District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., 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
Revised April 3, 2017

For temporary pits, below-grade tanks, and multi-well fluid management pits, submit to the appropriate NMOCD District Office.
For permanent pits submit to the Santa Fe Environmental Bureau office and provide a copy to the appropriate NMOCD District Office.

164468

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

Type of action: X Below grade tank registration
☐ Permit of a pit or proposed alternative method
☐ Closure of a pit, below-grade tank, or proposed alternative method
☐ Modification to an existing permit/or registration
☐ Closure plan only submitted for an existing permitted or non-permitted pit, below-grade tank, or proposed alternative method

Instructions: Please submit one application (Form C-144) per individual pit, 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: Advanced Wireless Communications, LLC OGRID #: 371710
Address: 5691 US 64, Farmington, NM 87401
Facility or well name: Mims State Com #2
API Number: 30-045-20587 OCD Permit Number:
U/L or Qtr/Qtr NW4 Section 16 Township T29N Range R9W County: San Juan
Center of Proposed Design: Latitude 36.7296829 Longitude -107.7869492 NAD83
Surface Owner: **X** Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☐ **Pit:** Subsection F, G or J of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A ☐ Multi-Well Fluid Management Low Chloride Drilling Fluid ☐ yes ☐ no
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L_____ x W_____ x D_____

3.
X☐ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: 90 bbl Type of fluid: Produced Water
Tank Construction material: Metal
☐ Secondary containment with leak detection **X** Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off
☐ Visible sidewalls and liner ☐ Visible sidewalls only ☐ Other _____
Liner type: Thickness 45mil _____mil ☐ HDPE ☐ PVC X Other reinforced LLDPE

4.
☐ **Alternative Method:**
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.

5.
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
X Alternate. Please specify 4 foot hog wire fencing topped with one strand of barbed wire

NMOCD
SEP 28 2018
DISTRICT III

23

6.

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

☐ Screen ☐ Netting **X** Other Expanded Metal

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

7.

Signs: Subsection C of 19.15.17.11 NMAC

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

X Signed in compliance with 19.15.16.8 NMAC

8.

Variances 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:

☐ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval.

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

9.

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. **Siting criteria does not apply to drying pads or above-grade tanks.**

General siting	
Ground water is less than 25 feet below the bottom of a low chloride temporary pit or below-grade tank. - **X** NM Office of the State Engineer - iWATERS database search; ☐ USGS; ☐ Data obtained from nearby wells	☐ Yes X No ☐ NA
Ground water is less than 50 feet below the bottom of a Temporary pit, permanent pit, or Multi-Well Fluid Management pit . NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells	☐ Yes X No ☐ NA
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. **(Does not apply to below grade tanks)** - Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within the area overlying a subsurface mine. **(Does not apply to below grade tanks)** - Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division	☐ Yes ☐ No
Within an unstable area. **(Does not apply to below grade tanks)** - 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. **(Does not apply to below grade tanks)** - FEMA map	☐ Yes ☐ No
Below Grade Tanks	
Within 100 feet of a continuously flowing watercourse, significant watercourse, lake bed, sinkhole, wetland or playa lake (measured from the ordinary high-water mark). - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes X No
Within 200 horizontal feet of a spring or a fresh water well used for public or livestock consumption;. - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes X No
Temporary Pit using Low Chloride Drilling Fluid (maximum chloride content 15,000 mg/liter)	
Within 100 feet of a continuously flowing watercourse, or any other significant watercourse or within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark). (Applies to low chloride temporary pits.) - Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet from a occupied 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 200 horizontal feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 300feet of any other fresh water well or spring, in existence at the time of the initial application. NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

Within 100 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Temporary Pit Non-low chloride drilling fluid	
Within 300 feet of a continuously flowing watercourse, or any other significant watercourse, or within 200 feet of any 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 spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or 1000 feet of any other fresh water well or spring, in the existence at the time of the initial application; - NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Within 300 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No
Permanent Pit or Multi-Well Fluid Management Pit	
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 1000 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 spring or a fresh water well used for domestic or stock watering purposes, 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 500 feet of a wetland. - US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site	☐ Yes ☐ No

10.

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.

X 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

X Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

X Design Plan - based upon the appropriate requirements of 19.15.17.11 NMAC

X Operating and Maintenance Plan - based upon the appropriate requirements of 19.15.17.12 NMAC

X 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: _____

11.

Multi-Well Fluid Management Pit 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.

☐ 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

☐ A List of wells with approved application for permit to drill associated with the pit.

☐ 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

☐ Hydrogeologic Data - based upon the requirements of Paragraph (4) of Subsection B of 19.15.17.9 NMAC

☐ Siting Criteria Compliance Demonstrations - based upon the appropriate requirements of 19.15.17.10 NMAC

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

12.
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

13.
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 **X** Below-grade Tank ☐ Multi-well Fluid Management Pit ☐ 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
X Alternative Closure Method

14.
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 C 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 H of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

15.
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 require justifications and/or demonstrations of equivalency. Please refer to 19.15.17.10 NMAC for guidance.

Ground water is less than 25 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 25-50 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 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 100 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, 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 300 horizontal feet of a private, domestic fresh water well or spring used for domestic or stock watering purposes, 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
Written confirmation or verification from the municipality; Written approval obtained from the municipality	☐ Yes ☐ No
Within 300 feet of a wetland. US Fish and Wildlife Wetland Identification map; Topographic map; 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 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

16.
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 E of 19.15.17.13 NMAC
- ☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of Subsection K 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 19.15.17.13 NMAC
- ☐ Waste Material Sampling Plan - based upon the appropriate requirements 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 H of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

17.
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): Krysten Moore Title: Member

Signature: [signature] Date: 9/24/18

e-mail address: krysten@advancedwirelessllc.com Telephone: 505-486-0045

18.
OCD Approval: ☒ Permit Application (including closure plan) ☐ Closure Plan (only) ☐ OCD Conditions (see attachment)

OCD Representative Signature: [signature] **Approval Date:** 10/10/18

Title: Environmental Spec. **OCD Permit Number:**

19.
Closure Report (required within 60 days of closure completion): 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:**

20.
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.

