the Oil Conservation Division Guidelines for Hydrostatic Test Dewatering, NMGC has provided the following information.

Summary of Activities
NMGC will hydrostatically test two sections of existing pipe (600 feet and 400 feet) of the Los Lunas Mainline, a 12 inch gas transmission line. Approximately 4,000 gallons of water from the City of Belen, a municipal water source, will be used for the test and collected at the project location. The water will be sent to a nationally accredited testing laboratory (NELAC) and undergo hazardous waste analysis. NMGC plans to conduct the test in December 2009. The test water should be removed from the site within one week from the start of the hydrostatic test.

Name and Address of Discharger
NMGC
Marcelle Fiedler, BC22
P.O. Box 97500
Albuquerque, NM 87199

Location and Legal Description of Test and Water Collection
The test water will be collected at the south end of the 400 foot section and the north end of the 600 foot section of the Los Lunas Mainline being tested, within the Nicolas Duran de Chavez Land Grant extrapolated Section 25, Township 6N, Range 1E. The project location can be found by driving south on I-25 from Albuquerque to exit 195, the first exit for Belen. The project is on the west side of the interstate and can be accessed from off the interstate. Enclosed are maps showing the location of the pipeline to be tested.

P.O. Box 97500 • Albuquerque, NM 87199-7500 • p: 888 NMGASCO • www.nmgco.com

After both hydrostatic tests are complete the water will be collected and sent to a nationally accredited testing laboratory (NELAC) for a hazardous waste analysis.

Maps

The following maps are included with this Notice of Intent:

- Overview of project area (topo map)
- Discharge site (topo and aerial map)
- Wells
- Floodplain map
- Geology of area
- Soils
- Land Ownership map
- Total Dissolved Solids map

Demonstration of Compliance with Siting Criteria

See attached Maps and Certification of Compliance with Siting Criteria completed by the NMGC Project Manager for demonstration of compliance with Siting Criteria for the locations where the water is collected from the pipe. The disposal location, Key Energy Services, is an OCD permitted facility.

Compliance with OCD's siting criteria for the 400 foot section are met because:

1. Hydrostatic test water collected in tanks will not be within 200 feet of any watercourse (see Discharge site map)
2. The nearest wells are more than 1,700 ft away from the discharge site and the discharge area is not within the 100 year floodplain (see Well Location and FEMA Flood plain maps)
3. There are no wetlands within 500 ft (see Certification of Compliance)
4. NMGC contacted the NM Bureau of Mines and Minerals about subsurface mines and email verification was submitted to NMGC that there are no mines in the area. (see attached email from Bureau of Mines)
5. There is one residence within 500 feet, but no schools, hospitals, or churches within 500 feet (see Discharge site map)

Compliance with OCD's siting criteria for the 600 foot section are met because:

6. Hydrostatic test water collected in tanks will not be within 200 feet of any watercourse (see Discharge site map)
7. The nearest wells are more than 1,400 ft away from the discharge site and the discharge area is not within the 100 year floodplain (see Well Location and FEMA Flood plain maps)
8. There are no wetlands within 500 ft (see Certification of Compliance)
9. NMGC contacted the NM Bureau of Mines and Minerals about subsurface mines and email verification was submitted to NMGC that there are no mines in the area. (see attached email from Bureau of Mines)
10. There are no residences, schools, hospitals, or churches within 500 feet (see Discharge site map)

Description of Activities

NMGC anticipates starting construction in December 2009. Approximately 2 weeks after construction begins, the hydrostatic testing will begin. The natural gas pipeline will be hydrostatically tested in two sections, 400 feet and 600 feet. The 400 foot section will be tested first using approximately 2,709 gallons of water from the City of Belen, a municipal source. The test water will be transferred by water truck to the 600 foot section to be reused for the second test. The second section will require an additional 1,152 gallons of water. Once hydrostatic testing starts, the tests will last 3-4 days and then the water will be stored in a holding tank for an additional 4 to 5 days while the water analysis is completed. When the results of the water analysis are received, the water will be hauled to Key for disposal, approximately 1 week after hydrostatic testing starts. NMGC anticipates that the water will be off site by approximately the end of December or one week from when the hydrostatic testing begins.

Method & Locations for Collection and Retention of Fluids & Solids

One 5,040 gallon tank will be used to hold the test water after testing both sections of pipe prior to transporting it to Key Energy Services Class 1 Injection Well. The test water will be transferred from the pipe into the tank by connecting a hose from the pipe directly to the tank. NMGC will use plastic liner or drip trays under hoses and valves to collect drips and leaks when transferring water. The holding tank will have secondary containment of hay bales and plastic. If water meets the OCD definition of Non-Hazardous/Non Exempt criteria, Key Energy Services, an OCD approved water hauler, will haul the water to their facility for disposal.

BMPs to Contain Discharge On Site & Control Erosion

Plastic liner and drip trays will be placed under hoses and valves to collect drips and leaks when transferring water between sections and when transferring water into the holding tank. The holding tank will have 1 and 1/3 secondary containment made with a plastic liner and hay bales.

Request for Alternate Treatment/Disposal

If the hydrostatic test water does not meet conditions for discharge to Key Energy Services injection well disposal, test water will be sent to a RCRA permitted TSDF for disposal.

Hydrostatic Test Water Sampling Plan

A hydrostatic test water sample will be collected from the 600 ft section of pipe after both sections of pipe are tested. The test water will be analyzed per the test methods found in 40 CFR 261 Subpart C. NMGC will expedite the laboratory analyses to minimize the storage time of the test water in the storage tank.

Disposal of Fluids & Solids

Hydrostatic test water

A representative sample of the hydrostatic test water will be collected from the 600 ft section of pipe after both sections of pipe are tested. Prior to disposal, the water will be analyzed for the following according to Test Methods for Evaluating a Solid Waste, EPA No. SW-846:

- TCLP
  - Volatiles (EPA Method 8260)
  - Semi volatiles (EPA Method 8270)
  - Metals (RCRA 8 – EPA Method 6010/6020*)

    - TPH (modified 8015)
    - Pesticides and herbicides
    - PCB (8082)
- Reactivity
- Corrosivity
- Ignitability

If the analytical results of the hydrostatic test water determine that the hydrostatic test water is a Non-Hazardous/Non-Exempt waste below the regulatory limits set forth in 40 CFR 261 Subpart C it will be sent to Key Energy Services Class 1 Injection Wells (Farmington, NM) for disposal. Key Energy is an OCD permitted facility.

Expected Quality & Volume of Discharge

The expected volume of the hydrostatic test discharge is approximately 3,861 gallons. NMGC plans to discharge the water at Key Energy Services Class 1 Injection Well. NMGC does not anticipate the water will contain any hazardous constituents above RCRA regulatory limits.

Geological Characteristics of Subsurface at Discharge Site

According to the NM Bureau of Geology Geologic Map of the Belen 7.5 minute Quadrangle, the project is within surficial deposits from the Holocene and late Pleistocene that consist of sandy and pebbly alluvium and local eolian sand sheets in generally low relief aprons and arroyo channels along valley margins. The sand is light brown to grayish orange, unconsolidated, well sorted (eolian) to poorly sorted (alluvium), subangular to subrounded, and composed dominantly of quartz. (Draft Geologic Map of the Belen 7.5 minute Quadrangle, Geoffrey Rawling, June 2003) Soils in the area are Bluepoint loamy fine sand, hummocky. The Bluepoint association is found in alluvial fans and terraces and is considered somewhat excessively drained. The parent material is mixed alluvium (NRCS soils data). The NM Bureau of Geology and Mineral geologic map may be found: http://geoinfo.nmt.edu/publications/maps/geologic/ofgm/home.cfm Information about soils was obtained from the NRCS web soil survey website: http://websoilsurvey.nrcs.usda.gov/app/

Depth & TDS Concentration of Ground Water Most Likely to be Affected by Discharge

According to State Engineer well records, May 2008, the nearest well is 1,700 feet from the 400 foot section collection location and 1,400 feet from the 600 foot collection location. The Valencia County Comprehensive Land Use Plan, 2005, includes a map of Areas of Concern where water may be vulnerable to contamination. The map shows the project location within an area where ground water is less than 100 feet deep and Total Dissolved solids are less than 2000 mg/L. (see enclosed maps)

ID of Landowners at and Adjacent to Discharge Site and Collection/Retention Site

A map is provided showing the landownership of the underlying and adjacent property owners of the Los Lunas Mainline. The underlying and adjacent landowner is private. This project is being done at the request of the underlying landowner and they have been notified about the project and hydrostatic test. (see attached copy of letter and proof of receipt)

Closing

In the event of a release associated with project activities, NMGC will comply with OCD's Release Notification and Corrective Action regulation NMAC 19.15.29 to remediate the spill as

soon as possible. In addition, per 20.6.2.1203, NMGC will notify OCD immediately of a release of any amount.

