

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.

4897

**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.

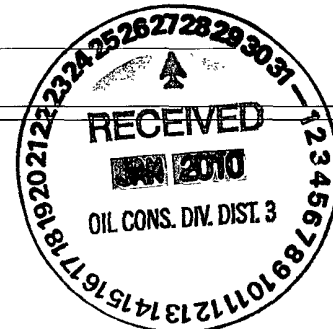
1.
Operator: McElvain Oil & Gas Properties, Inc. OGRID #: 22044
Address: 1050 17th St., Suite 1800, Denver, CO 80265-1801
Facility or well name: Big Gulp SWD No. 1
API Number: 30-045-35043 OCD Permit Number: _____
U/L or Qtr/Qtr L Section 20 Township 30N Range 13W County: San Juan
Center of Proposed Design: Latitude 36.79638°N Longitude 108.23401°W NAD: ☐ 1927 X 1983
Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
X 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: 5699 bbl Dimensions: L 90 x W 60 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 _____

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

X Alternate. Please specify Four foot high field fence on steel tee posts

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

X 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 X 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 X 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 X 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 X 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 X 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 X No

Within 500 feet of a wetland.

- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site

☐ Yes X No

Within the area overlying a subsurface mine.

- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division

☐ Yes X No

Within an unstable area.

- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map

☐ Yes X No

Within a 100-year floodplain.

- FEMA map

☐ Yes X 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
- X 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: _____

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 H₂S, 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: X 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)
- X On-site Closure Method (Only for temporary pits and closed-loop systems)
- X 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 identify 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: _____ Disposal Facility Permit Number: _____

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 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.

- 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.

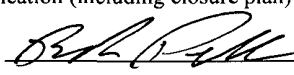
Name (Print): Robert E. Fielder Title: Agent

Signature:  Date: January 26, 2010

e-mail address: pmci@advantas.net Telephone: 505-320-1435

20.

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

OCD Representative Signature:  Approval Date: 2-2-10

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 identify 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: _____

Temporary Pit

Operating and Maintenance Procedures

McElvain Oil & Gas Properties, Inc. (MOG)

Big Gulp SWD No. 1

I. Design and Construction Specifications

- a. Prior to construction of the pit, three inches of soil will be stripped from the pit area and pushed to the southwest corner to act as a diversion berm for the drainage diversion around the pit. Additional excavated pit dirt will be pushed to the north edge of the pit area to divert the existing drainage around the pit area. The remaining pit dirt excavated will be stockpiled along the south edge to be used to fill the pit during interim reclamation. Due to the soil composition none will be stockpiled for topsoil. Topsoil will come from the contouring of the step down slope during interim reclamation.
- b. In lieu of a pit sign, MOG will install and maintain a sign on the wellsite in accordance with the provisions of Rule 103.
- c. Upon completion of construction and liner installation three sides of the temporary pit will be fenced with a four foot hogwire fence installed on steel tee posts since this location is over 1000 feet from the nearest residential building. The fourth side (rig side) will be fenced upon completion of the drilling operation and removal of the drilling equipment. This fence will be maintained to insure no access by livestock or wildlife as long as there is fluid in the temporary pit.
- d. The temporary pit will be constructed to the size shown on the attached Wellsite layout(s). Approximate volume of the temporary pit is 0.73 ac-ft. It is anticipated the top five feet will be alluvial material associated with this soil type (Badland). The bottom five feet is unknown but it will likely be the same material since there is an additional fifty feet of this badland ridge slope to the south of the pit area. The drainage to the south of the pit area is approximately twenty feet below the surface level of the pit area. The temporary pit walls will be constructed on 2:1 slopes. Any benches of rock encountered will be scraped to a depth to allow cover by soil material if possible. The side slopes will be walked down by the tractor to insure a smooth bottom and side walls for liner installation. Run on preventative measures will be installed on the northwest corner of the pit as shown on the site plan and discussed in 1. a. above.
- e. The temporary pit will be lined with a single section of 20 mil string reinforced LLDPE liner material with factory welded seams. The factory welded seams will be aligned running from the rig side to the outside wall. In the event a smooth bottom or wall slope cannot be attained on construction this liner will be underlain with a geotextile liner. The edges of the liner on the level part of the pad will be anchored in a trench around the perimeter at least eighteen inches deep and filled with dirt. An apron of identical material will be laid down over the step down slope. The location end will be anchored

in a trench on the level pad east of the mud tank. The pit side will be anchored in the same ditch as the pit liner along the east side.