21.
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 for private land only)
- ☐ 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

22.

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: _____

Mims State Com #002

Site Specific Hydrogeology

A visual site inspection confirming the information contained herein was performed on the well "Mims State Com #002", which is located at 36.7296829, -107.7869492. This location is located on the Blanco NE USGS topographic quadrangle. This location is in section 16 of Township 29 North Range 9 West. This location is located in San Juan County, New Mexico. The nearest town is Blanco, NM located 3 miles to the west; and the nearest large town with a population greater than 10,000 is Farmington located 33 miles to the west. The nearest highway is US Highway 64, located 0.15 miles to the north. This location is on Private land, NM State Leases B1-0870, E0-0397, E0-1203, E-5314. This location is in the Upper San Juan basin. This location is located 7228 feet above sea level and receives 14.2 inches of rain each year. The vegetation on this location is classified as Colorado Plateau Pinyon-Juniper Woodland as per the Southwest Regional Gas Analysis Program, information attached.

The estimated depth to ground water at this point is 93 feet. This estimation is based on the data published on the New Mexico Engineer's iWaters Database website. Groundwater data available from the NM State Engineer's iWaters Database for this area is attached. The nearest stream is 5 miles to the east and is listed as USGS 09356400 MANZANARES CANYON NEAR TURLEY, NM. The nearest river is located 2 miles to the west and is listed as USGS 09356500 SAN JUAN R NR BLANCO, NM. The nearest water body is 16 miles to the north east and is listed as USGS 09355100 NAVAJO RESERVOIR NR ARCHULETA, NM, and 24.38 square miles in size. This information was determined from the USGS website, maps attached. The surface geology at this location is Nacimiento Formation. The soil at this location is silty clay loam, 5 percent slopes and is well drained; medium to high runoff; moderately slow permeability as taken from the Nacimiento soil series by the USDA. The nearest mine is 47 miles to the west and the nearest mill is 25 miles west as indicated by the Registered Mines in New Mexico map from EMNRD, attached.

Regional Hydrogeological context:

The Nacimiento Formation is a sedimentary rock formation found in the San Juan Basin of western New Mexico. It is a heterogeneous nonmarine formation composed of shale, siltstone, and sandstone, deposited in floodplain, fluvial and lacustrine settings, and made up of sediment shed from the San Juan uplift to the north and the Brazos-Sangre de Cristo uplift to the east. This unit interbeds with the underlying Ojo Alamo Formation but is separated by an unconformity from the overlying San Jose Formation.

Lucas, S.G.; Ingersoll, R.V. (1981). "Cenozoic continental deposits of New Mexico: an overview". Geological Society of America Bulletin. 92 (12): I 917–I 932, II 1807–II 1981.

New Mexico Office of the State Engineer

Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced, O=orphaned, C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	Code	POD Sub-basin	County	Q 64	Q 16	Q 4	Sec	Tws	Rng	X	Y	Depth Well	Depth Water	Water Column
SJ 02883		SJM2	SJ	3	3	2	16	29N	09W	251496	4068078*	123	87	36
SJ 03185		SJM2	SJ	4	4	3	16	29N	09W	251290	4067283*	220	100	120

Average Depth to Water: **93 feet**

Minimum Depth: **87 feet**

Maximum Depth: **100 feet**

Record Count: 2

Basin/County Search:

Basin: San Juan County: San Juan

PLSS Search:

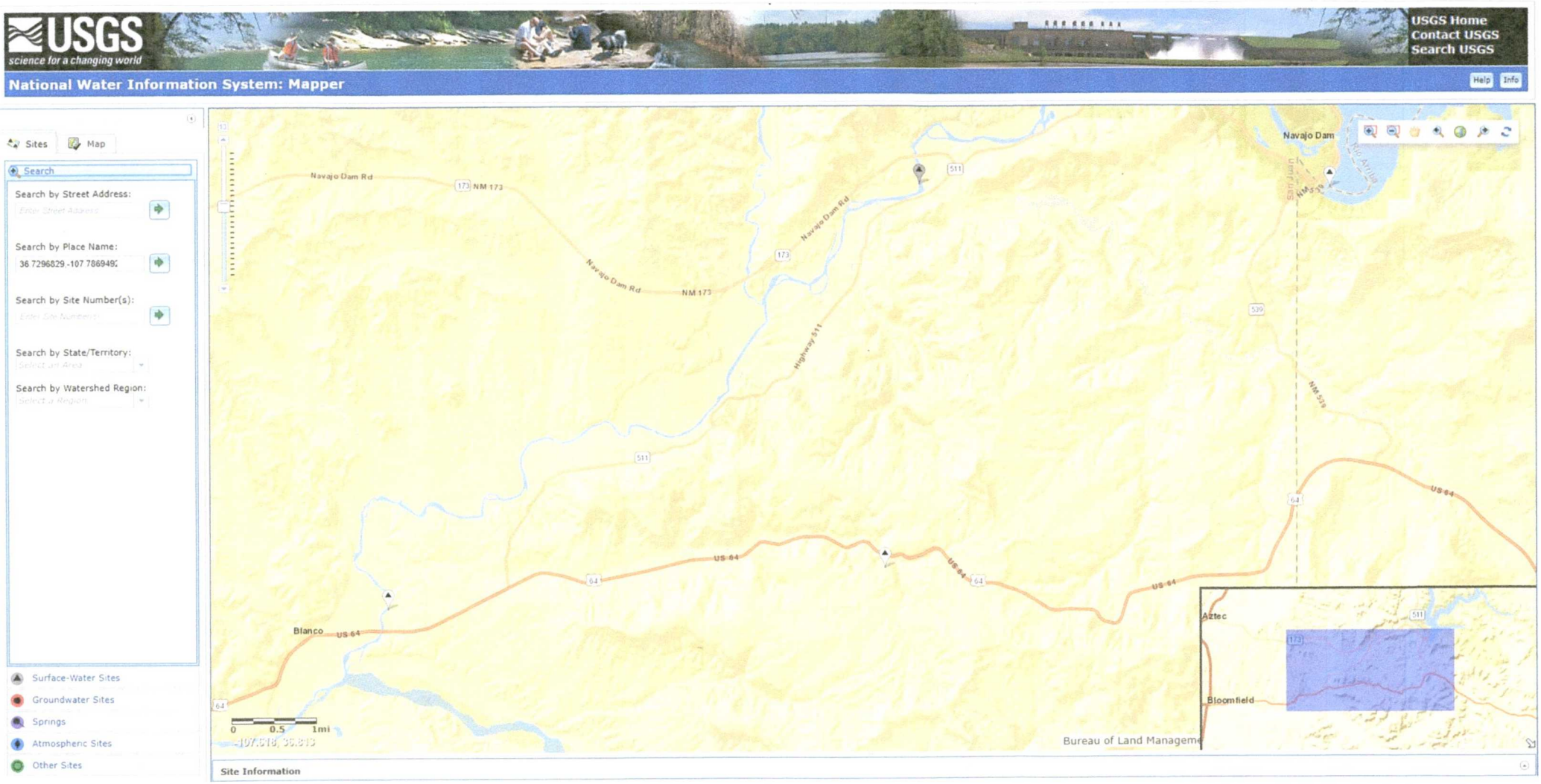
Section(s): 16 Township: 29N Range: 09W

***UTM location was derived from PLSS - see Help**

8/15/18 10:13 AM

WATER COLUMN/ AVERAGE DEPTH TO WATER

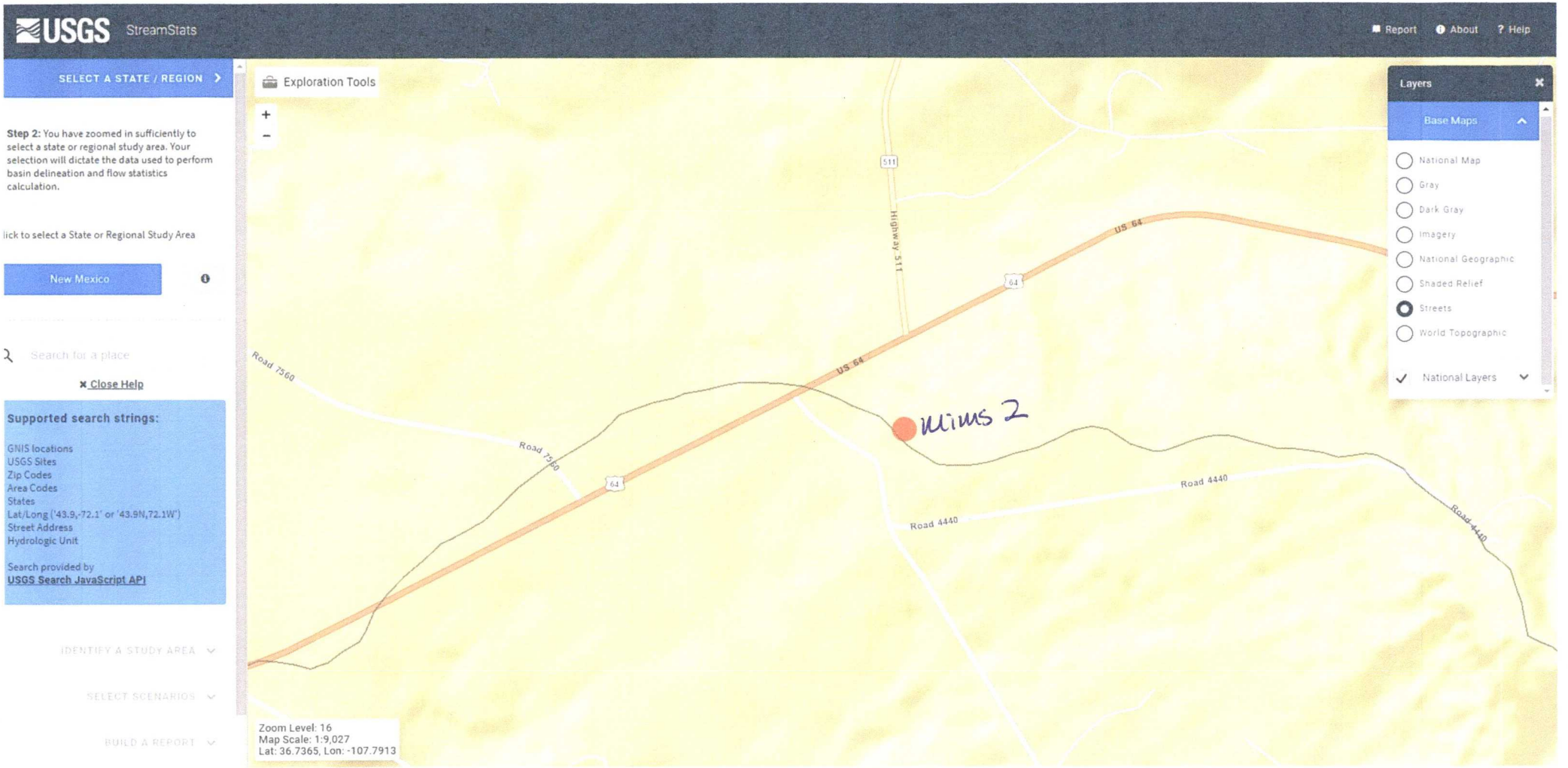

USGS StreamStats
Report
About
Help
SELECT A STATE / REGION
Exploration Tools
Step 2: You have zoomed in sufficiently to select a state or regional study area. Your selection will dictate the data used to perform basin delineation and flow statistics calculation.
Click to select a State or Regional Study Area
New Mexico
Search for a place
Close Help
Supported search strings:
GNIS locations
USGS Sites
Zip Codes
Area Codes
States
Lat/Long ('43.9,-72.1' or '43.9N,72.1W')
Street Address
Hydrologic Unit
Search provided by
USGS Search JavaScript API
IDENTIFY A STUDY AREA
SELECT SCENARIOS
BUILD A REPORT
POWERED BY WIM
Layers
Base Maps
National Map
Gray
Dark Gray
Imagery
National Geographic
Shaded Relief
Streets
World Topographic
National Layers
Road 4461
Manzanares Canyon
US-64
Highway-64
Blanco
Road 4440
Medina Canyon
Road 4990
Zoom Level: 14
Map Scale: 1:36,111
Lat: 36.7641, Lon: -107.7746
500 m
2000 ft
Leaflet | Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, USDA, EPA


