District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-144
July 21, 2008

For temporary pits, closed-loop systems, and below-grade tanks, submit to the appropriate NMOCD District Office.
For permanent pits and exceptions submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

4918

Pit, Closed-Loop System, Below-Grade Tank, or Proposed Alternative Method Permit or Closure Plan Application

Type of action: ☒ Permit of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Closure of a pit, closed-loop system, below-grade tank, or proposed alternative method
☐ Modification to an existing permit
☐ Closure plan only submitted for an existing permitted or non-permitted pit, closed-loop system, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, closed-loop system, below-grade tank or alternative request

Please be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.
Operator: DJ Simmons, Inc OGRID# 005578
Address: 1009 Ridgeway Place Farmington, NM 87410
Facility or well name: Blanco Wash 27-3
API Number: 3004535011 OCD Permit Number:
U/L or Qtr/Qtr B Section 27 Township 24N Range 8W County: San Juan
Center of Proposed Design: Latitude 36.28898088 Longitude -107.6659269 NAD: ☐ 1927 ☒ 1983
Surface Owner: ☐ Federal ☐ State ☐ Private ☒ Tribal Trust or Indian Allotment

2.
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☒ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☒ Lined ☐ Unlined Liner type: Thickness 20 mil ☐ LLDPE ☐ HDPE ☒ PVC ☐ Other
☐ String-Reinforced
Liner Seams: ☒ Welded ☐ Factory ☐ Other Volume: 6234 bbl Dimensions in Feet: L100 x W 40 x D 10

3.
☐ **Closed-loop System:** Subsection H of 19.15.17.11 NMAC
Type of Operation: ☐ P&A ☐ Drilling a new well ☐ Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)
☐ Drying Pad ☐ Above Ground Steel Tanks ☐ Haul-off Bins ☐ Other
☐ Lined ☐ Unlined Liner type: Thickness mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other
Liner Seams: ☐ Welded ☐ Factory ☐ Other

RECEIVED
JAN 2010
OIL CONS. DIV.

4.
☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: bbl Type of fluid:
Tank Construction material:
☐ Secondary containment with leak detection ☐ Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other
Liner type: Thickness mil ☐ HDPE ☐ PVC ☐ Other

5.

☐ **Alternative Method:**

Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

6.

Fencing: Subsection D of 19.15.17.11 NMAC *(Applies to permanent pits, temporary pits, and below-grade tanks)*

☐ Chain link, six feet in height, two strands of barbed wire at top *(Required if located within 1000 feet of a permanent residence, school, hospital, institution or church)*

☒ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☐ Alternate. Please specify_____

7.

Netting: Subsection E of 19.15.17.11 NMAC *(Applies to permanent pits and permanent open top tanks)*

☐ Screen ☐ Netting ☐ Other_____

☐ Monthly inspections (If netting or screening is not physically feasible)

8.

Signs: Subsection C of 19.15.17.11 NMAC

☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☒ Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17 NMAC for guidance.

Please check a box if one or more of the following is requested, if not leave blank:

☐ Administrative approval(s): Requests must be submitted to the appropriate division district or the Santa Fe Environmental Bureau office for consideration of approval.

☐ Exception(s): Requests must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

Instructions: The applicant must demonstrate compliance for each siting criteria below in the application. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Applicant must attach justification for request. Please refer to 19.15.17.10 NMAC for guidance. **Siting criteria does not apply to drying pads or above-grade tanks associated with a closed-loop system.**

Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☒ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to temporary, emergency, or cavitation pits and below-grade tanks)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No ☐ NA
Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. *(Applies to permanent pits)* - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☐ No ☒ NA
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☒ No
Within 500 feet of a wetland.	☐ Yes ☒ No

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☒ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☒ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☒ No

11.
Temporary Pits, Emergency Pits, and Below-grade Tanks Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☒ Hydrogeologic Report (Below-grade Tanks) - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC
☒ Hydrogeologic Data (Temporary and Emergency Pits) - based upon the requirements of Paragraph (2) of Subsection B of 19.15.17.9 NMAC
☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☒ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☒ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☒ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____ or Permit Number: _____

12.
Closed-loop Systems Permit Application Attachment Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Geologic and Hydrogeologic Data (only for on-site closure) - based upon the requirements of Paragraph (3) of Subsection B of 19.15.17.9
☐ Siting Criteria Compliance Demonstrations (only for on-site closure) - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ Closure Plan (Please complete Boxes 14 through 18, if applicable) - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

☐ Previously Approved Design (attach copy of design) API Number: _____

☐ Previously Approved Operating and Maintenance Plan API Number: _____ *(Applies only to closed-loop system that use above ground steel tanks or haul-off bins and propose to implement waste removal for closure)*

13.
Permanent Pits Permit Application Checklist: Subsection B of 19.15.17.9 NMAC
Instructions: Each of the following items must be attached to the application. Please indicate, by a check mark in the box, that the documents are attached.

☐ Hydrogeologic Report - based upon the requirements of Paragraph (1) of Subsection B of 19.15.17.9 NMAC
☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
☐ Climatological Factors Assessment
☐ Certified Engineering Design Plans - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Dike Protection and Structural Integrity Design - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Leak Detection Design - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Liner Specifications and Compatibility Assessment - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Quality Control/Quality Assurance Construction and Installation Plan
☐ Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC
☐ Freeboard and Overtopping Prevention Plan - based upon the appropriate requirements of 19.15.17.11 NMAC
☐ Nuisance or Hazardous Odors, including H_2S, Prevention Plan
☐ Emergency Response Plan
☐ Oil Field Waste Stream Characterization
☐ Monitoring and Inspection Plan
☐ Erosion Control Plan
☐ Closure Plan - based upon the appropriate requirements of Subsection C of 19.15.17.9 NMAC and 19.15.17.13 NMAC

14.
Proposed Closure: 19.15.17.13 NMAC
Instructions: Please complete the applicable boxes, Boxes 14 through 18, in regards to the proposed closure plan.

Type: ☐ Drilling ☐ Workover ☐ Emergency ☐ Cavitation ☐ P&A ☐ Permanent Pit ☒ Below-grade Tank ☐ Closed-loop System ☐ Alternative

Proposed Closure Method: ☐ Waste Excavation and Removal
☐ Waste Removal (Closed-loop systems only)
☒ On-site Closure Method (Only for temporary pits and closed-loop systems)
☒ In-place Burial ☐ On-site Trench Burial
☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

15.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***
☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

16.
Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only: (19.15.17.13.D NMAC)
Instructions: Please indentify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: **Basin Disposal** Disposal Facility Permit Number: **NM-01-005**

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?
☐ Yes (If yes, please provide the information below) ☐ No

Required for impacted areas which will not be used for future service and operations:
☒ Soil Backfill and Cover Design Specifications - - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.
Siting Criteria (regarding on-site closure methods only): 19.15.17.10 NMAC
Instructions: Each siting criteria requires a demonstration of compliance in the closure plan. Recommendations of acceptable source material are provided below. Requests regarding changes to certain siting criteria may require administrative approval from the appropriate district office or may be considered an exception which must be submitted to the Santa Fe Environmental Bureau office for consideration of approval. Justifications and/or demonstrations of equivalency are required. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 50 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is between 50 and 100 feet below the bottom of the buried waste - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes ☒ No ☐ NA
Ground water is more than 100 feet below the bottom of the buried waste. - NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☒ Yes ☐ No ☐ NA
Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☒ Yes ☐ No
Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application. - Visual inspection (certification) of the proposed site; Aerial photo; Satellite image	☐ Yes ☒ No
Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application. - NM Office of the State Engineer - iWATERS database; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance	☐ Yes ☒ No

adopted pursuant to NMSA 1978, Section 3-27-3, as amended. - Written confirmation or verification from the municipality; Written approval obtained from the municipality	
Within 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☒ No
Within the area overlying a subsurface mine. - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☒ No
Within an unstable area. - Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map	☐ Yes ☒ No
Within a 100-year floodplain. - FEMA map	☐ Yes ☒ No

18.
On-Site Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☒ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC
- ☒ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC
- ☒ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC
- ☒ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☒ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☒ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☒ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)
- ☒ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☒ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☒ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.
Operator Application Certification:

I hereby certify that the information submitted with this application is true, accurate and complete to the best of my knowledge and belief.

Name (Print): Steve Sacks Title: Regulatory Officer

Signature: Steve Sacks Date: 1/27/2010

e-mail address: ssacks@djsimmons.com Telephone: 505-326-3753 Ext 127

20.
OCD Approval: ☒ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: [signature] **Approval Date:** 3/15/10

Title: Enviro Spec **OCD Permit Number:**

21.
Closure Report (required within 60 days of closure completion): Subsection K of 19.15.17.13 NMAC

Instructions: Operators are required to obtain an approved closure plan prior to implementing any closure activities and submitting the closure report. The closure report is required to be submitted to the division within 60 days of the completion of the closure activities. Please do not complete this section of the form until an approved closure plan has been obtained and the closure activities have been completed.

☐ **Closure Completion Date:**

22.
Closure Method:

☒ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)
☐ If different from approved plan, please explain.

23.
Closure Report Regarding Waste Removal Closure For Closed-loop Systems That Utilize Above Ground Steel Tanks or Haul-off Bins Only:

Instructions: Please indentify the facility or facilities for where the liquids, drilling fluids and drill cuttings were disposed. Use attachment if more than two facilities were utilized.

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Disposal Facility Name: _____ Disposal Facility Permit Number: _____

Were the closed-loop system operations and associated activities performed on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please demonstrate compliance to the items below) ☐ No

Required for impacted areas which will not be used for future service and operations:

☐ Site Reclamation (Photo Documentation)
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique

24.

Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

☐ Proof of Closure Notice (surface owner and division)
☐ Proof of Deed Notice (required for on-site closure)
☐ Plot Plan (for on-site closures and temporary pits)
☐ Confirmation Sampling Analytical Results (if applicable)
☐ Waste Material Sampling Analytical Results (required for on-site closure)
☐ Disposal Facility Name and Permit Number
☐ Soil Backfilling and Cover Installation
☐ Re-vegetation Application Rates and Seeding Technique
☐ Site Reclamation (Photo Documentation)

On-site Closure Location: Latitude _____ Longitude _____ NAD: ☐1927 ☐ 1983

25.

Operator Closure Certification:

I hereby certify that the information and attachments submitted with this closure report is true, accurate and complete to the best of my knowledge and belief. I also certify that the closure complies with all applicable closure requirements and conditions specified in the approved closure plan.

Name (Print): _____ Title: _____

Signature: _____ Date: _____

e-mail address: _____ Telephone: _____

Hydrogeologic Report
DJ Simmons, Inc
Blanco Wash No. 27-3
T24N, R8W, Sec. 27

Regional Hydrological Context

Referenced Well Location:
The referenced Blanco Wash No. 27-3 proposed oil well and pit are located on Navajo Nation allotted lands in San Juan County, New Mexico. The site is positioned in the northeastern portion of the San Juan Basin. The San Juan Basin is an asymmetrical syncline that extends from northwestern New Mexico into southwestern Colorado (Carson National Forest DEIS, 2007). Elevation of the referenced location is approximately 6,797 feet mean standard sea level (MSL).

General Regional Groundwater Description:
The San Juan Basin is partially underlain by sandstone aquifers of the Colorado Plateau. The primary aquifer at this location is the Unita-Animas aquifer, composed primarily of Lower Tertiary rocks. The aquifer consists of the San Jose Formation; the underlying Animas formation and its lateral equivalent the Nacimiento formation; and the Ojo Alamo Sandstone formation. The thickness of the Unita-Animas aquifer generally increases toward the central part of the basin. In the northeastern part of the San Juan Basin, the maximum thickness of the aquifer is approximately 3,500 feet (USGS, 2001). This aquifer contains fresh to moderately saline water.

Groundwater in the region generally flows toward the San Juan River and it tributaries, where it either becomes alluvial groundwater or is discharged to stream flow. Additional information regarding the hydrogeologic setting can be found in the provided references.

Surface Geology and Soil Description:
The project area is located within the San Juan Basin, which is a Late Cretaceous-Early Tertiary depression adjacent to the eastern edge of the Colorado Plateau. Surface geology in the proposed project area is associated with sand-loam residuum and sand rock formations overlying the Nacimiento Formation.

One major soil unit occurs in the proposed project area. The Gypsiorthids-Badland-Stumble complex is found on hills, knolls, breaks and valleys and makes up the majority of the soils found in the project area. Included in this unit are approximately 15% Farb and Persayo soils on hills and breaks. The complex is composed of 35% Gypsiorthids on 5-30% slopes, 35% Badland on 5-30% slopes, and 15% Stumble loamy sand on 5-8% slopes. Gypsiorthids are very shallow to deep and well drained to excessively drained soils that formed dominantly from gypsum. Permeability tends to be slow to rapid with available water capacity very low to high. Runoff is slow to medium and the hazard for water erosion is slight to moderate. The hazard of wind erosion is severe. Badland soil is characterized by non-stony barren shale. This soil forms on uplands that are highly dissected with intermittent drainage ways. Stumble soil is deep and well somewhat excessively drained. The soil formed in alluvium derived from sandstone and shale.

Permeability is rapid with available water capacity very low. Runoff is very slow and the hazard for water erosion is slight. The hazard of wind erosion is very severe. The Gypsiorthids-Badland-Stumble complex is not suited to range seeding or brush management practices because of low precipitation and the hazard of soil blowing.

Siting Criteria Compliance Demonstrations:

The Blanco Wash No. 27-3 is not located in or proximate to any unstable areas. The location is not situated over a mine, karsts or a steep slope. The pit would not be located within 300 feet of a continuously flowing water course or intermittent stream. The location would be located within 200 feet an unnamed ephemeral drainage. The project would not be located within 200 of a, lakebed, sinkhole, or playa lake (see Siting Compliance Map II). The site is not within 500 feet of any observed or reported riparian areas or wetlands (see attached USFWS Wetland Map); within 500 feet of any private, domestic fresh water well or spring; or within 1000 feet of any other fresh water well or spring (see Siting Compliance Map I). The pit will not be within any incorporated municipal boundaries or defined municipal freshwater well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended. The location of the proposed pit is not within 300 feet of any permanent residence, school, hospital, institution, or church.

FEMA Map – 100-Year Floodplain:

The site is located within a FEMA class B area. FEMA describes designated class B areas as areas with low to moderate flood potential, usually located within areas that have flood events between 100-year to 500-year. Zones are also used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood events, or shallow flooding areas with average depths of less than one foot or drainage areas less than 1 square mile. The site is not located within an area with likely flood potential (FEMA website 2009). The site elevation is above the unnamed drainages proximate to the project area, please refer to the FEMA map attachment D, and Attachment F site photographs.

Site Specific Information:

Surface Hydrology:	The pit is located on relatively even upland plain. The well pad and pit area are bounded by one designated unnamed ephemeral drainage associated with the greater Blanco wash watershed. The drainage is approximately 150 feet east of the Blanco Wash No. 27-3 pit area.
1st Water Bearing Formation:	San Jose, Tertiary
Formation Thickness:	Approximately 1,900- feet.
Underlying Formation:	Nacimiento, Tertiary
Depth to Groundwater:	Depth to groundwater is estimated at greater than 100 feet below ground surface (bgs). No Office of the State Engineer (OSE) wells are located within a one -mile radius of the location. The closest recorded OSE well (No. SJ

00960S), is an irrigation well located 2.0 miles southeast from the proposed pit in T24N, R8W, Sec. 36, no depth to ground water data is available for this well. The closest domestic water well (No. 01335) with similar elevation and topographic features is located 2.9 miles to the southeast in Rio Arriba County, T24N, R7W, Sec. 31, with a recorded well depth of 185 feet bgs and no recorded depth to ground water. Well SJ 01131 located over 2 miles from the proposed pit has a depth to groundwater (DTW) of 400 feet. The New Mexico Institute of Mining and Technology Petroleum Recovery Research Center was accessed and the Mapping Portal and regional drilling well logs inspected for ground water data information. No information was available or indicated that the temporary pit location would impact ground water resources..

Attachment A Project Vicinity Map
Attachment B Mines, Mills, and Quarries Vicinity Map
Attachment C Hydrogeologic Aquifer Map
Attachment D New Mexico Water Resource Reporting Survey Reports
Attachment E Siting Criteria and Wetlands Map
Attachment F FEMA 100 Year Floodplain Map
Attachment G Surface Geology Map
Attachment H Site Photographs
Attachment I Pit Design Plat
Attachment J Design, Construction, Operation and Closure Plan
Attachment K Landowner's Consent For Temporary Pit On-site Burial

References:

Allen, Erin. Undated. Colorado Plateau Aquifers. http://academic.emporia.edu/schulmem/hydro/TERM%20PROJECTS/2007/Allen/Aquifer.html.

Federal Emergency Management Agency. Map Service Center. accessed December 2009.

http://msc.fema.gov/webapp/wcs/stores/servlet/info?storeId=10001&catalogId=10001&langId=-1&content=floodZones&title=FEMA%20Flood%20Zone%20Designations

New Mexico Energy, Minerals and Natural Resources Department, Division of Mining and Minerals. Database. 2008. Internet accessed December 2009.

New Mexico Office of the State Engineer. August 2008. New Mexico Water Rights Reporting System. Internet accessed December 2009. http://www.ose.state.nm.us/waters_db_index.html

New Mexico Institute of Mining an Technology, Petroleum Recovery Research Center. Pit Rule Mapping Portal. Accessed December 2009. http://pitrule.source3.com/

New Mexico WQCC. 2005. State of New Mexico Water Quality Act and the Water Control Commission Regulations.