II. Operational Plan

- a. MOG will use the proposed temporary to drill this well only. Timetable for pit reclamation will start after the well is drilled and the drilling rig is removed.
- b. MOG will operate and maintain the pit to contain the liquids and solids associated with the drilling phase of this operation, prevent contamination of the fresh water supply and protect the public health and the environment.
- c. MOG will not dispose of or store any hazardous material in this pit. All cement returns, workover and completion fluids associated with flow back or circulation during these operations will be stored in a flow back tank on location.
- d. MOG will monitor the condition of the installed liner from the date it is installed until the pit is closed. Visual inspection will be daily while the rig is onsite and weekly from rig release date to pit closure date. MOG will take the appropriate measures to repair and report to NMOCD any breach of the liner integrity within 48 hours of detection.
- e. Two feet of freeboard will be maintained in the pit at all times until closure.
- f. MOG will remove all free liquid from the temporary pit and haul it to the Key Four Corners Inc. facility, permit # NM-01-0009 within 30 days of cessation of the drilling operation. All fluids associated with drilling or workover operations that are accumulated and stored in the flow back tank will be removed within 30 days of cessation of these operations and hauled to the Key Four Corners Inc. facility.
- g. The pit will be maintained free of any solid refuse. This will be stored in a trash basket on the location.
- h. A header system or hoses without ends or unions will be used for loading liquid into or removing liquid from the temporary pit.
- i. The temporary pit will be maintained free of any oil accumulation. MOG will keep an oil absorbent boom on location for the entire time the pits are open.

III. Closure Plan

- a. MOG will close the pits within six months of the drilling rig release date of the well. MOG will provide 72 hour notice to the District 3 office prior to commencing closure operations.
- b. The surface ownership is BLM and they have been provided e-mail notification of the plan to proceed with in place burial if possible.
- c. MOG will initiate sampling and testing of the residue left in the pit after the completion of the liquid hauling operation in accordance with the applicable sampling and testing requirements outlined for in place burial. MOG will inspect the portion of the liner exposed by liquid removal for tears.

- i. If the testing of the residue meets the quality standards for in place burial listed below, MOG will proceed with in place burial as outlined in d. – h. below.

Components	Tests Method	Limit (mg/Kg)
Benzene	EPA SW-846 8021B or 8260B	0.2
BTEX	EPA SW-846 8021B or 8260B	50
TPH	EPA SW-846 418.1	2500
GRO/DRO	EPA SW-846 8015M	500
Chlorides	EPA 300.1	1000

- ii. If test results of the residue do not meet the quality standards for onsite burial, MOG will dispatch a vacuum truck as soon as practical in the contractors schedule. They will remove the residue and haul it to the JFJ Landfarm, permit # NM-01-0010. After the residue is removed the pit liner will be removed and hauled to an approved waste facility in San Juan County. MOG will then initiate testing and sampling of the temporary pit area as outlined in the Waste Evacuation and Haul section of the regulations. Results of these tests will be reported to the Aztec district office and the applicable closure method initiated.
- d. MOG will mix stockpiled pit dirt with residue at no more than a 3:1 ratio to stabilize the residue.
- e. MOG will cut and remove the section of the liner above the residue level in the temporary pit after residue stabilization. This will be disposed of at an approved San Juan County waste facility.
- f. MOG will use the remaining pit dirt stockpile to provide a compacted fill at least four feet thick over the stabilized residue to a depth within one feet of the step down pit edge. After removal of the step down apron and pit liner, MOG will push dirt from the step down slope to achieve a depth of one foot of topsoil and seeded with a free of noxious weeds seed mix consisting of at least three native plant species, including at least one grass, in the next applicable seeding season. Seeding will be done by broadcast method over the pit area and broadcast on the cut slopes. 70% coverage will be maintained through two successive growing seasons. MOG will provide notice to NMOCD at the end of the second successful season.
- g. MOG will file the applicable closure report with attachments within 60 days of completion of closure.
- h. MOG will install a 4" X 4' steel pipe marker at the center of the buried temporary pit, labeled in accordance with regulations, during interim reclamation.