USGS
science for a changing world
USGS Home
Contact USGS
Search USGS
National Water Information System: Mapper
Help
Info
Sites
Map
Search
Search by Street Address:
Search by Place Name:
36.7296829,-107.7869492
Search by Site Number(s):
Search by State/Territory:
Search by Watershed Region:
Surface-Water Sites
Groundwater Sites
Springs
Atmospheric Sites
Other Sites
Navajo Dam Rd
NM 173
Highway 511
Navajo Dam
NM 539
US 64
Blanco
Aztec
Bloomfield
0 0.5 1mi
Bureau of Land Management
Site Information


USGS StreamStats
SELECT A STATE / REGION
Exploration Tools
Report
About
Help
Layers
Base Maps
National Map
Gray
Dark Gray
Imagery
National Geographic
Shaded Relief
Streets
World Topographic
National Layers
Mws 2
Zoom Level: 17
Map Scale: 1:4,513
Lat: 36.7328, Lon: -107.7829
50 m
300 ft
Leaflet | Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
tep 2: You have zoomed in sufficiently to elect a state or regional study area. Your election will dictate the data used to perform asin delineation and flow statistics alculation.
k to select a State or Regional Study Area
New Mexico
Search for a place
Close Help
upported search strings:
NIS locations
SGS Sites
ip Codes
rea Codes
tates
at/Long ('43.9,-72.1' or '43.9N,72.1W')
treet Address
ydrologic Unit
earch provided by
SGS Search JavaScript API
IDENTIFY A STUDY AREA
SELECT SCENARIOS
BUILD A REPORT
POWERED BY WIM

U.S. Department of the Interior | U.S. Geological Survey
URL: https://viewer.nationalmap.gov/advanced-viewer/ Page Last Modified: 26-Jun-18
Page Contact Information: The National Map

USA.gov


USGS StreamStats
Report
About
Help
SELECT A STATE / REGION
Step 2: You have zoomed in sufficiently to select a state or regional study area. Your selection will dictate the data used to perform basin delineation and flow statistics calculation.
lick to select a State or Regional Study Area
New Mexico
Search for a place
Close Help
Supported search strings:
GNIS locations
USGS Sites
Zip Codes
Area Codes
States
Lat/Long ('43.9,-72.1' or '43.9N,72.1W')
Street Address
Hydrologic Unit
Search provided by
USGS Search JavaScript API
IDENTIFY A STUDY AREA
SELECT SCENARIOS
BUILD A REPORT
Exploration Tools
Layers
Base Maps
National Map
Gray
Dark Gray
Imagery
National Geographic
Shaded Relief
Streets
World Topographic
National Layers
Highway 511
US 64
Road 7560
Road 4440
Mims 2
Zoom Level: 16
Map Scale: 1:9,027
Lat: 36.7365, Lon: -107.7913

S039 Colorado Plateau Pinyon-Juniper Woodland

NLCD Class Evergreen Forest

Spatial Scale / Pattern Matrix

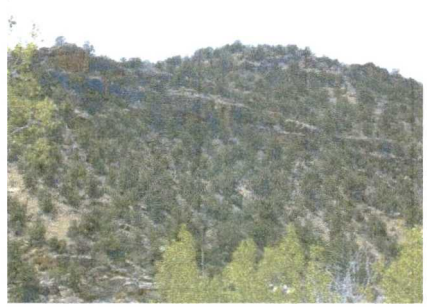
Concept Summary This ecological system occurs in dry mountains and foothills of the Colorado Plateau region including the Western Slope of Colorado to the Wasatch Range, south to the Mogollon Rim and east into the northwestern corner of New Mexico. It is typically found at lower elevations ranging from 1500-2440 m. These woodlands occur on warm, dry sites on mountain slopes, mesas, plateaus, and ridges. Severe climatic events occurring during the growing season, such as frosts and drought, are thought to limit the distribution of pinyon-juniper woodlands to relatively narrow altitudinal belts on mountainsides. Soils supporting this system vary in texture ranging from stony, cobbly, gravelly sandy loams to clay loam or clay. Pinus edulis and/or Juniperus osteosperma dominate the tree canopy. In the southern portion of the Colorado Plateau in northern Arizona and northwestern New Mexico, Juniperus monosperma and hybrids of Juniperus spp may dominate or codominate the tree canopy. Juniperus scopulorum may codominate or replace Juniperus osteosperma at higher elevations. Understory layers are variable and may be dominated by shrubs, graminoids, or be absent. Associated species include Arctostaphylos patula, Artemisia tridentata, Cercocarpus intricatus, Cercocarpus montanus, Coleogyne ramosissima, Purshia stansburiana, Purshia tridentata, Quercus gambelii, Bouteloua gracilis, Pleuraphis jamesii, or Poa fendleriana. This system occurs at higher elevations than Great Basin Pinyon-Juniper Woodland (CES304.773) and Colorado Plateau shrubland systems where sympatric.

Range Occurs on dry mountains and foothills of the Colorado Plateau region from the Western Slope of Colorado to the Wasatch Range, south to the Mogollon Rim. It is typically found at lower elevations ranging from 1500-2440 m.