Once OCD rules this application as administratively complete, and if required, NMGC will provide notice of the permit application in the Albuquerque Journal following requirements in NMAC 20.6.2.3108. In addition, a sign will be placed at the location of the discharge and at the Wal-Mart at the North Belen exit (exit 195) near the intersection of the I-25 bypass and highway 314, providing a synopsis of the public notice. A check for $100 is enclosed for the filing fee. Thank you for your assistance. If additional information is required please notify me in writing. Please call me at (505) 697-3516 if you have any questions.

Sincerely,

Marcelle Fiedler
Senior Environmental Scientist
Attachment: Location maps

Jones, Brad A., EMNRD

From: Jones, Brad A., EMNRD
Sent: Tuesday, October 27, 2009 11:34 AM
To: 'Marcelle Fiedler'
Subject: RE: RCRA hazardous waste test

Marcelle,

There are two items of concern with the limited text below:

1) The proposal states that "a representative sample of the hydrostatic test water will be taken after the 400 foot section is tested." Based upon our previous discussions, OCD requires a representative sample of the hydrostatic wastewater to be obtained and tested after all of the proposed sections of pipeline have been properly tested.

2) The proposal below does not satisfy the Toxicity Characteristic test method as specified in 40 CFR 261 Subpart C (§ 261.24). The provision states "where the waste contains less than 0.5 percent filterable solids, the waste itself, after filtering using the methodology outlined in Method 1311, is considered to be extracted for the purpose of this section." This is regards to Section 2.1 of EPA Method 1311, that addresses liquid waste. "For liquid wastes (i.e., those containing less than 0.5 % solid material), the waste, after filtration through a 0.6 to 0.8 µm glass fiber filter, is defined as the TCLP extract." Therefore, the analytical results would not be considered 20 times higher than maximum concentration of contaminants for toxicity characteristic. The results should be compared directly to the "regulatory limits" identified in Table 1 of § 261.24.

If you have any questions regarding this mater, please contact me.

Brad

Brad A. Jones
Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us
Office: (505) 476-3487
Fax: (505) 476-3462

From: Marcelle Fiedler [mailto:Marcelle.Fiedler@nmgco.com]
Sent: Tuesday, October 27, 2009 10:13 AM
To: Jones, Brad A., EMNRD
Subject: RCRA hazardous waste test

Brad
I revised the list of tests we will do for the Belen interchange hydro test. Just thought I would run it by you before I submit my revised information.

marcelle

Disposal of Fluids & Solids

Hydrostatic test water

A representative sample of the hydrostatic test water will be taken after the 400 foot section is tested. Prior to disposal, the water will be analyzed for the following according to Test Methods for Evaluating a Solid Waste, EPA No. SW-846:

- Volatiles (EPA Method 8260)
- Semi volatiles (EPA Method 8270)
- Metals (RCRA 8 – EPA Method 6010/6020*)
- TPH (modified 8015)
- PCB (8082)
- Reactivity
- Corrosivity
- Ignitability

* If concentrations are 20 times higher than maximum concentration of contaminants for toxicity characteristic then TCLP methods will be utilized.

If the analytical results of the hydrostatic test water determine that the hydrostatic test water is a Non-Hazardous/Non-Exempt waste below the regulatory limits set forth in 40 CFR 261 Subpart C it will be sent to Key Energy Services Class 1 Injection Wells (Farmington, NM) for disposal. Key Energy is an OCD permitted facility.

Marcelle Fiedler
NMGC
7120 Wyoming, Blvd. NE, Suite 20
Albuquerque, NM 87109
Phone: 505-697-3516
Cell: 505-220-1056
Fax: 505-697-4481 or 4497

Mailing address:
PO Box 97500
Albuquerque, NM 87199-7500

marcelle.fiedler@nmgco.com

ACKNOWLEDGEMENT OF RECEIPT
OF CHECK/CASH

I hereby acknowledge receipt of check No. _____ dated 10/16/09

or cash received on _____ in the amount of $ 100 00

from New Mexico Gas Co.

for HITP-9

Submitted by: Lawrence Romero Date: 10/21/09

Submitted to ASD by: Lawrence Romero Date: 10/23/09

Received in ASD by: _____ Date: _____

Filing Fee _____ New Facility _____ Renewal _____

Modification _____ Other _____

Organization Code 521.07 Applicable FY 2004

To be deposited in the Water Quality Management Fund.

Full Payment _____ or Annual Increment _____

New Mexico
GAS COMPANY

If you have any questions about this payment please contact:

NEW MEXICO GAS COMPANY
P O Box 97500 MS AC3
Accounts Payable
Albuquerque, NM 87199-7500

BANK #	CHECK DATE	VENDOR NO.	CHECK NO.
523	Oct/16/2009	SINGLEPMNT	011706

INVOICE #	DATE	AMOUNT	DISC.	NET AMT	VOUCHER ID	REMARKS
WATERQUALITY1012(	Oct/12/2009	100.00	0.00	100.00	00029464	

Total Gross Amount	Total Discounts	Total Paid Amount
$100.00	$0.00	$100.00

New Mexico
GAS COMPANY

RECEIVED OCD
2009 OCT 19 A 11: 23

CERTIFIED MAIL -7008 1830 0002 7428 7573
RETURN RECEIPT REQUESTED

October 16, 2009

Brad Jones
State of New Mexico - Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: New Mexico Gas Company Notice of Intent to discharge hydrostatic test water from the North Belen Interchange lowering project

Dear Mr. Jones,

New Mexico Gas Company (NMGC) is submitting their Notice of Intent to hydrostatically test two sections of the Los Lunas Mainline in Valencia County, New Mexico. Following the Oil Conservation Division Guidelines for Hydrostatic Test Dewatering, NMGC has provided the following information.

Summary of Activities
NMGC will hydrostatically test two sections of existing pipe (600 feet and 400 feet) of the Los Lunas Mainline, a 12 inch gas transmission line. Approximately 4,000 gallons of water from the City of Belen, a municipal water source, will be used for the test and collected at the project location. The water will be sent to a nationally accredited testing laboratory (NELAC) and undergo hazardous waste analysis. NMGC plans to conduct the test in December 2009. The test water should be removed from the site within one week from the start of the hydrostatic test.

Name and Address of Discharger
NMGC
Marcelle Fiedler, BC22
P.O. Box 97500
Albuquerque, NM 87199

Location and Legal Description of Test and Discharge
The test water will be collected at the north end of the 600 foot section of the Los Lunas Mainline being tested, within the Nicolas Duran de Chavez Land Grant extrapolated Section 25, Township 6N, Range 1E. The project location can be located by driving south on I-25 from Albuquerque to exit 195, the first exit for Belen. The project is on the west side of the interstate and can be accessed from off the interstate. Enclosed are maps showing the location of the pipeline to be tested.

P.O. Box 97500 ◦ Albuquerque, NM 87199-7500 ◦ p: 888 NMGASCO ◦ www.nmgco.com

Once collected, the hydrostatic test water will be sent to a nationally accredited testing laboratory (NELAC) for a hazardous waste analysis.

Maps

The following maps are included with this Notice of Intent:

- Overview of project area (topo map)
- Discharge site (topo and aerial map)
- Wells
- Floodplain map
- Geology of area
- Soils
- Land Ownership map
- Total Dissolved Solids map

Demonstration of Compliance with Siting Criteria

See attached Maps and Certification of Compliance with Siting Criteria completed by the NMGC Project Manager for demonstration of compliance with Siting Criteria for the location where the water comes out of the pipe. The disposal location, Key Energy Services, is an OCD permitted facility.