IV. Siting Requirements substantiation and hydrogeologic data

- a. Hydrogeologic data –
- i. Surface formation – Ojo Alamo formation
- ii. Geographic setting – Located on a ridgeline running east southeast off of Pinon Mesa.

- iii. Soils – NRCS, BA – Badland- a non saline to very slightly saline soil formed by the erosion of shales and deposited as the south steep face of this ridgeline. Typical distribution is 0 – 60 inches: Badlands with possible sand/siltstone lens.
- iv. Drainage – Generally to the southeast. There are two identified drainages in the area of the subject location shown on the attached wellsite diagram. The first is an arroyo that originates at the base of the cliffs of Pinon Mesa in the NE/4 of section 19. This drains run off from approximately 80 acres along the slopes and possible excess spill over from Pinon Mesa cliffs during heavy rains. This wash is right at 200 feet from the wellhead and 245 feet from the NE pit corner at its closest point. The second is a deep gully that runs along the west side of the location. This drainage heads up approximately 600 feet west and slightly north of the northwest location corner and drains an estimated 2-3 acres in from a small basin upslope. Depth varies from 3-5 feet. Width is 3-4 feet. This gully doesn't drain much and obviously is the result of many years of run off erosion. This gully currently runs through the pit area and will be diverted around the west side of the pit by construction of a dam on the northwest corner of the pit constructed from pit dirt removed during excavation. This dam will remain after the pit is reclaimed.

b. Siting requirements substantiation

- i. There are no water wells identified on the iWaters data base in this section. We suspect there was a water well affiliated with the historic homestead approximately 4000 feet to the east but it was way before there were any records kept and was abandoned by the time the grace period was offered. A search of all the offsetting sections was done and turned up 24 wells with 12 water depth data records. Water depths reported varied from 9 feet to 306 feet. We plotted the locations on topo maps using iWaters UTM location data to determine ground level elevation which we used to calculate subsea elevations for the associated depth to water. The calculated subsea elevations ranged from +5280 to + 5421 feet. Averaging all of the calculated elevations yielded +5391 feet. Most of these calculated numbers, not surprisingly, came out very close to the La Plata river elevation equivalent. Initially we thought the strata was a valley fill zone but we found identical subsea calculations in two wells southwest of this location which indicate it is a body within the Ojo Alamo that is probably recharged up-dip of this area from surface run off and the river. With a twelve foot step down, elevation at the bottom of the pit is 5503 feet. Using the elevation range we calculate a depth to water of 82 to 223 feet. Using the overall average number we came up with a depth to groundwater of 112 feet. Due to the large number of data points that fell in the same subsea elevation range we feel this is a common zone over the area and feel this zone is over 100 feet below the bottom of the pit.

- ii. The only flowing watercourse is the La Plata River. It is 1.1 mile east of the location. The large arroyo north of the location is considered significant but it is over 200 feet from the pit. The gulley along the west side is not considered significant because of its limited drainage area. As diverted it will be approximately 60 – 80 feet from the pit.
- iii. The nearest building is the old homestead house 0.75 miles east of the location.
- iv. By iWaters UTM location data there are two water wells approximately 3700 feet from this location. One is southwest and one is southeast. Neither of these could be found during visual inspection. Suspect they are bad well spots on iWaters.
- v. This is a rural area location.
- vi. There are no USFWS identified wetlands within 500 feet of the proposed pit.
- vii. This was not identified as part of the FEMA 100 year flood plain. Nearest FEMA identified floodplain is 1250 feet northeast of proposed pit.
- viii. There were no unstable areas noted during the field inspection or evidence of underground mining activity. Archeological survey work on another location revealed an abandoned ocre mine slightly over a mile to the northwest of this proposed site. This mine is located in the base of the sandstone cliffs that define Pinon Mesa and 200 feet higher elevation. Check of the Mining & Minerals database revealed no mines, mills or quarries in this area.