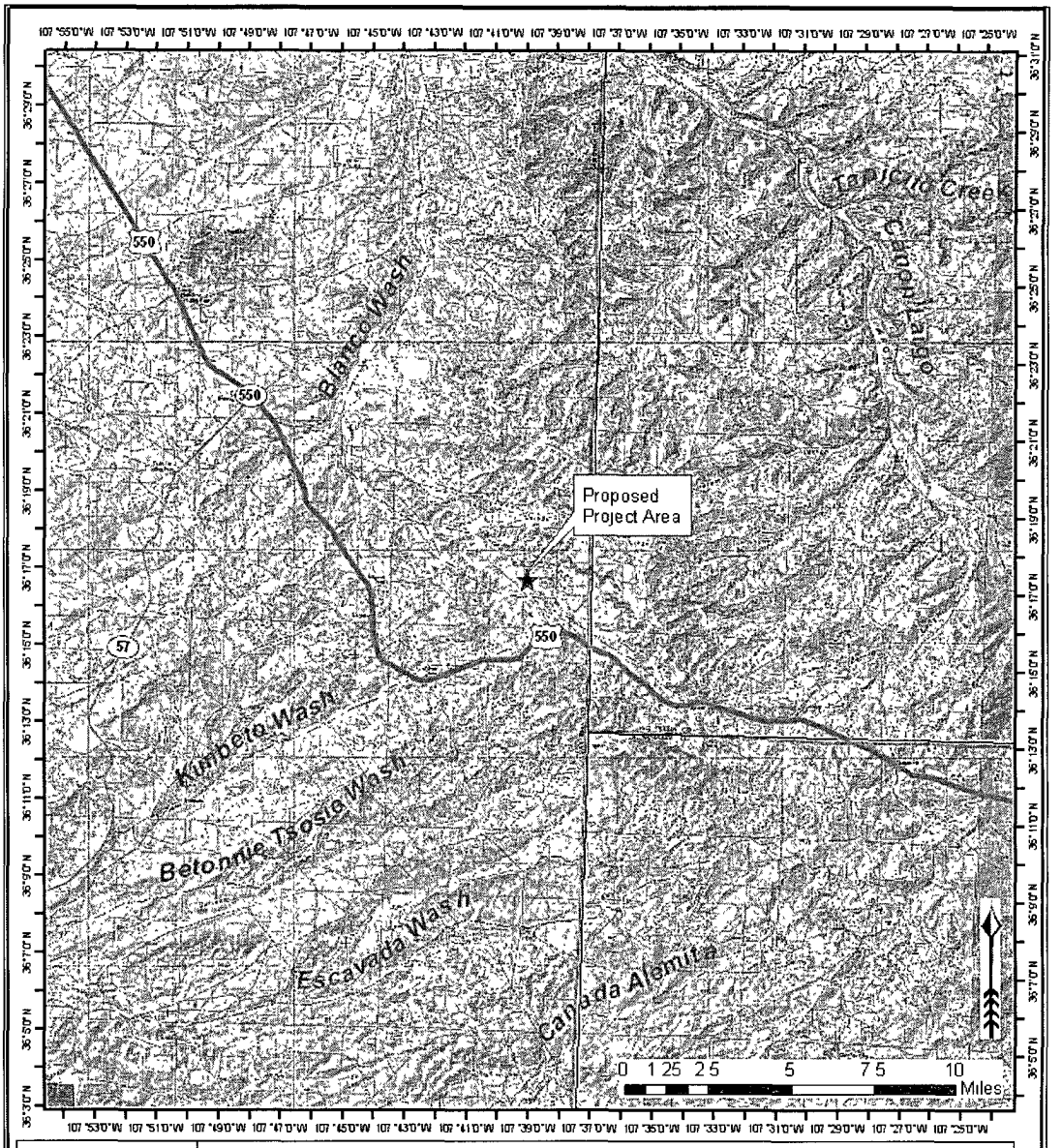
United States Department of Agriculture, Forest Service. 2007. Draft Environmental Impact District, Carson National Forest, Rio Arriba County, New Mexico.

United States Department of the Interior. Bureau of Land Management. 2003. Final Farmington Resource Management Plan and Final Environmental Impact Statement. Farmington Field Office, Farmington, New Mexico.

United States Geological Survey. 2001. Groundwater Atlas of the United States: Arizona, Colorado, New Mexico and Utah. USGS Publication HA 730-C; http://capp.water.usgs.gov.

APPENDIX A

PROJECT VICINITY MAP



ECOSPHERE ENVIRONMENTAL SERVICES	**DJ SIMMONS, INC.** **Blanco Wash 27-3**	
	TOWNSHIP 24N, RANGE 08W, SECTION 27	VICINITY MAP
	NAVAJO RESERVOIR AND FARMINGTON 100K TOPO	**FIGURE 1**
	SAN JUAN COUNTY, NEW MEXICO — 1:250,000	11/18/2008

APPENDIX B

Mines, Mills and Quarries Web Vicinity Map

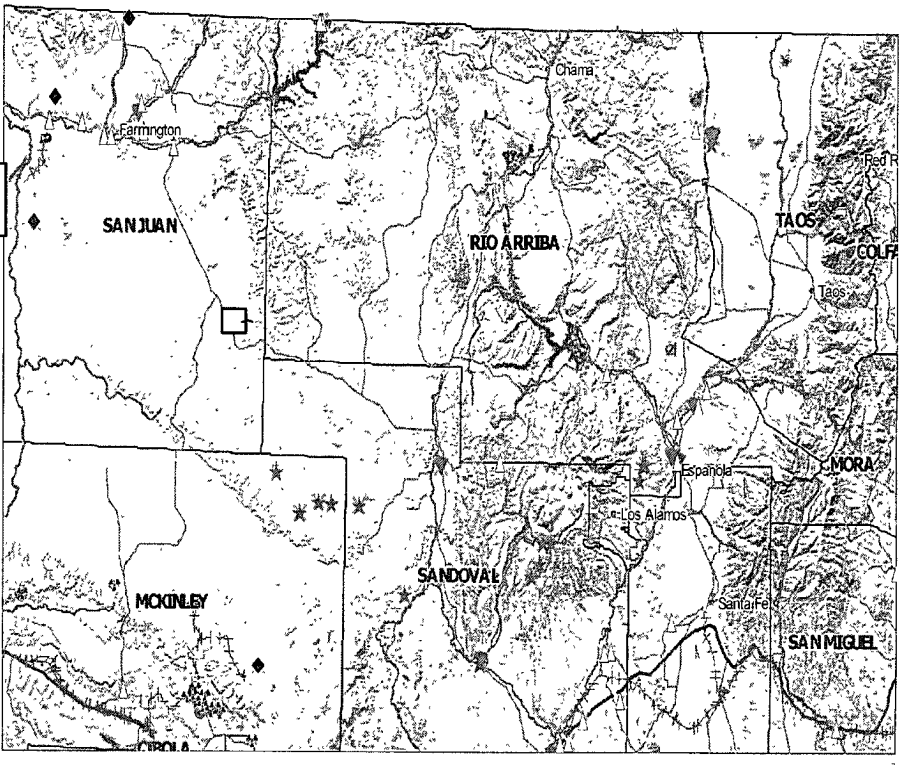
Blanco Wash No. 27-3

O Blanco Wash No. 27-3

Mines, Mills & Quarries Commodity Groups

- Aggregate & Stone Mines
- Coal Mines
- Industrial Minerals Mines
- Industrial Minerals Mills
- Metal Mines and Mill Concentrate
- Potash Mines & Refineries
- Smelters & Refinery Ops.
- Uranium Mines
- Uranium Mills

Population



SCALE 1 : 2,203,053

20 0 20 40 60

MILES

N

APPENDIX C

HYDROGEOLOGIC AQUIFER MAP

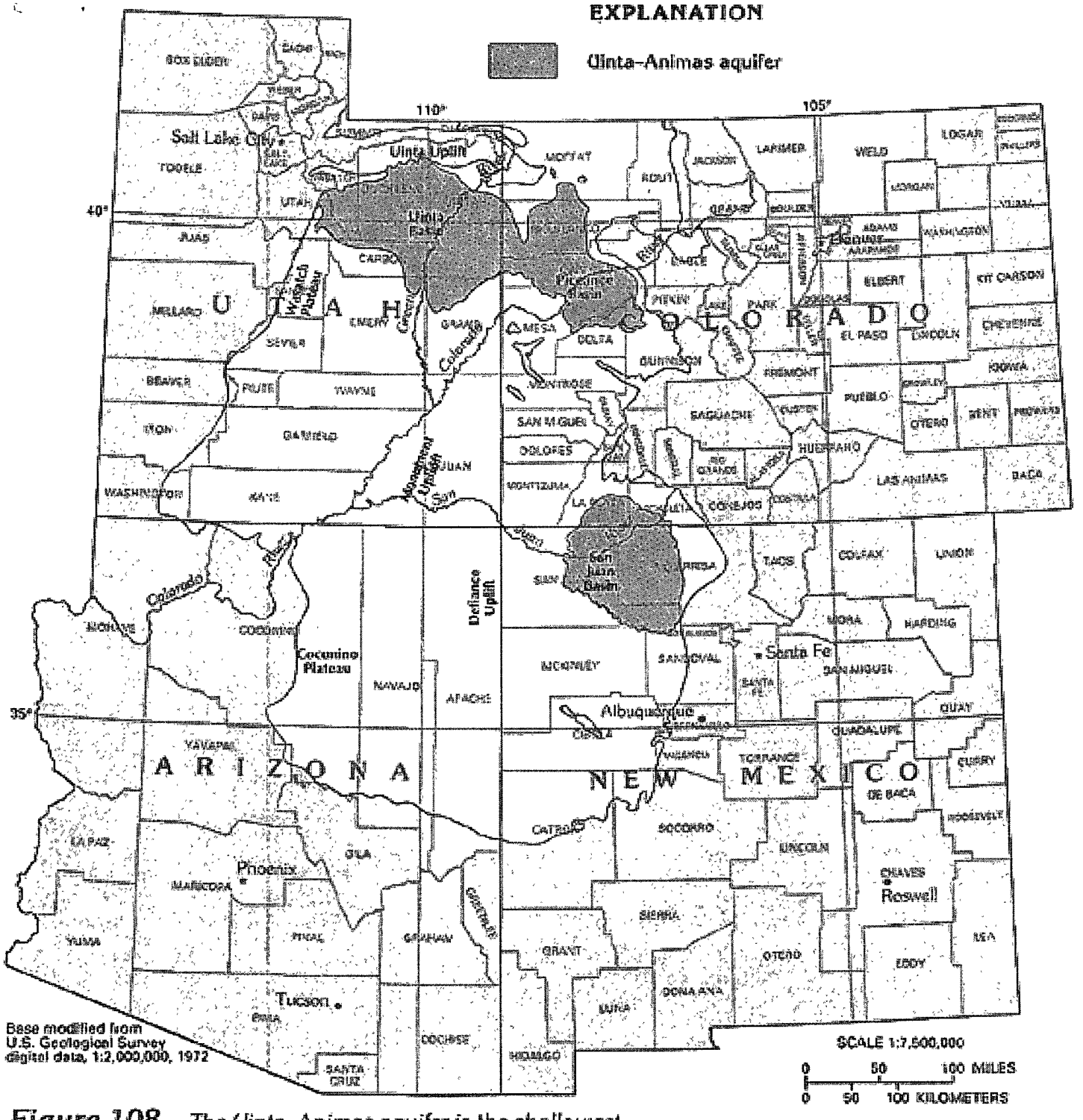


Figure 108. The Uinta–Animas aquifer is the shallowest of the Colorado Plateaus aquifers and is present in the Uinta, Piceance, and San Juan Basins.