Compliance with OCD's siting criteria are met because:

1. Hydrostatic test water collected in tanks will not be within 200 feet of any watercourse (see Discharge site map)
2. The nearest wells are more than 1,400 ft away from the discharge site and the discharge area is not within the 100 year floodplain (see Well Location and FEMA Flood plain maps)
3. There are no wetlands within 500 ft (see Certification of Compliance)
4. NMGC contacted the NM Bureau of Mines and Minerals about subsurface mines and email verification was submitted to NMGC that there are no mines in the area. (see attached email from Bureau of Mines)
5. There are no residences, schools, hospitals, or churches within 500 feet (see Discharge site map)

Description of Activities

NMGC anticipates starting construction in December 2009. Approximately 2 weeks after construction begins, the hydrostatic test will be done. The natural gas pipeline will be hydrostatically tested in two sections, 400 feet and 600 feet. The 400 foot section will be tested first using approximately 2,709 gallons of water from the City of Belen, a municipal source. The test water will be transferred to the 600 foot section for testing. The second section will require an additional 1,152 gallons of water. Once hydrostatic testing starts, the tests will last 3-4 days and then the water will be stored in a holding tank for an additional 4 to 5 days while the water analysis is completed. When the results of the water analysis are received, the water will be hauled to Key for disposal, approximately 1 week after hydrostatic testing starts. NMGC anticipates that the water will be off site by approximately the end of December or one week from when the hydrostatic testing begins.

Method & Location for Collection and Retention of Fluids & Solids

One 5,040 gallon tank will be used to contain the test water prior to transporting it to Key Energy Services Class 1 Injection Well. The test water will be transferred from the pipe into the tank by connecting a hose from the pipe directly to the tank. NMGC will use plastic liner or drip trays under hoses and valves to collect drips and leaks when transferring water. The holding tank will have secondary containment of hay bales and plastic. If water meets the OCD definition of Non-Hazardous/Non Exempt criteria, Key Energy Services, an OCD approved water hauler, will haul the water to their facility for disposal.

BMPs to Contain Discharge On Site & Control Erosion

Plastic liner and drip trays will be placed under hoses and valves to collect drips and leaks when transferring water. The holding tank will have 1 and 1/3 secondary containment made with a plastic liner and hay bales.

Request for Alternate Treatment/Disposal

If the hydrostatic test water does not meet conditions for discharge to Key Energy Services injection well disposal, test water will be sent to a RCRA permitted TSDF for disposal.

Hydrostatic Test Water Sampling Plan

A hydrostatic test water sample will be collected after the 400 foot section of pipe is tested. The test water will be analyzed per the test methods found in 40 CFR 261 Subpart C. NMGC will expedite the laboratory analyses to minimize the storage time of the test water in the storage tank.

Disposal of Fluids & Solids

Hydrostatic test water

A representative sample of the hydrostatic test water will be taken after the 400 foot section is tested. Prior to disposal, the water will be analyzed for the following according to Test Methods for Evaluating a Solid Waste, EPA No. SW-846:

- TPH (418.1)
- TCLP (RCRA 8 – EPA Method 1311)
- BTEX, MTB, TMB (8021B)
- PCB (8082)
- Reactivity
- Corrosivity
- Ignitability
- Chlorides

If the analytical results of the hydrostatic test water determine that the hydrostatic test water is a Non-Hazardous/Non-Exempt waste below the regulatory limits set forth in 40 CFR 261 Subpart C it will be sent to Key Energy Services Class 1 Injection Wells (Farmington, NM) for disposal. Key Energy is an OCD permitted facility.

Expected Quality & Volume of Discharge

The expected volume of the hydrostatic test discharge is approximately 3,861 gallons. NMGC plans to discharge the water at Key Energy Services Class 1 Injection Well. NMGC does not anticipate the water will contain any hazardous constituents above OCD regulatory limits.

Geological Characteristics of Subsurface at Discharge Site

According to the NM Bureau of Geology and Mineral resources geologic map, the project is within the Upper Santa Fe Group (middle Pleistocene to uppermost Miocene). Soils in the area are Bluepoint loamy fine sand, hummocky. The Bluepoint association is found in alluvial fans and terraces and is considered somewhat excessively drained. The parent material is mixed alluvium (NRCS soils data). The NM Bureau of Geology and Mineral geologic map may be found: http://geoinfo.nmt.edu/publications/maps/geologic/state/home.html - Open file geologic maps for the quadrangles were not available. Information about soils was obtained from the NRCS web soil survey website: http://websoilsurvey.nrcs.usda.gov/app/

Depth & TDS Concentration of Ground Water Most Likely to be Affected by Discharge

According to State Engineer well records, May 2008, the nearest well is 1,400 feet from the collection location. The Valencia County Comprehensive Land Use Plan, 2005, includes a map of Areas of Concern where water may be vulnerable to contamination. The map shows the project location within an area where ground water is less than 100 feet deep and Total Dissolved solids are less than 2000 mg/L. (see enclosed maps)

ID of Landowners at and Adjacent to Discharge Site and Collection/Retention Site

A map is provided showing the landownership of the underlying and adjacent property owners of the Los Lunas Mainline. The underlying and adjacent landowner is private. This project is being done at the request of the underlying landowner and they have been notified about the project and hydrostatic test.

Closing

In the event of a release associated with project activities, NMGC will comply with OCD's Release Notification and Corrective Action regulation NMAC 19.15.3.116 to remediate the spill as soon as possible.

Once OCD rules this application as administratively complete, and if required, NMGC will provide notice of the permit application in the Albuquerque Journal following requirements in NMAC 20.6.2.3108. In addition, a sign will be placed at the location of the discharge and at the Wal-Mart at the North Belen exit (exit 195) near the intersection of the I-25 bypass and highway 314, providing a synopsis of the public notice. A check for $100 is enclosed for the filing fee. Thank you for your assistance. If additional information is required please notify me in writing. Please call me at (505) 697-3516 if you have any questions.

Sincerely,

Marcelle Fiedler
Senior Environmental Scientist
Attachment: Location maps

Certification of Compliance with Siting Criteria

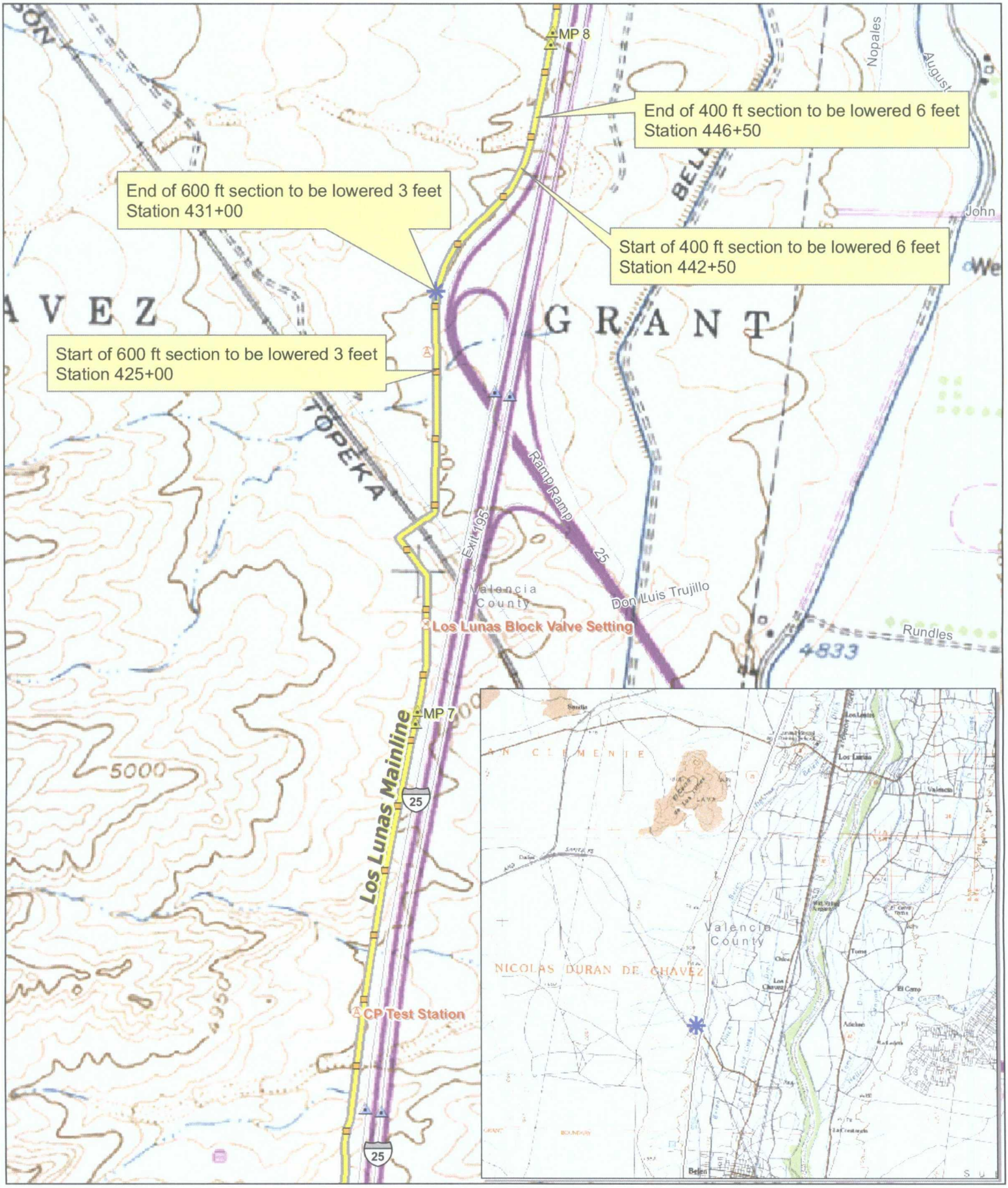
I, Tim Duncan, Engineer with NMGC visited the project site in the field on October 15, 2009 and verified that the location where NMGC will collect the hydrostatic test water from the pipe, meets the following siting criteria:

- No wells within 1,000 ft
- No watercourses within 200 ft
- No wetlands within 500ft
- No permanent residence, school, hospital, institution or church within 500 ft

My observations in the field match the enclosed map showing where NMGC plans to collect the water.

Signature	Engineer Title	10/15/09 Date

wellhead protection area includes springs



North Belen Interchange Lowerings
12" Los Lunas Mainline

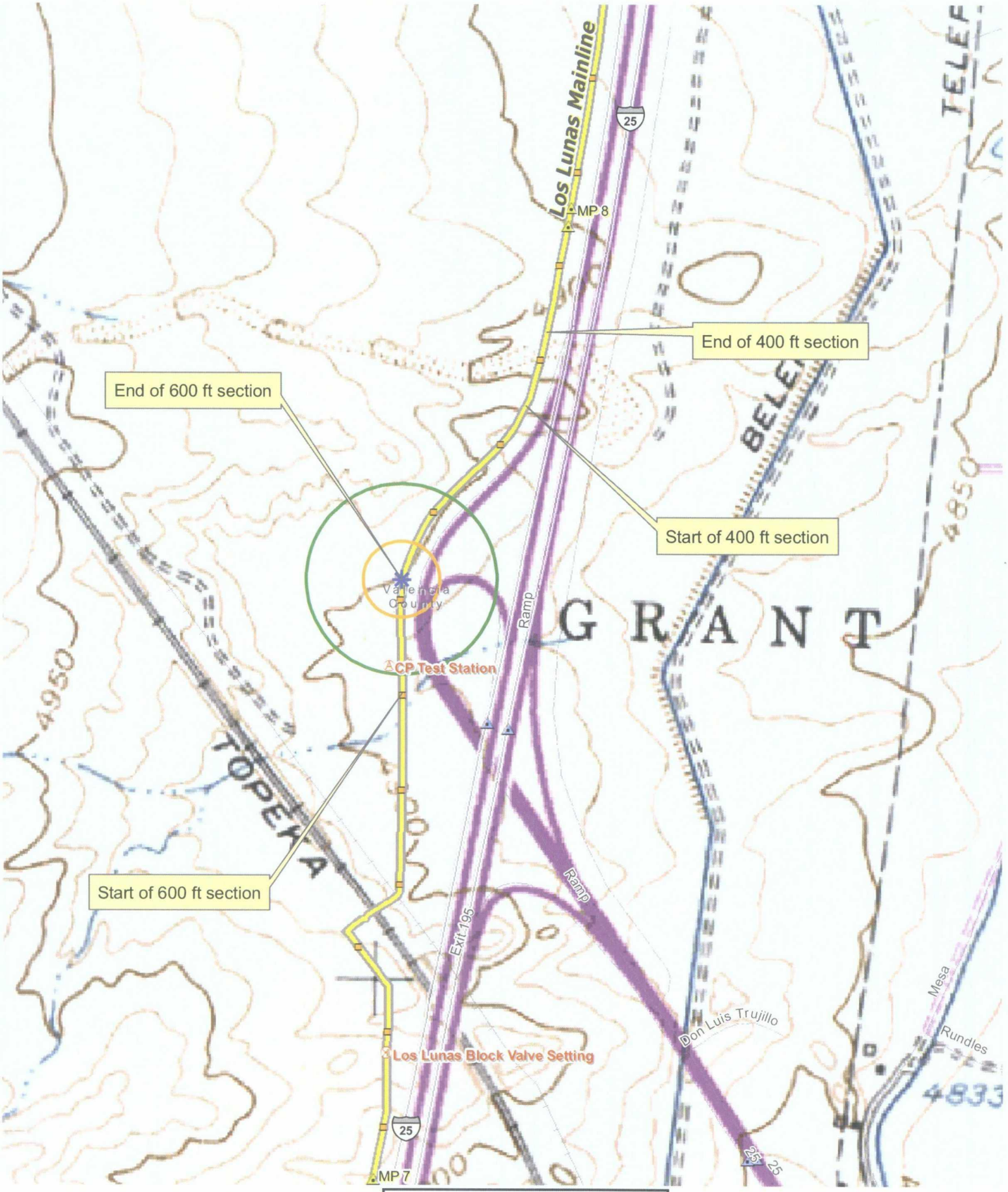
0.1 0 0.1 0.2

Miles

Overview Map

Legend

* Collection Location