District I

1625 N. French Dr. Hobbs, NM 88240

District II

1301 W. Grand Avenue, Artesia, NM 88210

District III

1000 Rio Brazos Rd., Aztec, NM 87410

District IV

1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico

Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, NM 87505

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number		2 Pool Code 96160-SWD		3 Pool Name Mesa Verde	
4 Property Code		5 Property Name BIG GULP SWD			6 Well Number 1
7 DGRID No. 22044		8 Operator Name McELVAIN OIL & GAS PROPERTIES, INC.			9 Elevation 5525

10 Surface Location

UL or Lot No.	Section	Township	Range	Lot Idn.	Feet from the	North/South Line	Feet from the	East/West Line	County
L	20	30 N	13 W		1807	South	1117	West	San Juan

11 Bottom Hole Location If Different From Surface

UL or Lot No.	Section	Township	Range	Lot Idn.	Feet from the	North/South Line	Feet from the	East/West Line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.

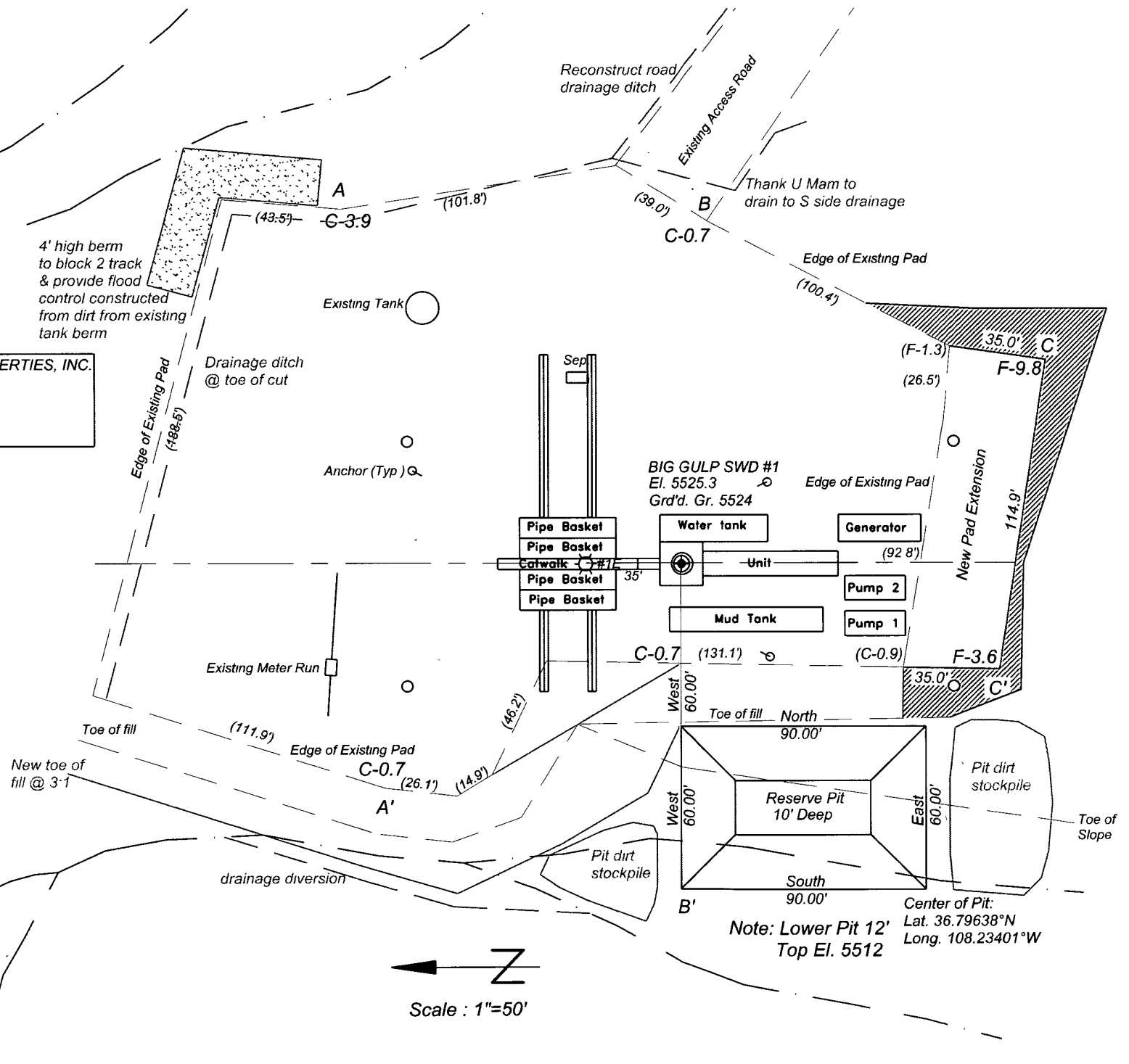
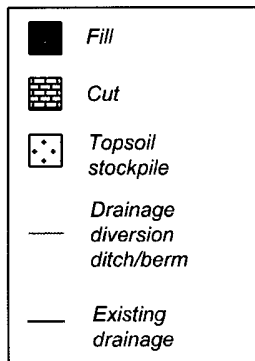
No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