APPENDIX D

New Mexico Water Resources Reporting Survey Reports

New Mexico Office of the State Engineer

Wells with Well Log Information

No wells found

Basin/County Search:

Basin: San Juan **County:** San Juan

PLSS Search:

Section(s): 21, 22, 23, 28, 27, 26, 33, 34, 35 **Township:** 24N **Range:** 08W

New Mexico Office of the State Engineer
Wells Without Well Log Information

No wells found

Basin/County Search:

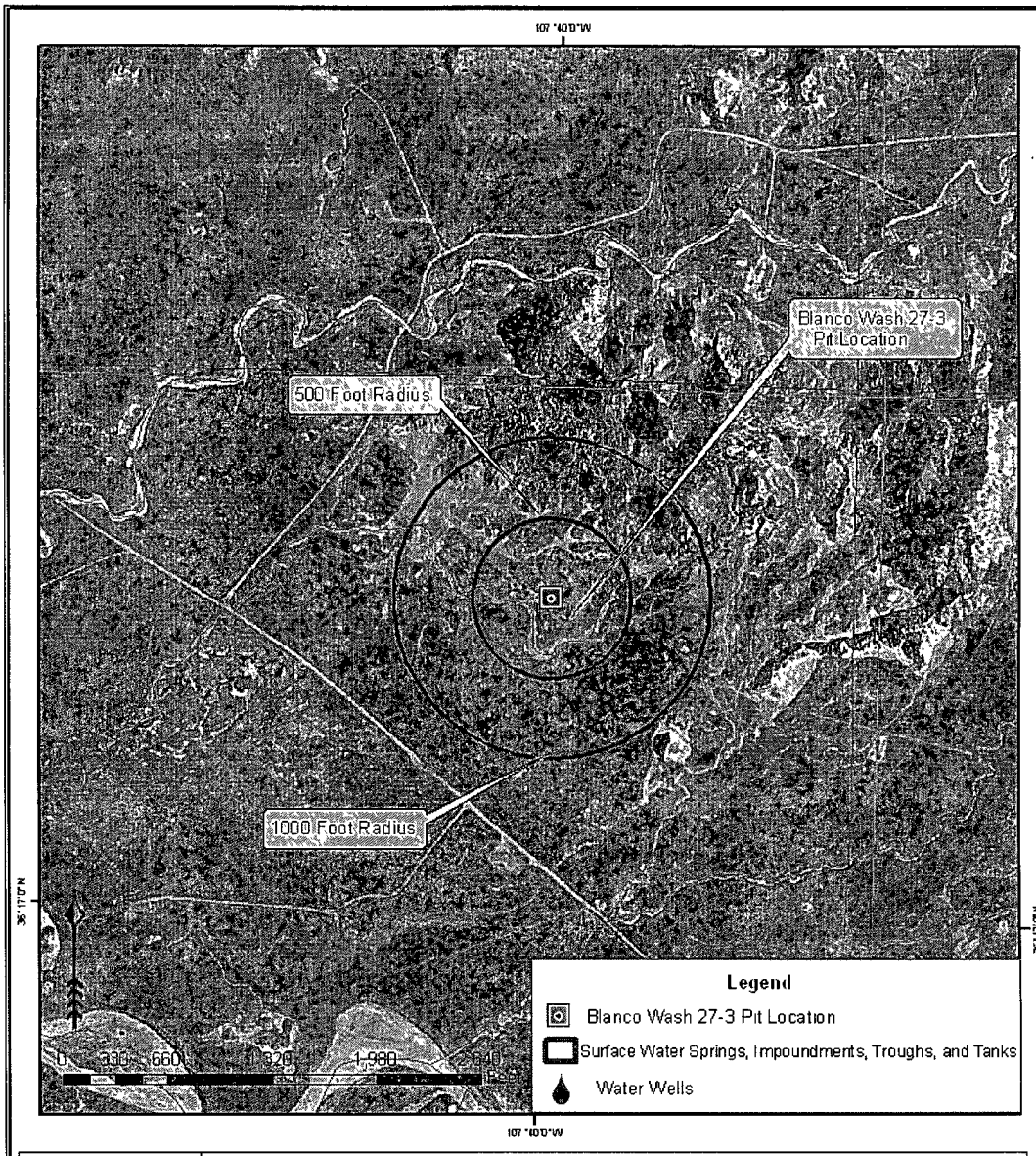
Basin: San Juan **County:** San Juan

PLSS Search:

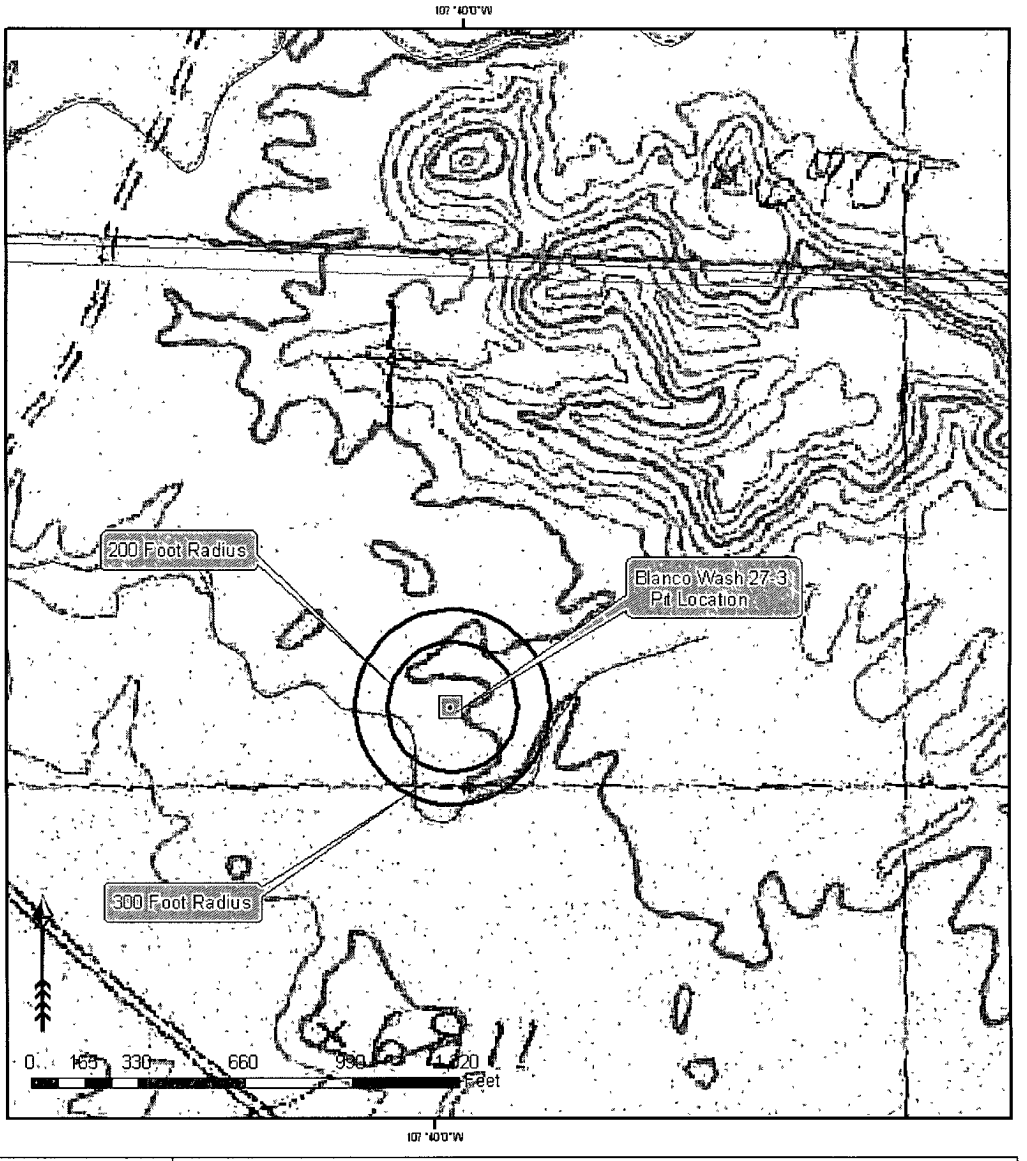
Section(s): 21, 22, 23, 28, 27, 26, 33, 34, 35 **Township:** 24N **Range:** 08W