North Belen Interchange Lowerings
12" Los Lunas Mainline

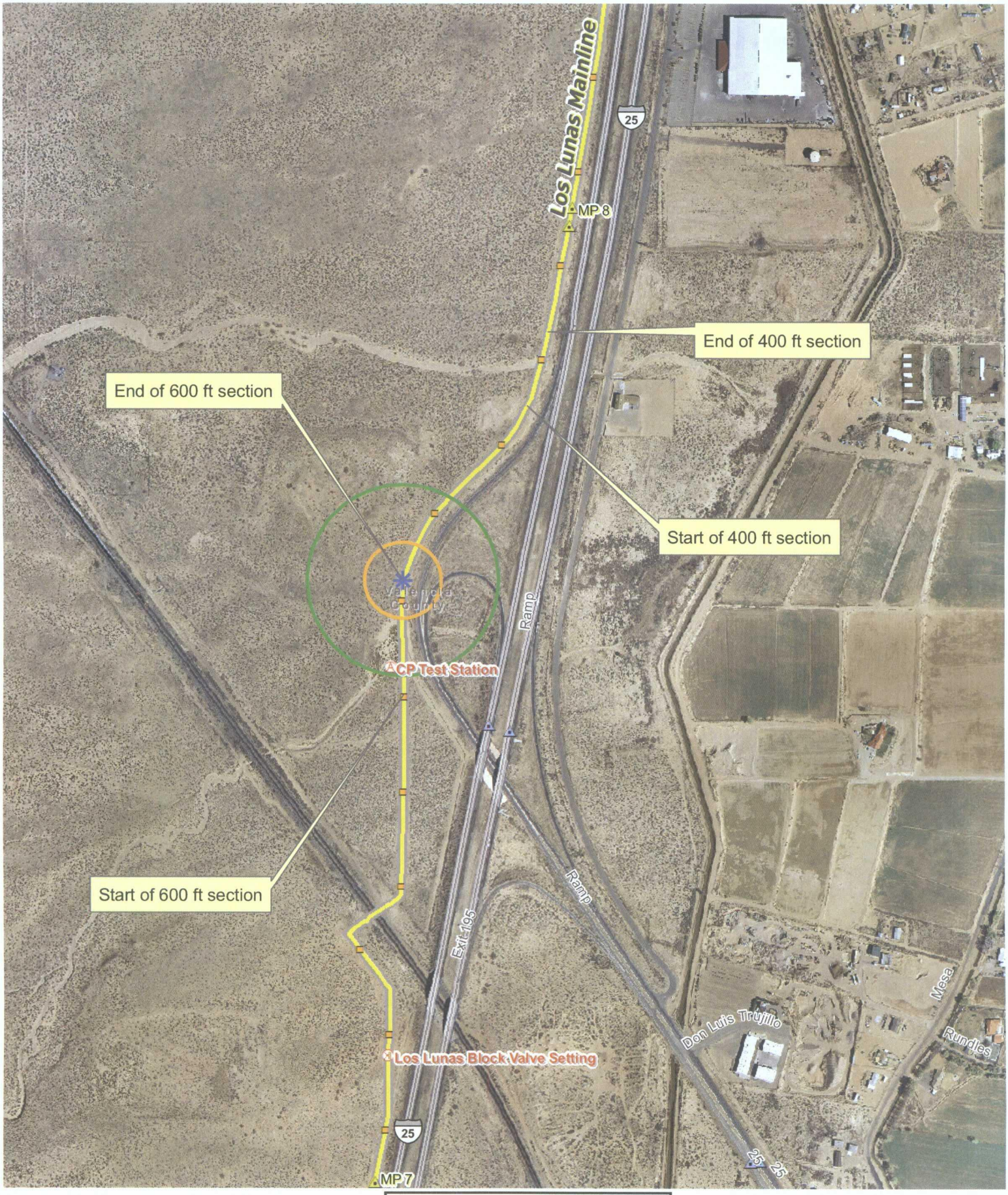
0.06 0 0.06 0.12

Miles

Legend

- Collection Location
- CollectionLocation_200ftBuffer
- CollectionLocation_500ftBuffer

Discharge Site Map



North Belen Interchange Lowerings
12" Los Lunas Mainline

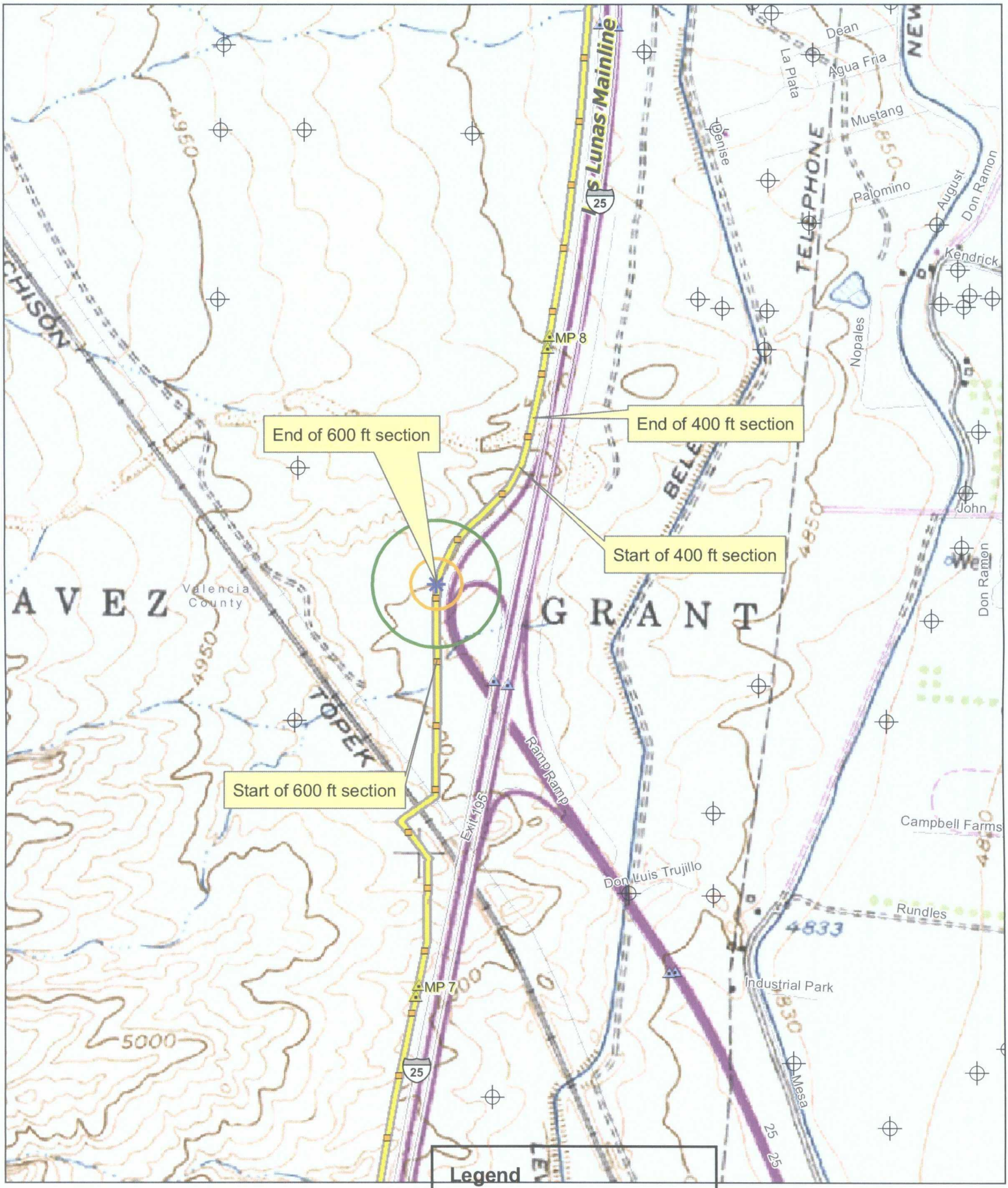
0.06 0 0.06 0.12

Miles

Legend

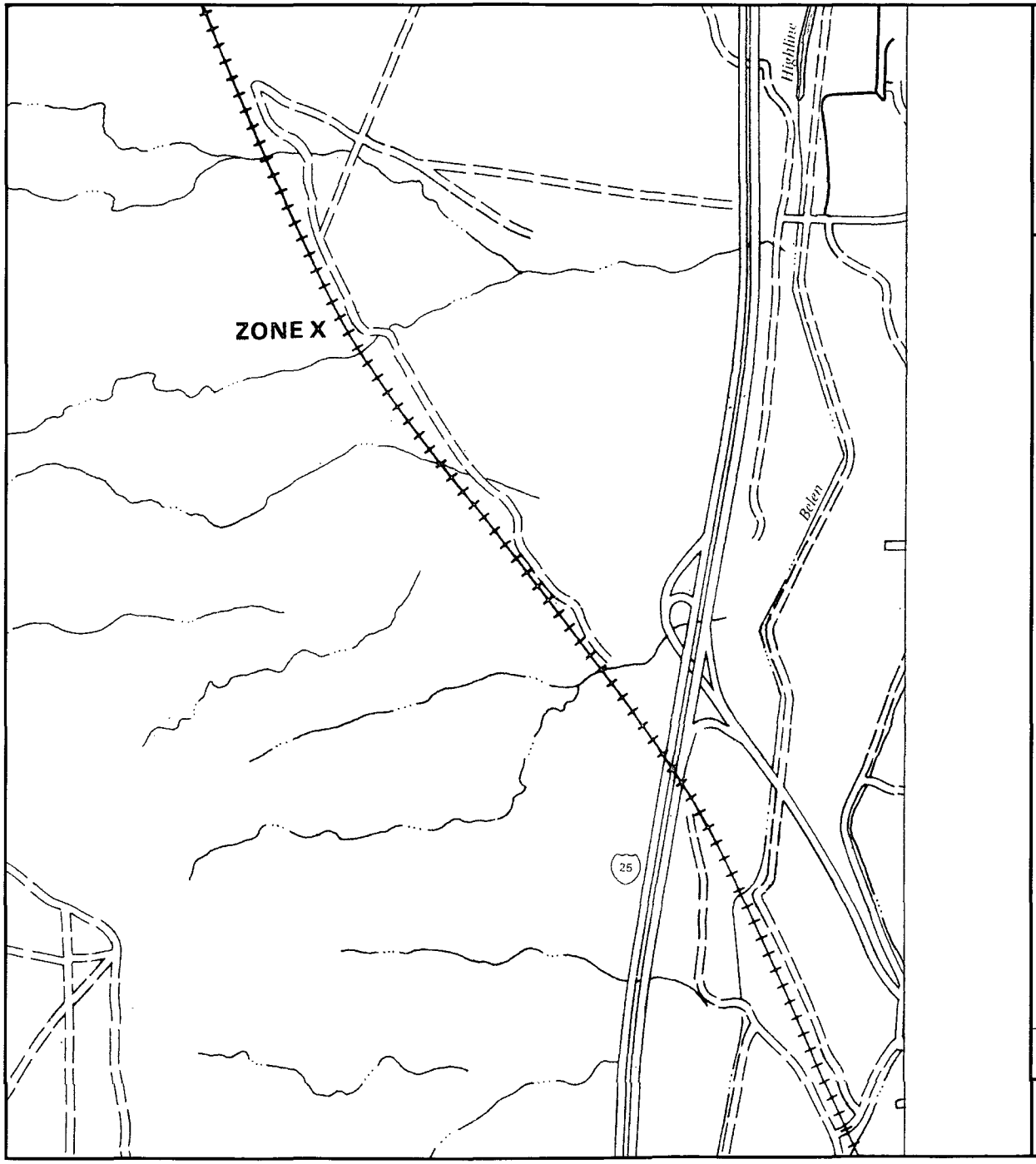
- Collection Location
- CollectionLocation_200ftBuffer
- CollectionLocation_500ftBuffer