Additional Information

Southwest ReGAP Analysis Project Land Cover Datasets:	http://earth.gis.usu.edu/swgap/
NatureServe Explorer (for Ecological System and Alliance information):	http://www.natureserve.org/explorer/
USDA Natural Resources Conservation Service Plants Database:	http://plants.usda.gov/

Field Photos



PhotoID : UT050803MD24_1.JPG

PhotoID : UT050803MD22_1.JPG

PhotoID : UT062603MD06_1.JPG

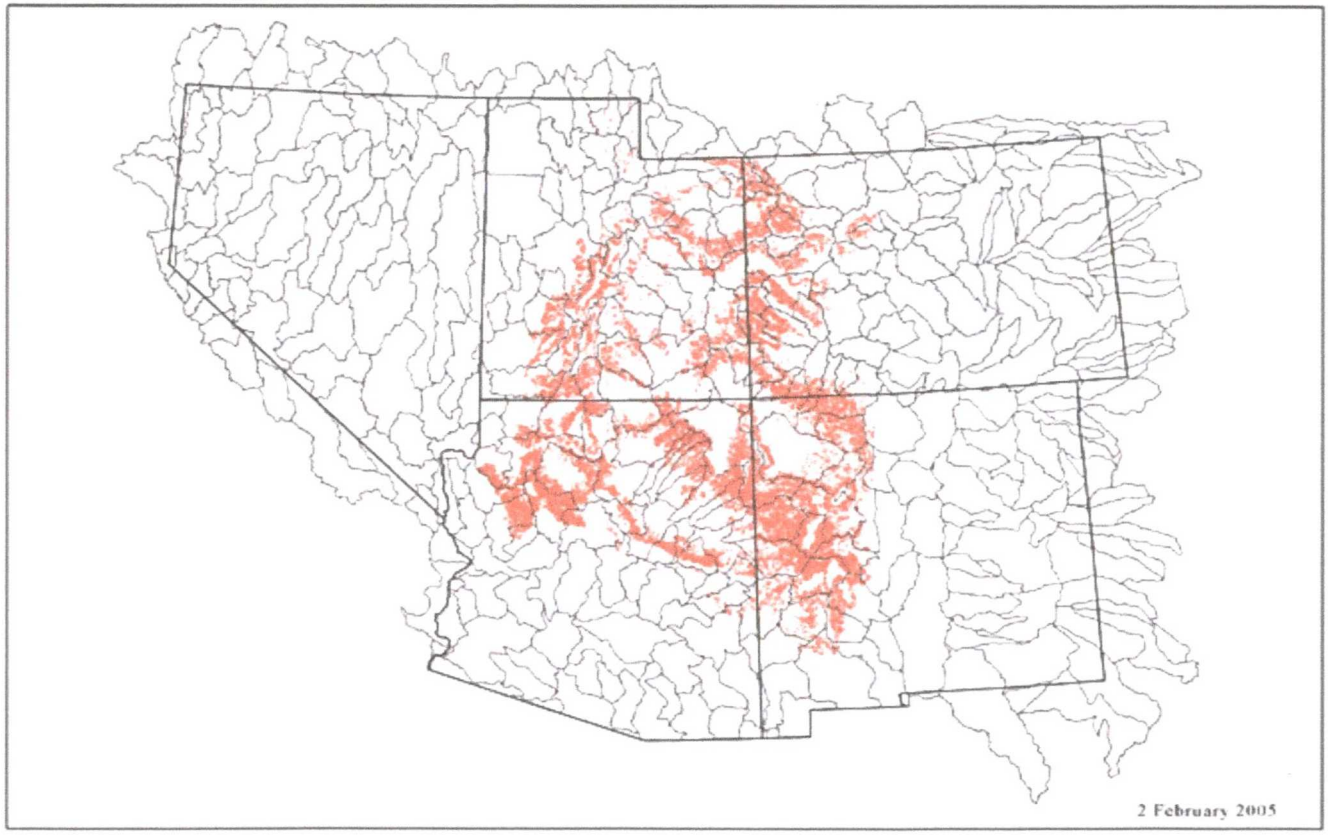
Southwest Regional GAP Analysis Project - Landcover Descriptions

S039 Colorado Plateau Pinyon-Juniper Woodland

This distribution map represents the Ecological System as it was mapped by the Southwest ReGAP Analysis Project for the 5-state region. The boundaries represent hydrologic units used for delineating Wildlife Habitat Relationships. Ecological Systems that are rare or have very limited distributions may not be visible on this map. Refer to the list below to identify where this system was mapped.

States where System was mapped by SWReGAP: AZ,CO,NM,UT

Distribution Map



SWReGAP data is projected in Albers Conical Equal Area with a longitude of Central Meridian at -96
For illustrations purposes this map is presented with a longitude of Central Meridian at -112.

Disclaimer: This is a draft product of SWReGAP. The user assumes the entire risk related to its use of this data. For more information and for related links, see http://fws-nmcfwru.nmsu.edu/swregap/

Southwest Regional Gap Analysis Project

Advanced Wireless Communications, LLC
Below Grade Tank Design and Construction

In accordance with NMAC 19.15.17 the following information describes the design and construction of below grade tanks on Advanced Wireless Communications, LLC(AWC) locations. This a procedure for all below grade tanks (BGT). A separate plan will be submitted in the event any BGT does not conform to this plan.

General Plan:

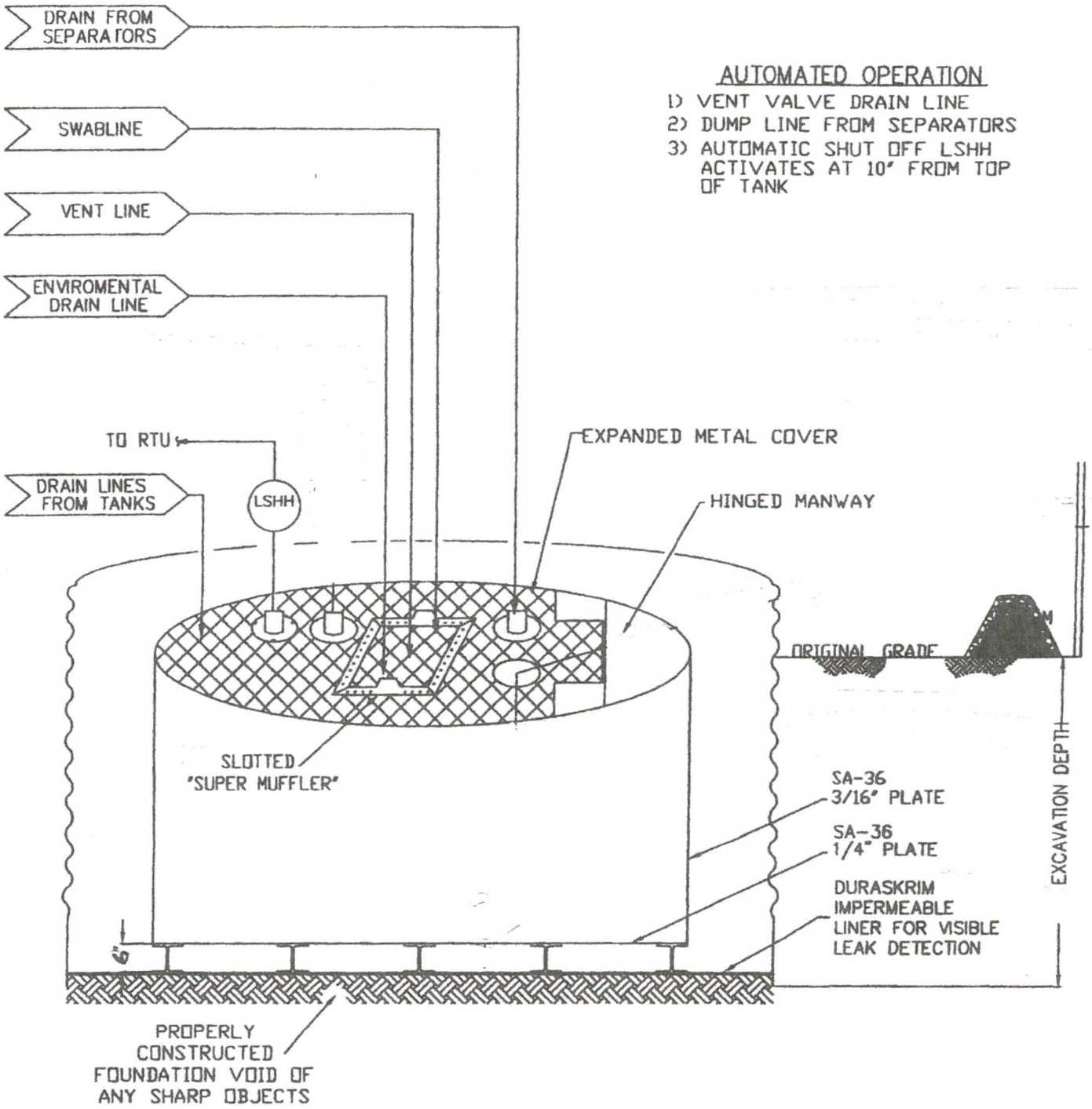
1. AWC will design and construct a properly sized and approved BGT which will contain liquids and should prevent contamination of fresh water to protect the public health and environment.
2. AWC signage will comply with 19.15.17.11 NMAC when AWC is the operator.
3. AWC constructs fencing using 4 foot hog wire fencing topped with one strand of barbed wire or with a steel top rail.
4. AWC will construct an expanded metal covering on the top of the BGT.
5. AWC will ensure that a below-grade tank is constructed of materials resistant to the below-grade tank's particular contents and resistant to damage from sunlight.
6. The below-grade tank system shall have a properly constructed foundation consisting of a level base free of rocks, debris, sharp edges or irregularities as shown on the design drawing.
7. AWC shall operate and install the below-grade tank to prevent the collection of surface water run-on. AWC has built in shut off devices that do not allow a below-grade tank to overflow. All berms or containments shall be at a minimum 6" above surrounding ground level to keep surface water run-on from enter the below grade tank or below grade tank containment. AWC shall construct a berm or containment of adequate size and material based on the specific application of each site.
8. AWC will construct and use a below-grade tank that does not have double walls. The below grade tank's side walls will be open for visual inspection for leaks, the below grade tank's bottom will be elevated a minimum of 6" above the underlying ground surface for visual inspection of leaks. The below-grade tank will be underlain with a geomembrane liner to divert leaked liquid to a location that can be visually inspected.
9. AWC will equip the below-grade tanks with the ability to detect high liquid level in the tank and provide alarm notification and shut down process streams into the tank. Once high level is detected RTU logic closes the inlet separator sales valve. This shutdown of the inlet valve prevents any hydrocarbon process streams from entering the below-grade tank once a high level is detected. In addition to the mechanical shut-in, an electronic page is sent out to 1)the designated water hauling company, 2)the designated pumper/MSO for that site, 3)the supervisors of AWC, notifying of the high tank level and indicating that action must be taken to address the alarm.
10. The geomembrane liner consists of a 45-mil flexible LLDPE material manufactured by Dura-Skrim as N45B. N45B is a flexible geomembrane, reinforced with a closely knit 9x9 weft inserted polyester scrim fully encapsulated between two layers of highly UV stabilized linear low density polyethylene.
11. Items depicted on the design diagram that will be installed only as applicable to operation of each well site and of a site specific nature: Swab Line, Vent Line, Production tank drain lines, drain line from compressor skid

MANUAL OPERATION

1) PRODUCTION TANKS DRAINLINE
2) SWABLINE DRAIN LINE
3) ENVIROMENTAL DRAIN LINE FROM COMPRESSOR SKID

AUTOMATED OPERATION

1) VENT VALVE DRAIN LINE
2) DUMP LINE FROM SEPARATORS
3) AUTOMATIC SHUT OFF LSHH ACTIVATES AT 10" FROM TOP OF TANK



PRODUCED WATER PIT TANK

OPEN TOP GRAVITY FLOW TANK

DURA♦SKRIM® N45B

SCRIM REINFORCED POLYETHYLENE – NSF/ANSI STANDARD 61 CERTIFIED

RAVEN

PRODUCT DESCRIPTION

DURA♦SKRIM® N45B is a flexible geomembrane, reinforced with a closely knit 9x9 weft inserted polyester scrim fully encapsulated between two layers of highly UV stabilized linear low density polyethylene. Exceptional toughness, high tensile and puncture strength is achieved with the combination of premium high strength LLDPE and dense scrim reinforcement. A highly stabilized formulation consisting of antioxidants, UV stabilizers and carbon black provide excellent protection for long-term exposed or barrier applications. DURA♦SKRIM® N-Series geomembranes are produced in the color black as standard, and are available in other custom manufactured colors with minimum order quantity requirements.