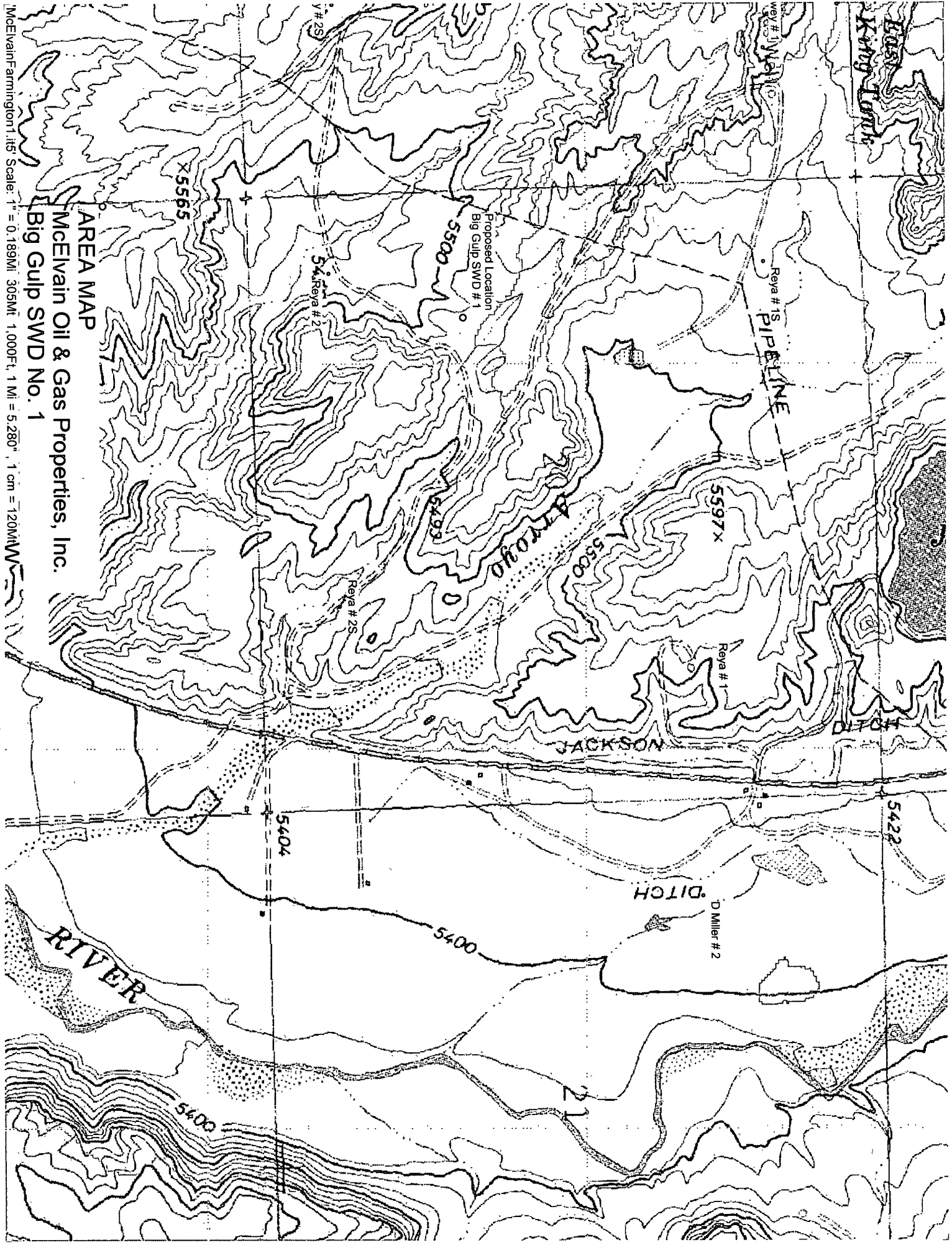
<p>16</p> <p>S 88°17' W</p> <p>40.41 Ch.</p> <p>N 89°11' W</p> <p>39.71 Ch.</p> <p>79.79 Ch.</p> <p>40.04 Ch.</p> <p>40.25 Ch.</p> <p>40.27 Ch.</p> <p>79.65 Ch.</p> <p>N 87°54' W</p> <p>1117'</p> <p>1807'</p> <p>Lat. 36.79650° N</p> <p>Long. 108.23371° W</p> <p>Sec. 20</p>	<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or undivided mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</p> <p>Signature _____ Date _____</p> <p>Printed Name _____</p>
	<p>18 SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>Date of Survey 02 Oct 2009</p> <p>Signature and Seal of Professional Surveyor</p> <p>William E. Mahnke II</p> <p>Certificate Number 8466</p>