APPENDIX E

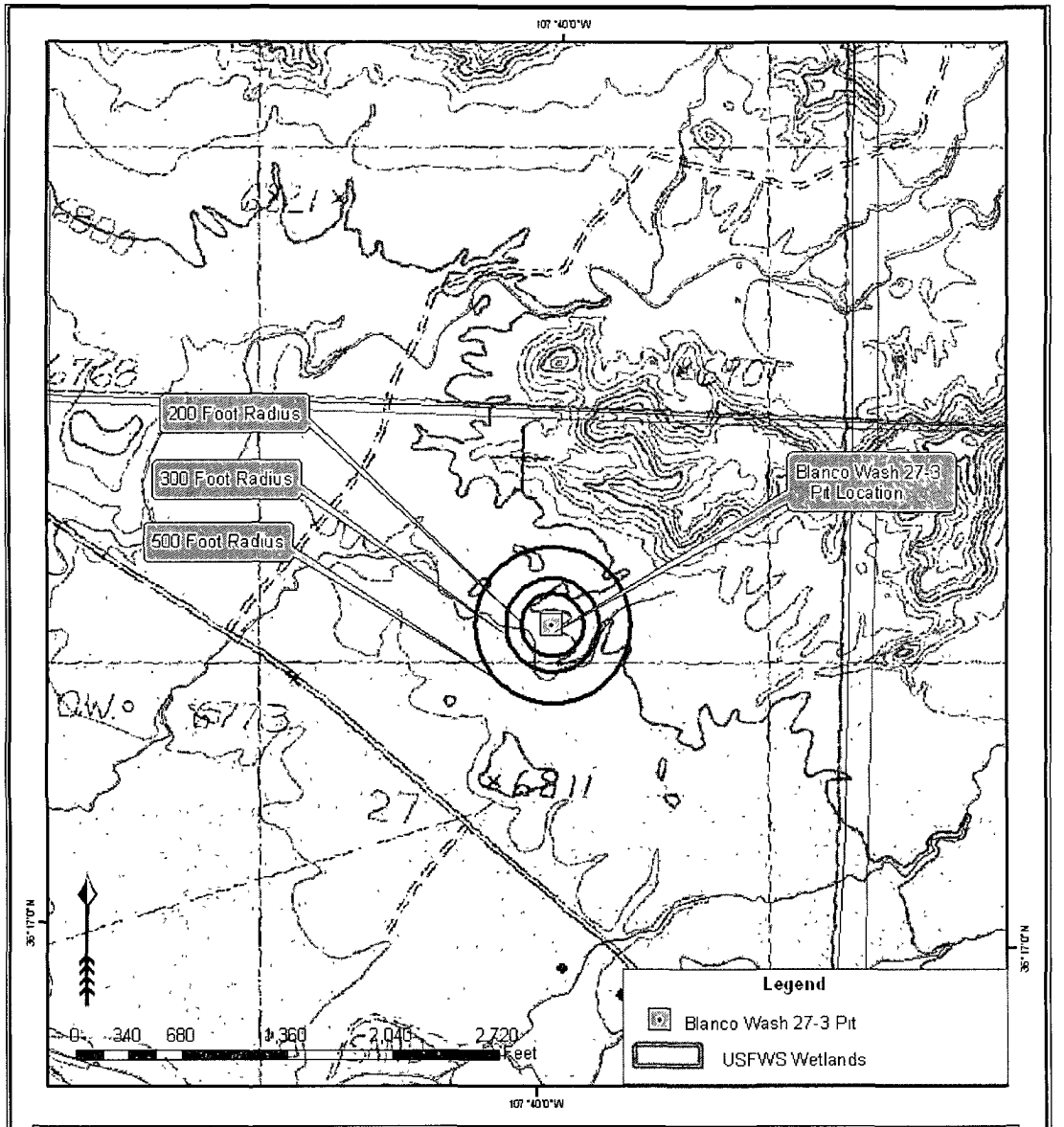
SITING CRITERIA and WETLANDS MAPS



ECOSPHERE ENVIRONMENTAL SERVICES	**DJ SIMMONS, INC.** **Blanco Wash 27-3**		
	TOWNSHIP 24N, RANGE 08W, SECTION 27		**SITING I CRITERIA MAP**
	CROW MESA WEST QUADRANGLE		**FIGURE 2**
	SAN JUAN COUNTY, NEW MEXICO	1 10,000	12/2/2008



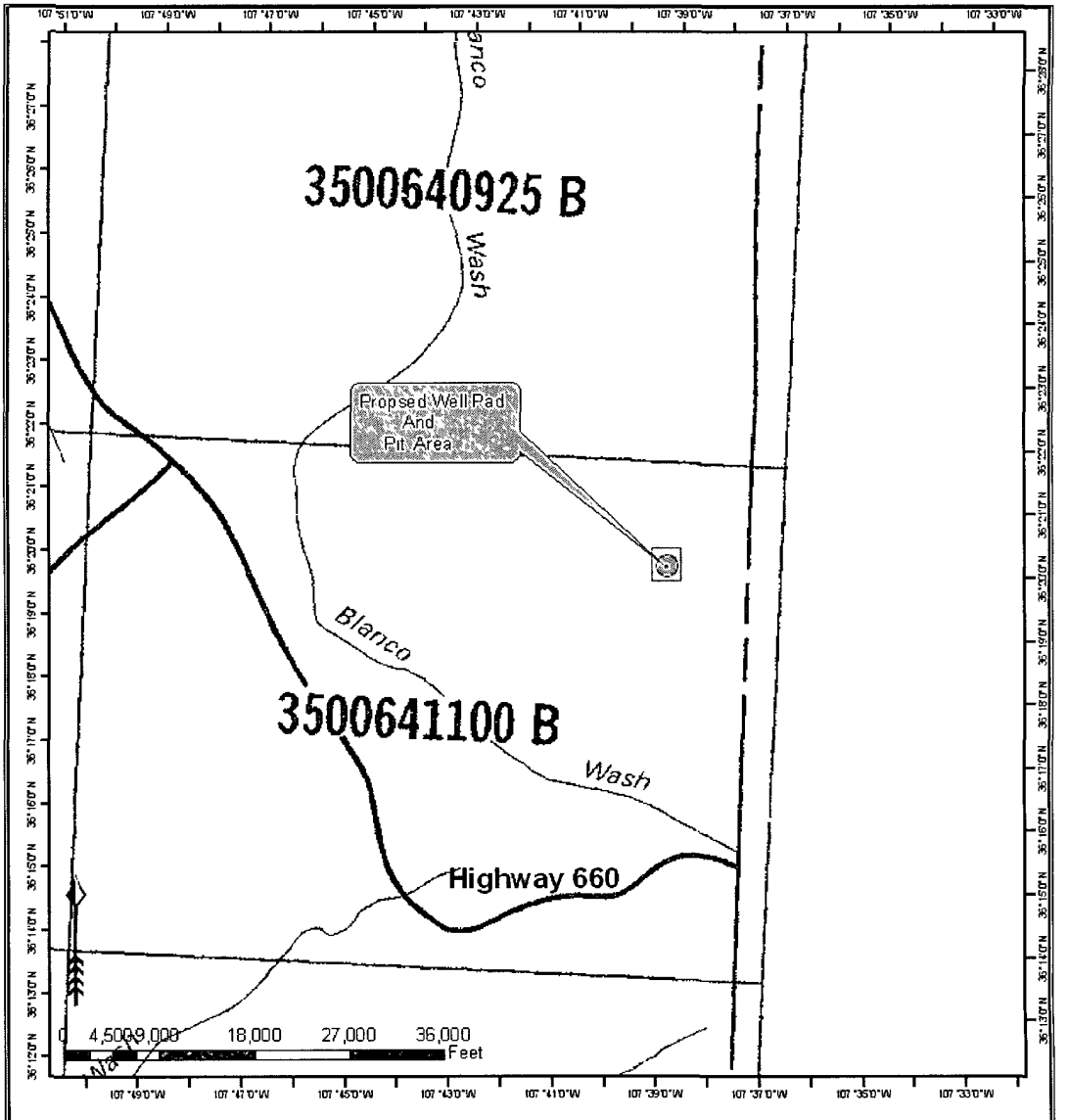
ECOSPHERE ENVIRONMENTAL SERVICES	**DJ SIMMONS, INC.** **Blanco Wash 27-3**		
	TOWNSHIP 24N, RANGE 08W, SECTION 27		**SITING II CRITERIA MAP**
	CROW MESA WEST QUADRANGLE		**FIGURE 3**
	SAN JUAN COUNTY, NEW MEXICO	1:5,000	12/2/2008



ECOSPHERE ENVIRONMENTAL SERVICES	**DJ SIMMONS, INC.** **Blanco Wash 27-3**		
	TOWNSHIP 24N, RANGE 08W, SECTION 27		**WETLANDS MAP**
	CROW MESA WEST QUADRANGLE		**FIGURE 4**
	SAN JUAN COUNTY, NEW MEXICO	1:10,000	12/2/2008

APPENDIX F

FEMA 100-year Floodplain Map:



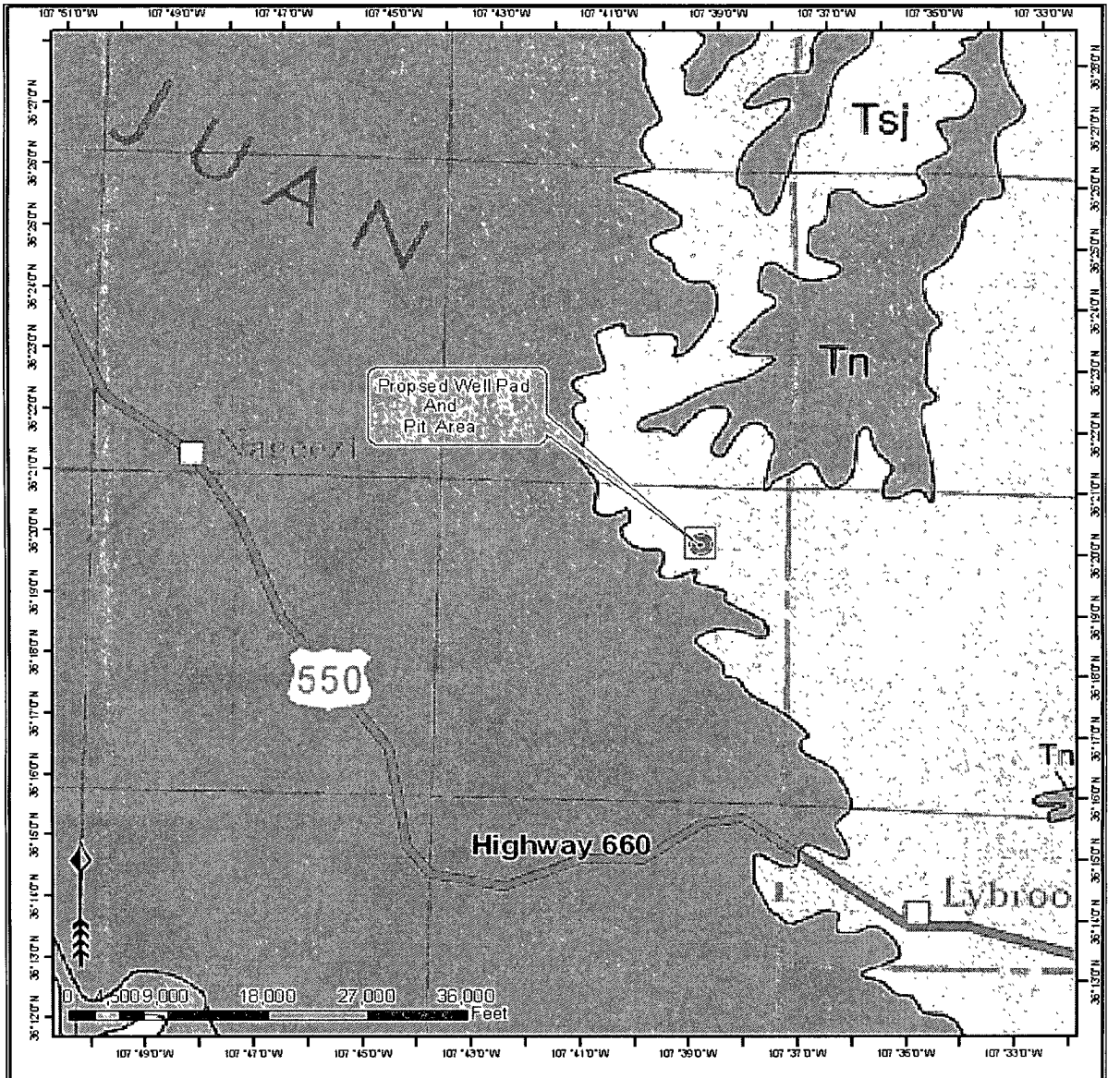
ECOSPHERE
ENVIRONMENTAL SERVICES

DJ SIMMONS, INC.
Blanco Wash No. 27-3

TOWNSHIP 24N, RANGE 08W, SECTION 27		**Floodplains Map**
FEMA Floodplains Map		**Figure 5**
SAN JUAN COUNTY, NEW MEXICO	1:50,000	12/7/2009

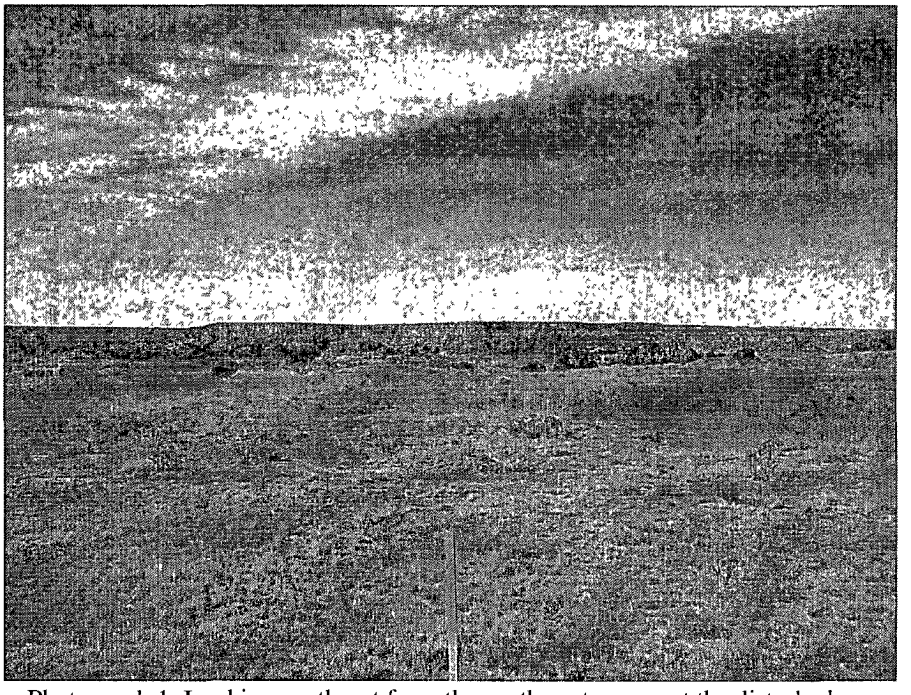
APPENDIX G

SURFACE GEOLOGY MAP

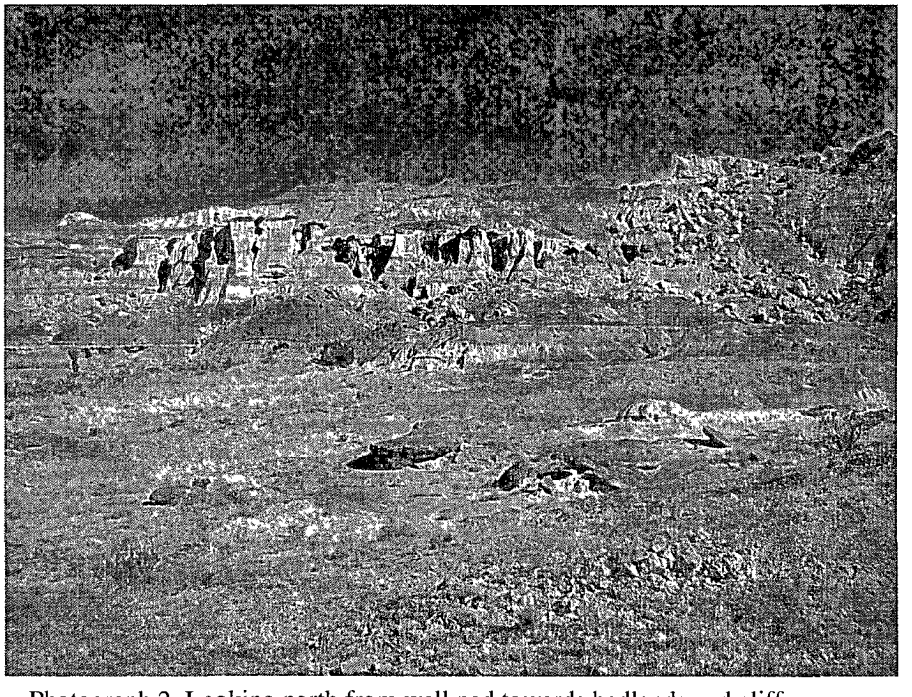


ECOSPHERE ENVIRONMENTAL SERVICES	**DJ SIMMONS, INC.** **Blanco Wash No. 27-3**		
	TOWNSHIP 24N, RANGE 08W, SECTION 27		**Geology Map**
	Surface Geology Map		**Figure 6**
	SAN JUAN COUNTY, NEW MEXICO	1:50,000	12/7/2009

Attachment H
Site Photographs

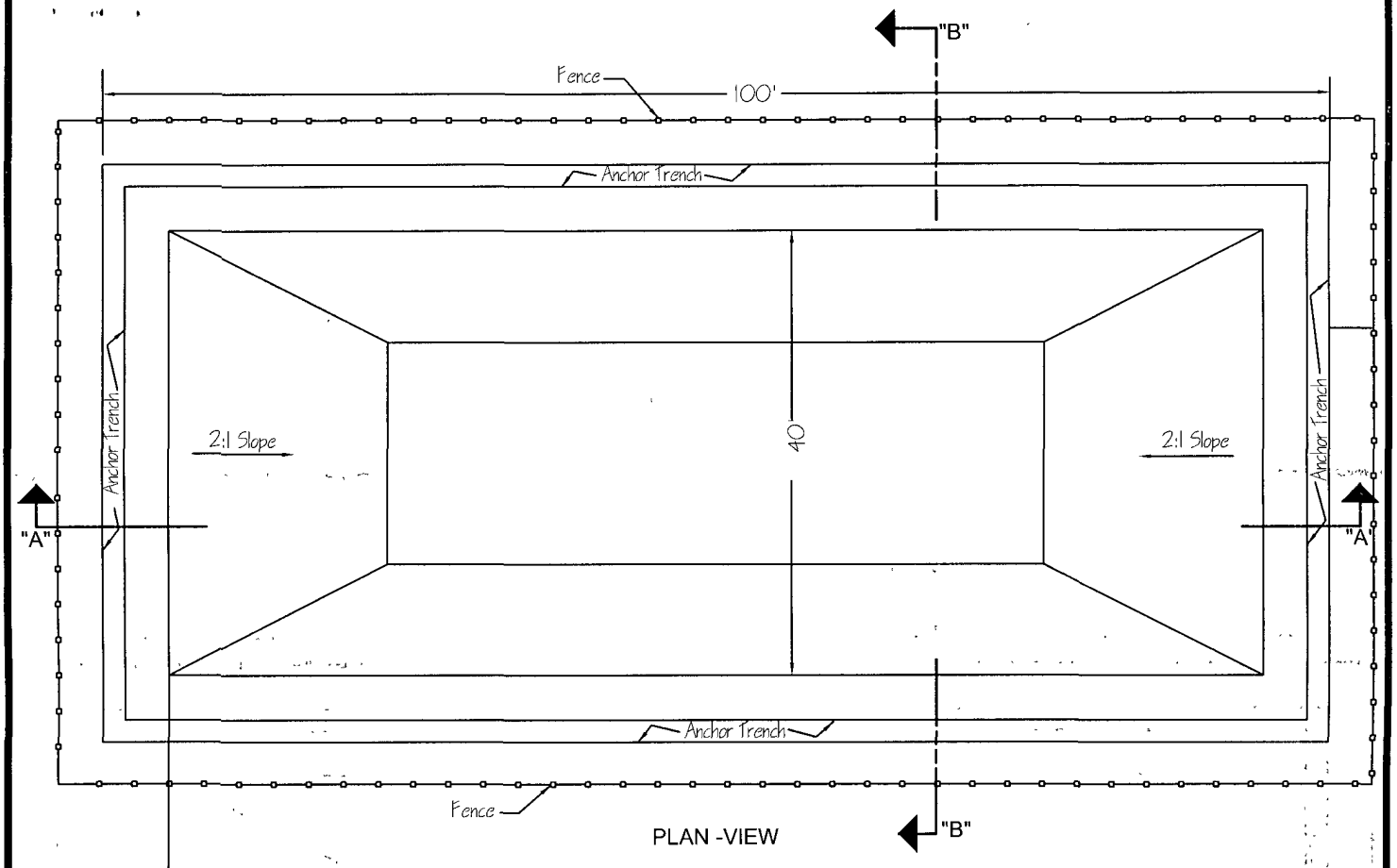


Photograph 1: Looking southeast from the northwest corner at the disturbed portion of the proposed project area.