PRODUCT USE

DURA♦SKRIM® N45B is used in applications that require exceptional outdoor life requiring up to 20 years of exposure depending upon the geographical location. Applications requiring high tear properties, exceptional tensile strength and puncture resistance utilize N45B to meet these demands. DURA♦SKRIM® N-Series is manufactured from a chemical-resistant, linear-low-density polyethylene with excellent cold crack performance and resistance to thermal expansion.

DURA♦SKRIM® N45B meets the physical property values as stated in GRI test method GM25, and is certified under the NSF/ANSI Standard 61, Drinking Water System Components – Health Effects.

SIZE & PACKAGING

DURA♦SKRIM® N45B is available in a variety of widths and lengths to meet the project requirements. Large diameter mill rolls are available to assure an efficient seaming process. Factory welded panels are produced in a controlled environment and are accordion folded and tightly rolled on a heavy-duty core for ease of handling and time saving installation.

DURA♦SKRIM®

Bio Cell Liner

PRODUCT	PART #
DURA♦SKRIM	N45B

APPLICATIONS

- Waste Lagoon Liners
- Floating Covers
- Daily Landfill Covers
- Modular Tank Liners
- Tunnel Liners
- Remediation Liners
- Earthen Liners
- Interim Landfill Covers
- Landfill Caps
- Erosion Control Covers
- Canal Liners
- Disposal Pit Liner
- Water Containment Ponds
- Heap Leach Liner
- Secondary Containment
- Remediation Covers

DURA♦SKRIM® N45B

SCRIM REINFORCED POLYETHYLENE – NSF/ANSI STANDARD 61 CERTIFIED

PRO-FORMA DATA SHEET

		DURA♦SKRIM® N45B			
		IMPERIAL		METRIC	
PROPERTIES	TEST METHOD	MINIMUM	TYPICAL	MINIMUM	TYPICAL
Appearance		Black		Black	
Core Thickness	ASTM D5199	40 mil	45 mil	1.02 mm	1.14 mm
Weight	ASTM D751	189 lbf/msf	213 lbf/msf	923 g/m²	1040 g/m²
Construction		9x9-1000 Denier PET scrim reinforced polyethylene			
Tongue Tear Strength	ASTM D5884	100 lbf	135 lbf	445 N	601 N
Grab Tensile at Break	ASTM D7004	275 lbf	350 lbf	1223 N	1557 N
Tensile Elongation at Break	ASTM D7004	22 %	30 %	22 %	30 %
Puncture Resistance	ASTM D4833	108 lbf	125 lbf	480 N	556 N
Standard OIT or High Pressure HPOIT	ASTM D3895 ASTM D5885	100 min 400 min	150 min 2400 min	100 min 400 min	150 min 2400 min
Hydraulic Conductivity		1.47×10^{-10} cm/sec			
Maximum Static Use Temperature		180° F		82° C	
Minimum Static Use Temperature		-70° F		-57° C	

PRO-FORMA SHEET CONTENTS: The data listed in the Pro-Forma data sheet is representative of initial production runs. These values may be revised at anytime without notice as additional test data becomes available.

DURA♦SKRIM®

DURA♦SKRIM® N45B is a flexible geomembrane, reinforced with a closely knit 9x9 weft inserted polyester scrim fully encapsulated between two layers of highly UV stabilized linear low density polyethylene. Exceptional toughness, high tensile and puncture strength is achieved with the combination of premium high strength LLDPE and dense scrim reinforcement. A highly stabilized formulation consisting of antioxidants, UV stabilizers and carbon black provide excellent protection for long-term exposed or barrier applications.

Scan QR Code to download technical data sheets.

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www.ravenefd.com

RAVEN

Advanced Wireless Communications, LLC
Below Grade Tank Maintenance and Operating Plan

In accordance with Rule 19.15.17 the following information describes the operation and maintenance of Below Grade tanks on locations operated by Advanced Wireless Communications, LLC (AWC). This is standard procedure for all BGT. A separate plan will be submitted in the event any BGT does not conform to this plan.

General Plan:

1. AWC will operate and maintain a BGT to contain liquids and solids and maintain the integrity of the liner, liner system and secondary containment system to prevent contamination of fresh water and to protect public health and environment. AWC will accomplish this by performing an inspection on a monthly basis and installing automatic overflow shutoff devices as seen on the design plan.
2. AWC shall not discharge into or store any hazardous waste into the below grade tank.
3. AWC shall operate and install the below-grade tank to prevent the collection of surface water run-on. AWC has built in shut off devices that do not allow a below grade tank to overflow. AWC constructs berms at least 6" above the surrounding ground level to keep surface water run-on from entering the BGT or containment as shown on the design plan.
4. As per 19.17.15.12 subsection D, Paragraph 3, AWC will inspect the below-grade tank at least monthly reviewing several items which include 1)containment berms adequate and no oil present, 2)tanks had no visible leaks or sign of corrosion, 3)tank valves, flanges and hatches had no visible leaks and 4)no evidence of significant spillage of produced liquids. If any of these are detected upon inspection, AWC shall remove any visible or measurable layer of oil from the fluid surface of the BGT in an effort to prevent significant accumulation of oil over time. The written or digital record of the monthly inspections will include the items listed above and will be maintained for five years.
5. AWC shall require and maintain a 10" adequate freeboard to prevent overtopping of the below-grade tank.
6. If a pit or below-grade tank develops a leak, or if any penetration of the pit liner occurs below the liquid's surface, then AWC shall remove all liquid above the damage or leak within 48 hours of discovery, notify the appropriate division office pursuant to 19.15.29 NMAC and repair the damage or replace the pit liner or below-grade tank as applicable.
   If the tank integrity is compromised:
   a. All discharges will be shut off to the Below Grade Tank.
   b. All liquids will be removed as soon as possible but no later than 24 hours after discovery.
   c. AWC will notify and report to NMOCD in accordance to 19.15.29 NMAC and all other applicable agencies as required.