Bearings from GLO Plat

McELVAIN OIL & GAS PROPERTIES, INC.
 BIG GULP SWD #1
 1807' FSL & 1117' FWL
 Sec. 20, T30N, R13W, NMPM
 San Juan Co., NM

Legend





McElvain Farmington 1:15 Scale: 1" = 0.189 Mi 305 Mt 1.000 Ft 1 Mi = 5.280' 1 cm = 120 Mt W

New Mexico Office of the State Engineer
POD Reports and Downloads

Township:	30N	Range:	13W	Sections:	16
NAD27	X:	Y:	Zone:	<input checked="" type="checkbox"/>	Search Radius:
County:	<input checked="" type="checkbox"/>	Basin:	<input checked="" type="checkbox"/>	Number:	Suffix:
Owner Name: (First)		(Last)		<input checked="" type="radio"/> Non-Domestic <input checked="" type="radio"/> Domestic	
		<input checked="" type="radio"/> All			
POD / Surface Data Report			Avg Depth to Water Report		
Water Column Report					
Clear Form		iWATERS Menu		Help	

AVERAGE DEPTH OF WATER REPORT 09/09/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
(Depth Water in Feet)										
No Records found, try again										

New Mexico Office of the State Engineer
POD Reports and Downloads

Township:	30N	Range:	13W	Sections:	17
NAD27	X:	Y:	Zone:		Search Radius:
County:		Basin:		Number:	Suffix:
Owner Name: (First)			(Last)	<input checked="" type="radio"/> Non-Domestic <input checked="" type="radio"/> Domestic	
			<input checked="" type="radio"/> All		
<input type="button" value="POD / Surface Data Report"/>			<input type="button" value="Avg Depth to Water Report"/>		
<input type="button" value="Water Column Report"/>					
<input type="button" value="Clear Form"/>		<input type="button" value="iWATERS Menu"/>		<input type="button" value="Help"/>	

AVERAGE DEPTH OF WATER REPORT 09/09/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
SJ	30N	13W	17				3	9	45	25

Record Count: 3

Avg SS Datum to water depth + 5418

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: **30N** Range: **13W** Sections: **17**

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☒ Non-Domestic ☒ Domestic
☒ All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

iWATERS Menu

Help

POD / SURFACE DATA REPORT 09/09/2008

DB File Nbr	(acre ft per annum)	Use	Diversion	Owner	POD Number
SJ 02565	DOM	Same as 3029	3	ALAN BERNHOLTZ	SJ 02565
SJ 02572	DOM		3	PATRICK MAURER	SJ 02572
SJ 02574	DOM	1995	3	VICTOR TED & COLLETTE HAMBLIN	SJ 02574 +5421
SJ 02657	DOM		3	WILLIAM FARRELL	SJ 02657
SJ 02943	DOM		3	MARTY WARD	SJ 02943
SJ 03017	DOM	2000	3	WILLARD R. CARTWRIGHT	SJ 03017 +5417
SJ 03029	DOM	2000	3	BERNADETTE LOPEZ	SJ 03029 +5416

Record Count: 7

AVG
+ 5418

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tw	Rng	Sec	q	q	q	Zone	E X	N Y
SJ 02565	30N	13W	17	2	2	2	13	212717	4079715