Discharge Site Map



North Belen Interchange Lowerings
12" Los Lunas Mainline

Well Location Map



insurance agent or call the National Flood Insurance Prog

N

APPROXIMATE SCALE

2000 0

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

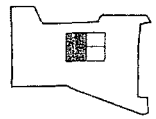
FLOOD INSURANCE RATE MAP

VALENCIA COUNTY, NEW MEXICO

UNINCORPORATED AREAS

PANEL 200 OF 375

(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

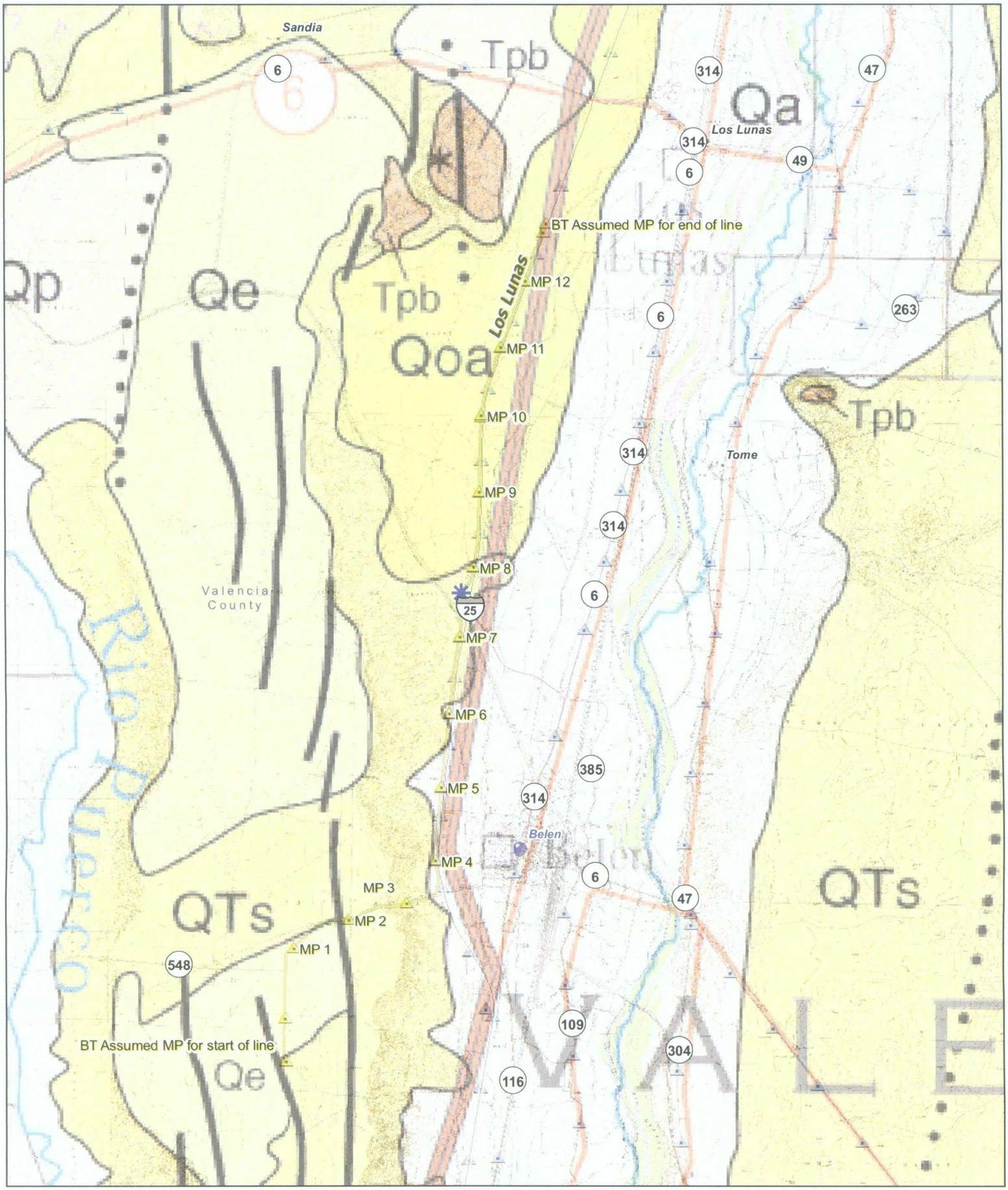
COMMUNITY-PANEL NUMBER

350086 0200 D

MAP REVISED:

FEBRUARY 9, 2000

Federal Emergency Management Agency



North Belen Interchange Lowerings
12" Los Lunas Mainline

0.8 0 0.8 1.6
Miles

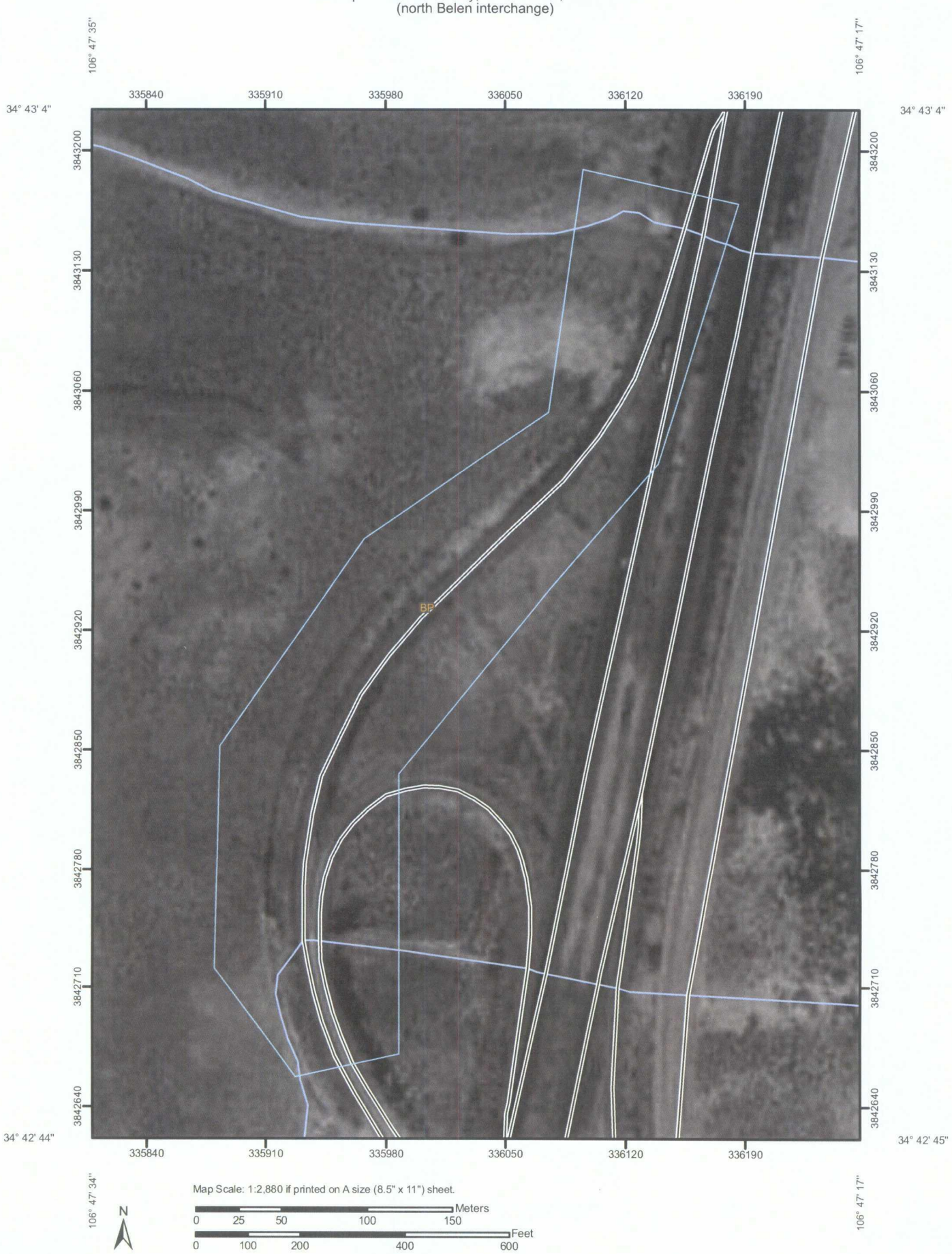
Legend

✱ Collection Location

Geology Map

QTs - Upper Santa Fe Group

Soil Map—Valencia County, New Mexico, Eastern Part
(north Belen interchange)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features
- Cities

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:2,880 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 13N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Valencia County, New Mexico, Eastern Part
Survey Area Data: Version 9, Feb 23, 2009

Date(s) aerial images were photographed: 10/6/1996

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Valencia County, New Mexico, Eastern Part (NM612)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
BP	Bluepoint loamy fine sand, hummocky	13.2	100.0%
Totals for Area of Interest		**13.2**	**100.0%**

Map Unit Description (Brief, Generated)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The Map Unit Description (Brief, Generated) report displays a generated description of the major soils that occur in a map unit. Descriptions of non-soil (miscellaneous areas) and minor map unit components are not included. This description is generated from the underlying soil attribute data.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief, Generated)

Valencia County, New Mexico, Eastern Part

Map Unit: BP—Bluepoint loamy fine sand, hummocky

Component: Bluepoint (90%)

The Bluepoint component makes up 90 percent of the map unit. Slopes are 1 to 9 percent. This component is on alluvial fans, alluvial plains. The parent material consists of mixed alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 0 percent. This component is in the R042XA054NM Deep Sand ecological site. Nonirrigated land capability classification is 7s. Irrigated land capability classification is 3s. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. The soil has a slightly sodic horizon within 30 inches of the soil surface.

Data Source Information

Soil Survey Area: Valencia County, New Mexico, Eastern Part
Survey Area Data: Version 9, Feb 23, 2009

Valencia County, New Mexico, Eastern Part

BP—Bluepoint loamy fine sand, hummocky

Map Unit Setting

Elevation: 4,900 to 6,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 57 to 60 degrees F
Frost-free period: 170 to 210 days

Map Unit Composition

Bluepoint and similar soils: 90 percent

Description of Bluepoint

Setting

Landform: Alluvial fans, stream terraces
Landform position (three-dimensional): Tread, rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed alluvium

Properties and qualities

Slope: 1 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Low (about 4.3 inches)

Interpretive groups

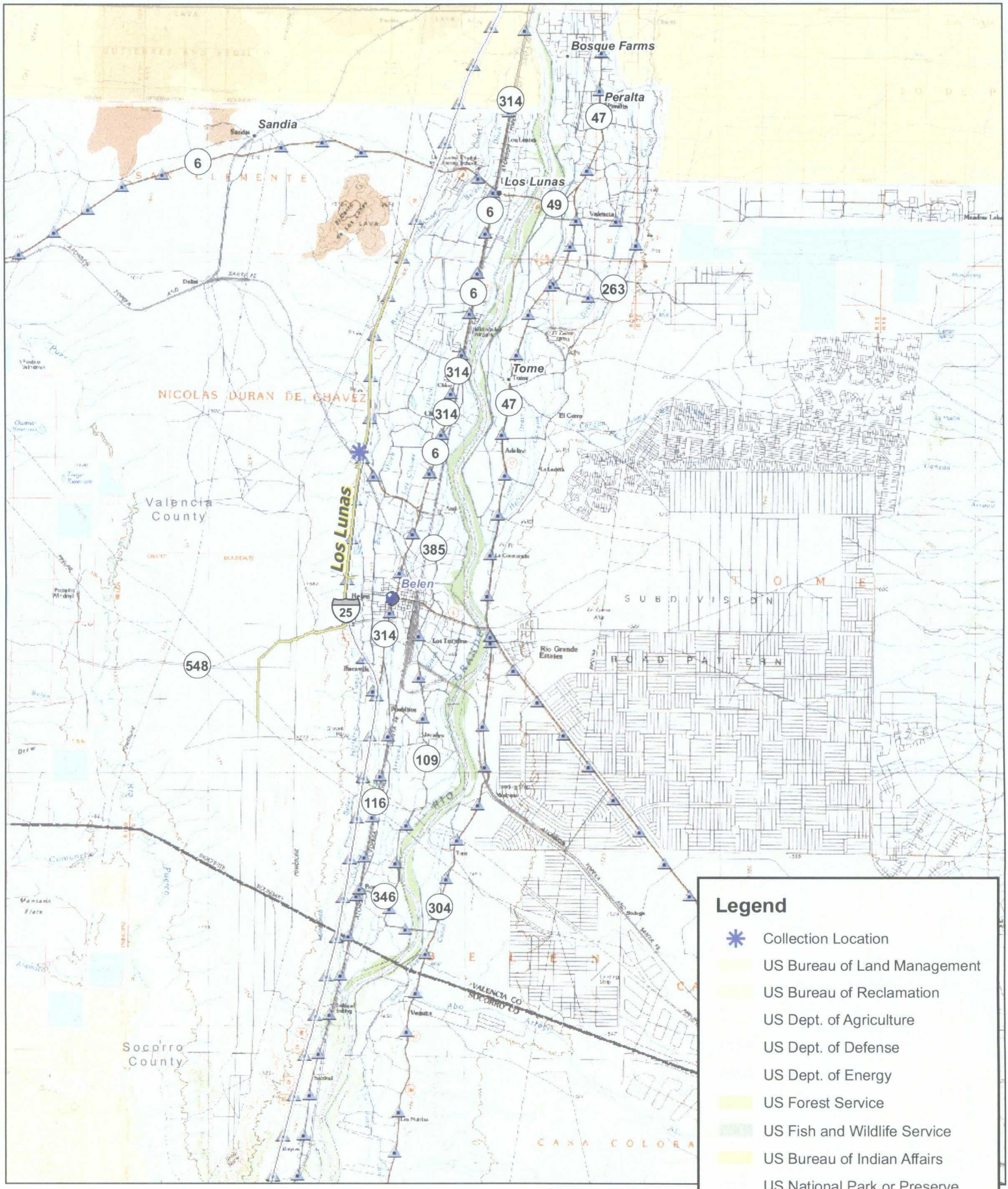
Land capability classification (irrigated): 3s
Land capability (nonirrigated): 7s
Ecological site: Deep Sand (R042XA054NM)

Typical profile

0 to 12 inches: Loamy fine sand
12 to 60 inches: Loamy sand

Data Source Information

Soil Survey Area: Valencia County, New Mexico, Eastern Part
Survey Area Data: Version 9, Feb 23, 2009



Legend

- Collection Location
- US Bureau of Land Management
- US Bureau of Reclamation
- US Dept. of Agriculture
- US Dept. of Defense
- US Dept. of Energy
- US Forest Service
- US Fish and Wildlife Service
- US Bureau of Indian Affairs
- US National Park or Preserve
- Private
- NM State
- NM State Game and Fish
- NM State Park