Advanced Wireless Communications, LLC
San Juan Basin
Below Grade Tank
Closure Plan

Lease Name: **Mims State Com 2**
API No.: **30-045-20587**
Description: **Section 16, Township 29N, Range 09W, San Juan County**

In accordance with Rule 19.15.17.13 NMAC the following information describes the closure requirements of below-grade tanks on Advanced Wireless Communications, LLC. (AWC) locations. This is Advanced Wireless Communications' standard procedure for all below-grade tanks. A separate plan will be submitted for any below-grade tank which does not conform to this plan.

General Plan

1. AWC will obtain approval of this closure plan prior to commencing closure of the below grade tank at this location pursuant to 19.15.17.13.C (1) NMAC

2. AWC will notify the surface owner by certified mail, return receipt requested, that the AWC plans closure operations at least 72 hours, but no more than one week, prior to any closure operation. Notice will include:

    a. Well Name
    b. API #
    c. Well Location

3. Advanced Wireless Communications, LLC will notify the NMOCD Aztec Office by email that the AWC plans closure operations at least 72 hours, but no more than one week, prior to any closure operation. Notice will include:
    a. Well Name
    b. API #
    c. Well Location

4. Within 60 days of cessation of operations, AWC will remove liquids and sludge from below-grade tanks prior to implementing a closure method and will dispose of the liquids and sludge in a division-approved facility. Approved facilities and waste streams include:

    a. Soils, tank bottoms, produced sand, pit sludge and other exempt wastes impacted by petroleum hydrocarbons will be disposed of at an approved location/facility.

    b. Produced Water will be disposed of at:
    Advanced Wireless Communications, LLC owned salt water Disposal Facilities

5. Within six (6) months of cessation of operations, AWC will remove the below-grade tank and dispose of it in a division-approved facility or recycle, reuse, or reclaim it in a manner that the appropriate division district office approves. If there is any equipment associated with a below-grade tank, then the AWC shall remove the equipment, unless the equipment is required for some other purpose.

6. AWC will collect a closure sample of the soil beneath the location of the below grade tank that is being closed. The closure sample will consist of a five-point composite sample to include any obvious stained or wet soils, or other evidence of contamination. The closure sample will be analyzed for all constituents listed in Table I below, including DRO+GRO, Chlorides, TPH, benzene and BTEX.

TABLE I

Depth Below bottom of pit to groundwater less than 10,000 mg/l TDS	**Constituent**	**Method**	**Limit**
≤ 50 Feet	Chloride	EPA 300.0	600 mg/kg
	TPH	Method 418.1	100 mg/kg
	BTEX	Method 8021B or 8260B	50 mg/kg
	Benzene	Method 8021B or 8260B	10 mg/kg
51 feet - 100 feet	Chloride	EPA 300.0	10,000 mg/kg
	TPH	Method 418.1	2,500 mg/kg
	GRO + DRO	Method 8015	1,000 mg/kg
	BTEX	Method 8021B or 8260B	50 mg/kg
	Benzene	Method 8021B or 8260B	10 mg/kg
> 100 feet	Chloride	EPA 300.0	20,000 mg/kg
	TPH	EPA 418.1	2,500 mg/kg
	GRO + DRO	Method 8015	1,000 mg/kg
	BTEX	Method 8021B or 8260B	50 mg/kg
	Benzene	Method 8021B or 8260B	10 mg/kg

7. If any contaminant concentration is higher than the parameters listed in Table I of 19.15.17.13 NMAC, the division may require additional delineation upon review of the results and the AWC must receive approval before proceeding with closure. If all contaminant concentrations are less than or equal to the parameters listed in Table I of 19.15.17.13 NMAC, then the AWC can proceed to backfill the pit, pad, or excavation with non-waste containing, uncontaminated, earthen material.

8. After closure has occurred, AWC will reclaim the former BGT area, if it is no longer being used for extraction of oil and gas, by substantially restoring the impacted surface area to the condition that existed prior to oil and gas operations. AWC will construct the soil cover to the site's existing grade and prevent ponding of water and erosion of the cover materials. The soil cover shall consist of the background thickness of topsoil, or one foot of suitable materials to establish vegetation at the site, whichever is greater. All areas will be reclaimed as early as practicable, and as close to their original condition or land use as possible. They shall be maintained in a way as to control dust and minimize erosion.

9. AWC will complete reclamation of all disturbed areas no longer in use when the ground disturbance activities at the site have been completed. The reseeding shall take place during the first favorable growing season after closure. Reclamation activities will be considered completed when a uniform vegetative cover has been established that reflects a life-form ratio of plus or minus fifty percent (50%) of pre-disturbance levels, and a total percent plant cover of at least seventy percent (70%) of pre-disturbance levels, excluding noxious weeds.

   *Re-vegetation and reclamation obligations imposed by other applicable federal, state or tribal agencies on lands managed by those agencies shall supersede the above requirements, provided they provide equal or better protection of fresh water, human health and the environment.

10. AWC will notify the Aztec Office of the NMOCD by email when reclamation and closure activities are completed.

11. Within 60 days of closure, AWC will submit a closure report to the Aztec office of the NMOCD, filed on Form C-144. The report will include the following:
    a. Proof of closure notice to NMOCD and surface owner
    b. Confirmation sampling analytical results
    c. Soil backfill and cover installation information
    d. Photo documentation of site reclamation