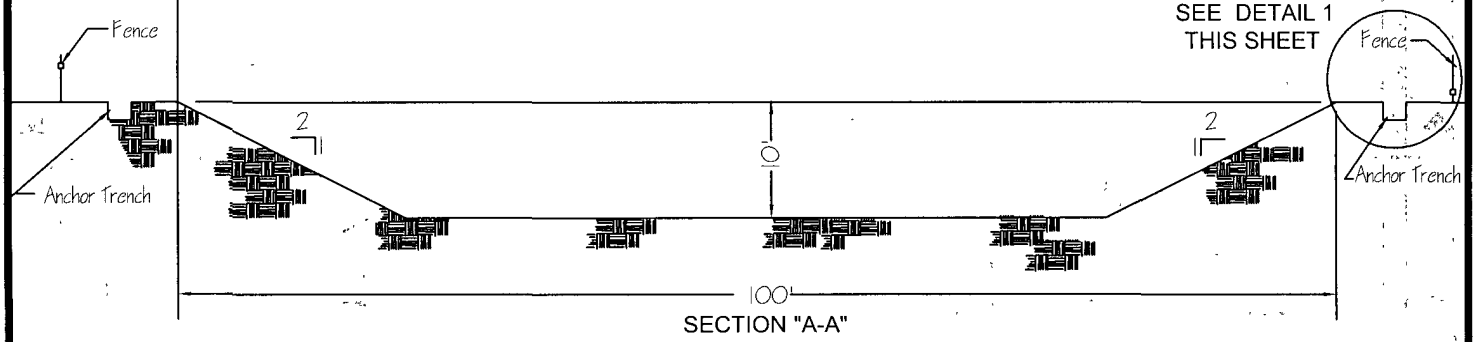


Photograph 2: Looking north from well pad towards badlands and cliffs

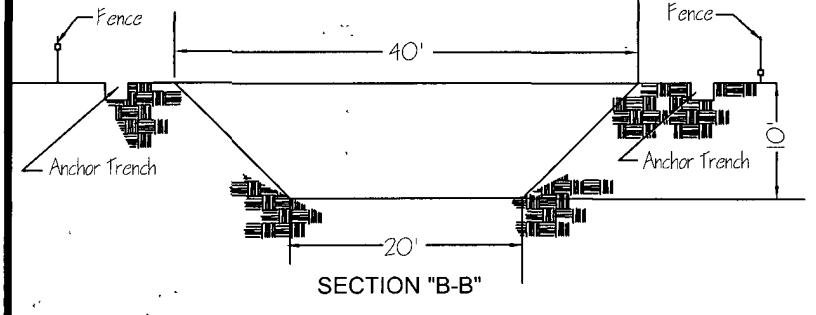
Attachment I
Temporary Pit Design



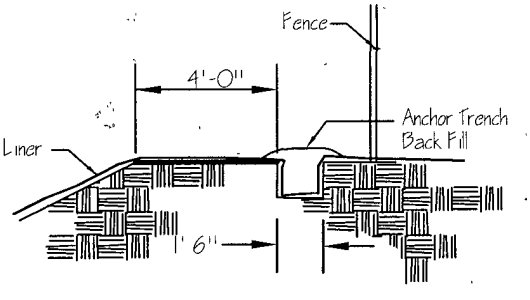
PLAN -VIEW



SECTION "A-A"



SECTION "B-B"

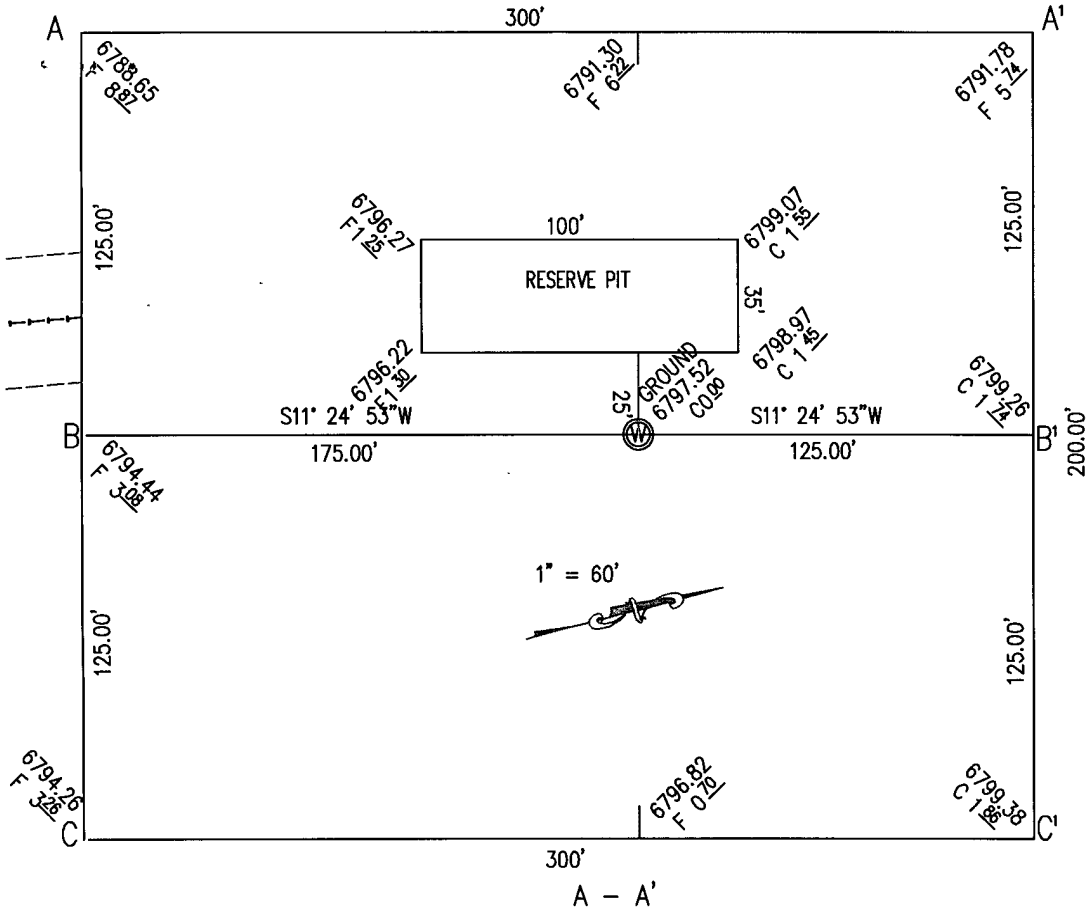


DETAIL 1

DJ SIMMONS, INC.
1009 Ridgeway Place, Suite 200
Farmington, NM. 87401
Phone 505 326-3753
Fax 505 327-4659

Reviewed By: Rod Seale
Drawn By: Craig Starkey
Approved By: Rod Seale
Date: Jan 18, 2010

BLANCO WASH 27-3
TEMPORARY PIT
DESIGN.



DJ SIMMONS INC.
OPERATOR

BLANCO WASH 27-3
WELL NAME and NUMBER

1301.06 F/NL 1698.21 F/EL
FOOTAGES

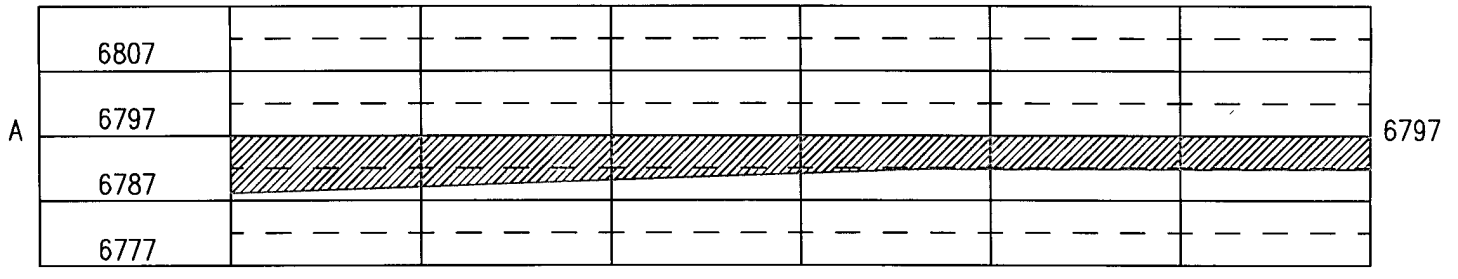
27	24N	8W
SEC.	TWP.	RGE.