North Belen Interchange Lowerings
12" Los Lunas Mainline

Land Ownership Map

1 0 1 2

Miles

Valencia County

Comprehensive

Land Use Plan

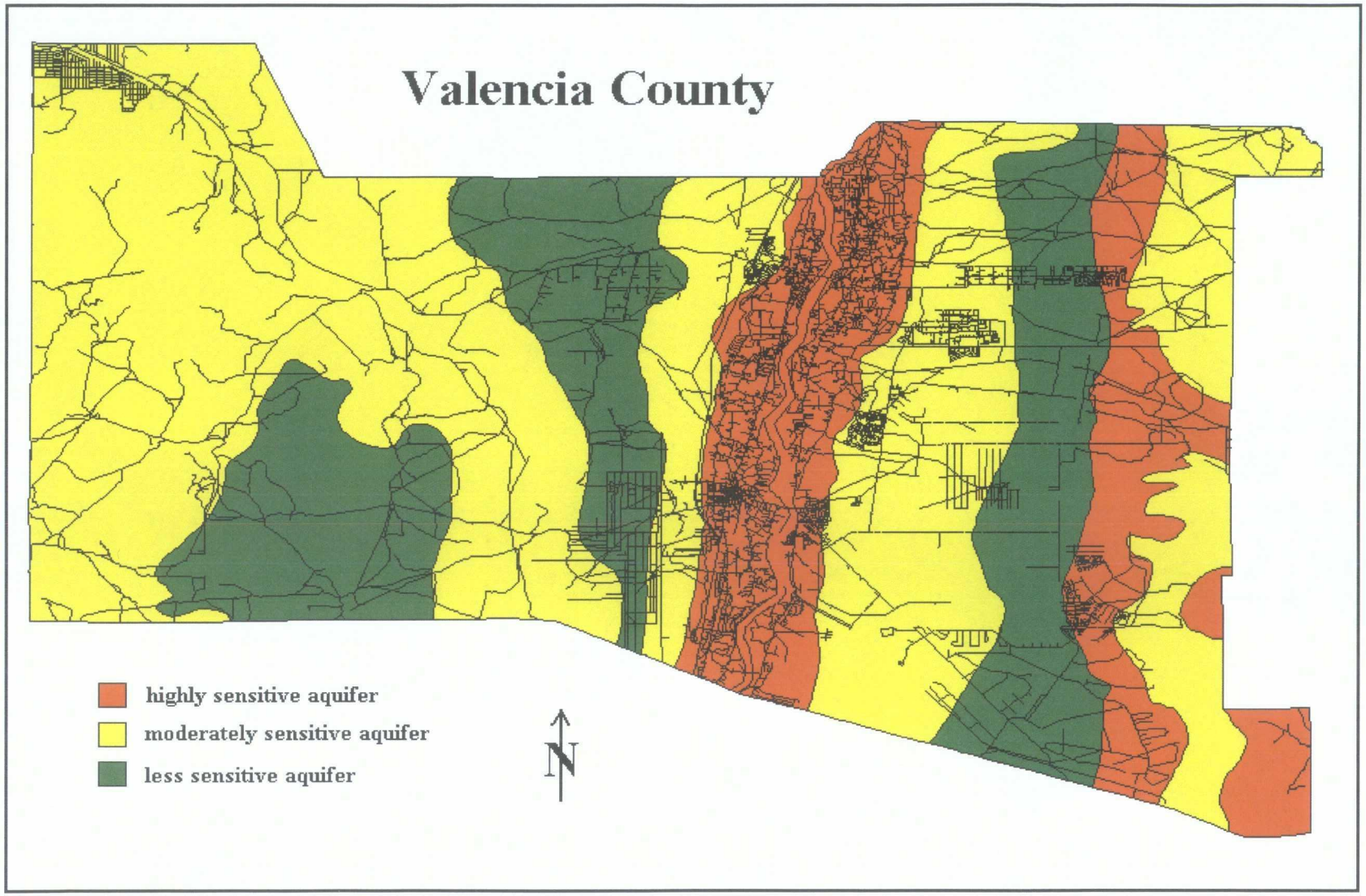
Adopted by the
County Commission
October 7, 2005

Valencia County residents rely on good quality ground water (underground water) as their primary source of drinking water. This source of water is found in aquifers which are water bearing layers of permeable rock, sand, or gravel beneath the surface of the land. Ground water becomes contaminated when contaminants move through soil and aquifers faster than natural processes can reduce them to acceptable levels (McQuillan, Parker, and Richards, 2000). The sources of ground water contamination are many, with the chief contributors being septic tanks, dairy and other animal wastes, commercial fertilizers, leaking underground storage tanks, and spills and leaks from above ground storage tanks, pipelines, and traffic accidents. The New Mexico Environment Department (NMED) has identified 65 past and current leaks from storage tanks in Valencia County that are either cleaned up or are currently being monitored or investigated. Storage tank leaks have been identified in Belen, Bosque Farms, Los Lunas, Jarales, and Peralta.

Septic tanks are especially problematic because in New Mexico they have contaminated more acre-feet of ground water and more public and private water supply wells than all other sources combined. An estimated 208,000 septic-tank systems and cesspools discharge about 78 million gallons of wastewater per day in New Mexico. Lot size is a critical factor in determining the amount of natural attenuation that occurs between the location where septic effluents are discharged, and the nearest down-gradient point of ground water withdrawal, and thus the potential for water well contamination. In New Mexico, residential developments with average lot sizes up to 0.84 acre (including roadways) have caused ground water contamination in excess of allowable standards (McQuillan, 2004).

The New Mexico Environment Department has recently tightened up regulations controlling septic tanks and other household sewage treatment and disposal systems. The new rules, approved April 6, 2005, apply a three-quarter acre minimum on undeveloped lots whose depth to ground water is less than 100 feet regardless of the plat date, and bring all undeveloped lots to current standards (Valencia County News Bulletin, 2005). Before the new standards were approved, regulations allowed septic tank installation on lots smaller than three-quarters of an acre if the lot was platted before February 1, 1990.

A map (Figure 20) showing Areas of Concern (AOCs) where waters of the State may be vulnerable to contamination from septic tank discharges has been compiled by the New Mexico Environment Department (NMED). This map shows areas in Valencia County with ground water less than 100 feet deep, and with 2000 mg/L or less Total Dissolved Solids (TDS). The County currently has no measures in the zoning or subdivision regulations that protect wellheads or recharge areas. The County should investigate adopting some regulations to protect the ground water.



July 2005

Figure 20
Liquid Waste Program
Aquifer Mapping - Areas of Concern

Mid-Region
Council of Governments
809 Copper Ave. NW
Albuquerque, NM 87102
505-247-1750

Source: NM Environment Department, Lee Wilson and Assoc., Aquifer Vulnerability Maps

Marcelle Fiedler

From: Moiola, Lloyd, EMNRD [lloyd.moiola@state.nm.us]
Sent: Friday, October 09, 2009 8:16 AM
To: Marcelle Fiedler
Subject: RE: Request for information about subsurface mines

Marcelle,

Your project area appears to be on unplatted grant lands, however based on Mining and Minerals Division Abandoned Mine Land Program records, we do not find any mines on that area of the Belen quadrangle. Please let me know if you need information about subsurface mines on future projects.

Thanks,

Lloyd Moiola

From: Marcelle Fiedler [mailto:Marcelle.Fiedler@nmgco.com]
Sent: Thursday, October 08, 2009 4:37 PM
To: Moiola, Lloyd, EMNRD
Cc: Mark Sikelianos
Subject: Request for information about subsurface mines

Lloyd
Last year you helped us confirm that there were no subsurface mines in an area where we did a hydrostatic test on our gas pipeline. I wonder if you can check for subsurface mines at a different location for another project. this is a requirement of the Oil conservation Division for our permit application.

This project location is in Section 25 T 6 N R1 E on the Belen USGS quad

if you need more information please let me know. 697-3516
Thanks so much!
Marcelle

Marcelle Fiedler
NMGC
7120 Wyoming, Blvd. NE, Suite 20
Albuquerque, NM 87109
Phone: 505-697-3516
cell: 505-220-1056
Fax: 505-697-4481 or 4497

Mailing address:
PO Box 97500
Albuquerque, NM 87199-7500

marcelle.fiedler@nmgco.com