San Juan, NEW MEXICO
COUNTY STATE

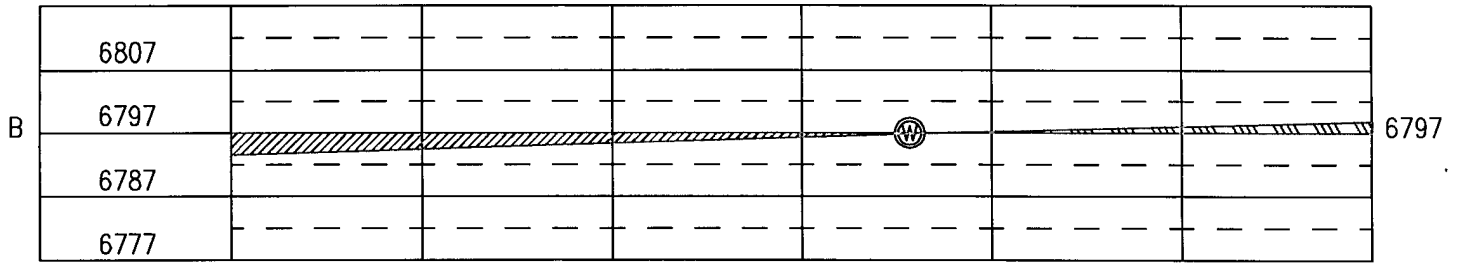
REVISED: JANUARY 26, 2010
OCTOBER 28, 2008
DATE

SCALE
Horiz. 1" = 50'
Vert. 1" = 30'

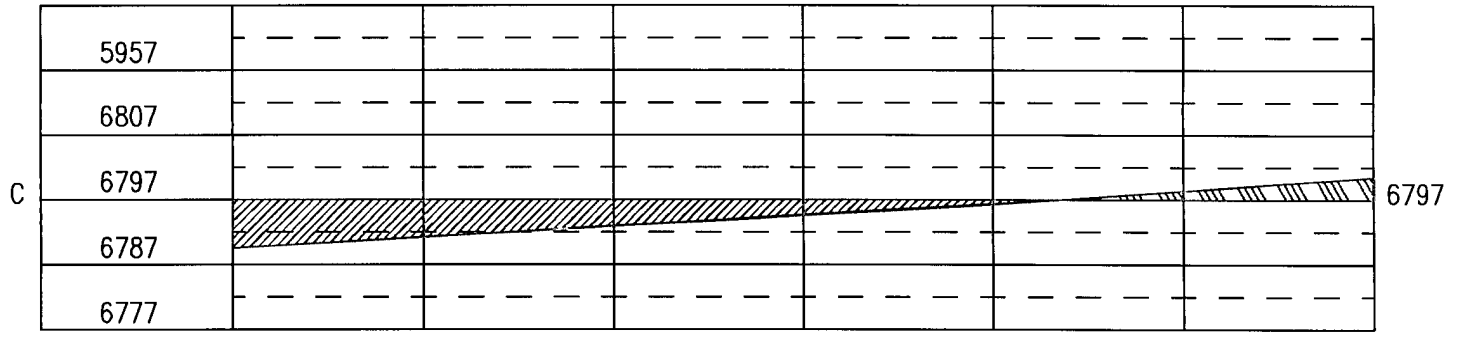
A – A'



B – B'



C – C'



Attachment J
Temporary Pit Design, Construction, Operation and Closure Plan

In accordance with 19.15.17 NMAC the following information describes the design, construction, operation and closure requirements of temporary pits (TPs) on DJ Simmons, Inc locations, hereinafter known as DJ Simmons locations, in the San Juan Basin of New Mexico. This is DJ Simmons's standard procedure for all TPs. A separate plan would be submitted and utilized for any TP which does not conform to this plan.

Design, Construction, and Operation

- DJ Simmons shall follow all of the design, construction and operation guidelines and stipulations outlined below and contained in their entirety within paragraphs (1) through (11) of Subsection F of 19.15.17.11 NMAC and paragraphs (1) through (8) of subsection A and paragraphs (1) through (5) subsection B 19.15.17.12 NMAC.

- DJ Simmons shall use appropriate engineering principles and practices and follow applicable liner manufactures' requirements.

- The temporary pit will be designed and constructed to contain liquids and solids and prevent contamination of fresh water and protect public health and environment.

- Prior to pit construction, excavated topsoil will be stockpiled and stored for use as the final cover or fill upon closure and reclamation.

Closure Requirements

- DJ Simmons shall abide by the closure requirements outlined below and contained in their entirety in NMAC 19.15.17.13 (F).

- DJ Simmons shall close a temporary pit within 60 days of cessation of the temporary pits' operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The C-144 closure report form would be filed with the Division. All closure activities will include proper documentation as stipulated by NMAC 19.15.17 and will be submitted to OCD within 60 days of the closure on a Closure Report using Division Form C-144. The report will include the following:

- Disposal Facility
- Details on Capping and Covering, where applicable
- Plot Plan (Pit Diagram)
- Inspection reports
- Sampling Results

- DJ Simmons shall remove by vacuum truck all free standing water (liquids) from the temporary pit prior to implementation of a closure method. The liner will be cut off at the mud line (Bureau of Indian Affairs APD Condition of Approval) with the remaining portion of the cut off liner being hauled to a permitted disposal site. The mud and drill cuttings along with the underlying portion of the liner will be buried in place in accordance with NMAC 19.15.17.13.(F) (e). The liquids will be removed in a manner that the appropriate District Office approves including; recycled, reused, reclaimed, evaporated, and/or disposed of in a Division-approved facility.

- DJ Simmons shall test the soils beneath the temporary pit to determine whether a release has occurred. DJ Simmons shall collect, at a minimum, a five point, composite sample. The samples would be taken of the affected area using sampling tools and all samples tested per 19.15.17.13(B)(1)(b) NMAC. In the event that the criteria are not met (See Table 1), all contents will be handled per 19.15.17.13(B)(1)(a) (i.e. dig and haul to a Division-approved facility). Approval to haul will be requested of the Aztec District office prior to initiation. Collected samples would include individual grab samples from any area that is wet, discolored or showing other evidence of a release: and analyze samples for BTEX, TPH and chlorides to demonstrate that the benzene concentration, as determined by EPA SW-846 methods 8021B or 8260B or other EPA methodology that the division approves, does not exceed 50mg/kg: the TPH concentration, as determined by the EPA method 418.1 or other EPA methodology that the division approves, does no exceed 2500 mg/kg: and the chloride concentration , as determined by the EPA method 1000 or other EPA methodology that the division approves, does not exceed 1000 mg/kg, or the background concentration, which may be greater. DJ Simmons shall notify the division of its results on form C-141.

Table 1: Closure Criteria for Below Grade Tanks

Components	Testing Methods	Closure Limits (mg/Kg)
Benzene	EPA SW-846 Method 8021B or 8260B	0.2
BTEX	EPA SW-846 Method 8021B or 8260B	50
TPH	EPA SW-846 Method 8015 M(Full Range)* or Method 418.1	2500
GRO/DRO	EPA SW-846 Method 8015M (GRO/DRO)	500
Chlorides	EPA SW-846 Method 300.1	1000

* Preferred method

- If DJ Simmons or the division determines that a release has occurred, DJ Simmons shall comply with 19.15.17.116 NMAC and 19.15.1.19 NMAC stipulations as appropriate.

- If contamination is confirmed by field sampling, DJ Simmons will follow the *Guidelines For Remediation Of Leaks, Spills, and Releases* per NMOCD August 1993 mandate, when remediating identified contaminants.

- If the sampling program demonstrates that a release has occurred or that any release does not exceed the concentrations specified in Paragraph (4) of Subsection E of 19.15.17.13 NMAC, then DJ Simmons shall backfill the excavation with compacted, non-waste containing., earthen material: construct a division prescribed soil cover: re-contour and re-vegetate the site.

- Notice of Closure will be given to the Aztec Division office between 72 and 7 days (one Week) of the closure via e-email, or verbally. The notification of closure will include the following:
  - Operator's name (DJ Simmons)
  - Well Name and API Number
  - Location (USTR)

- All closure activities will include proper documentation and be available for review per request and will be submitted to OCD within 60 days of closure of the Temporary pit. The closure report will be filed on a C-144 form and incorporate the following:

  i. Details on Capping and Covering, where applicable
  ii. Inspection reports
  iii. Sampling Results

- Re-contouring of the location shall match the original geographic features and topographic fit, lines, form, shape and texture of the surrounding topographical contours. Re-shaping of the contour will include establishment or reestablishment of drainages to control sedimentation, total dissolved solids (TDS), and to mitigate ponding and prevent erosion. Natural drainages will be unimpeded and appropriate hydrologic BMPs such as water bars and/or silt traps will be placed in areas where needed to prevent erosion and sediment movement on a large scale. The final re-contour shall have a uniform appearance with smooth surface, fitting the aesthetic of the surrounding natural landscape.

- DJ Simmons shall seed (BIA approved seed mix) the disturbed areas within the first growing season after the operator has closed the pit. Seeding will be accomplished using a seed drill on the contour whenever possible or by other division approved methods. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintained that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs. *Note: DJ Simmons assumes the seeding stipulations including mix and seeding methods specified by the Surface Management Agency (BIA.) or Land owner as part of a surface use agreement or APD are Division-approved methods unless notified by the Division of their unacceptability.* The operator will be responsible for monitoring vegetative stand development and for eradicating all noxious/invasive weeds within the re-vegetated area.

- A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil whichever maybe greater.

- In accordance with the direction given at a meeting with the Supervisor of the Farmington Federal Indian Minerals Office the surface Allottee's do not need to be notified of DJ Simmons's proposed temporary pit closure plan because the last sentence of Item 2 (Conveyance) of the Oil and Gas Lease has notified the Allottee's of our intent during the well drilling, completion, and reclamation process.

Attachment K
Landowner's Consent for Temporary Pit On-Site Burial