Driller Licence:

Driller Name:

Drill Start Date:

Log File Date:

Pump Type:

Casing Size:

Depth Well:

Source:

Drill Finish Date:

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water:

New Mexico Office of the State Engineer
Point of Diversion Summary



(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are biggest to smallest)

POD Number
SJ 02572

Tws Rng Sec q q q Zone
30N 13W 17 2 2 13

~~E~~ N
212618 4079616

Driller Licence:
Driller Name:
Drill Start Date:
Log File Date:
Pump Type:
Casing Size:
Depth Well:

Source:
Drill Finish Date:
PCW Received Date:
Pipe Discharge Size:
Estimated Yield:
Depth Water:

**New Mexico Office of the State Engineer
Point of Diversion Summary**

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	^E X	^N X
SJ 02574	30N	13W	17	2	4	4	13	212704	4079115

Driller Licence: 717 WESTERN WATER WELLS

Driller Name: HOOD, TERRY

Source: Shallow

Drill Start Date: 03/21/1995

Drill Finish Date: 03/21/1995

Log File Date: 03/27/1995

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size: 6

Estimated Yield: 15

Depth Well: 26

Depth Water: 9

Water Bearing Stratifications:	Top	Bottom	Description
	16	26	Sandstone/Gravel/Conglomer
Casing Perforations:	Top	Bottom	
	21	26	

GLE - 5430'
9

Depth SS → 5421 +

New Mexico Office of the State Engineer
Point of Diversion Summary



(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	$\frac{E}{X}$	$\frac{N}{X}$
SJ 02657	30N	13W	17	2	4		13	212605	4079216

Driller Licence:
Driller Name:
Drill Start Date:
Log File Date:
Pump Type:
Casing Size:
Depth Well:

Source:
Drill Finish Date:
PCW Received Date:
Pipe Discharge Size:
Estimated Yield:
Depth Water:

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	^E X	^N X
SJ 02943	30N	13W	17	2	1	2	13	212330	4079724

Driller Licence:

Driller Name: THOMPSON

Source:

Drill Start Date:

Drill Finish Date:

Log File Date:

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size: 6

Estimated Yield:

Depth Well: 60

Depth Water:

New Mexico Office of the State Engineer
Point of Diversion Summary



(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E	N
SJ 03017	30N	13W	17	2	4	2	13	X	X
								212704	4079315

Driller Licence:	1357	BAILEY DRILLING COMPANY	Source:	Shallow
Driller Name:	MARK BAILEY		Drill Finish Date:	07/07/2000
Drill Start Date:	07/07/2000		PCW Received Date:	
Log File Date:	07/19/2000		Pipe Discharge Size:	
Pump Type:			Estimated Yield:	5
Casing Size:	5		Depth Water:	20
Depth Well:	37			

Casing Perforations:	Top	Bottom
	17	37

GLE-5437
20
Depth(SS) 5477+

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E	N
SJ 03029	30N	13W	17	2	2	1	13	212517	4079715

Driller Licence: 1357 BAILEY DRILLING COMPANY	Source: Shallow
Driller Name: MARK BAILEY	Drill Finish Date: 07/25/2000
Drill Start Date: 07/23/2000	PCW Received Date:
Log File Date: 08/11/2000	Pipe Discharge Size:
Pump Type:	Estimated Yield: 7
Casing Size: 5	Depth Water: 45
Depth Well: 65	

Casing Perforations:	Top	Bottom
	45	65

GLE-5461
45
Depth (SS) 5416' +

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 30N Range: 13W Sections: 18

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic
☒ All

AVERAGE DEPTH OF WATER REPORT 09/09/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg

No Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 30N Range: 13W Sections: 19

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic
☒ All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

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AVERAGE DEPTH OF WATER REPORT 09/09/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg

No Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 30N Range: 13W Sections: 20

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic
☒ All

AVERAGE DEPTH OF WATER REPORT 09/09/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg

No Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: Range: Sections:

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☒ Non-Domestic ☒ Domestic
☒ All

AVERAGE DEPTH OF WATER REPORT 09/09/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg

No Records found, try again

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 30N Range: 13W Sections: 28

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic
☒ All

POD / Surface Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

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AVERAGE DEPTH OF WATER REPORT 09/09/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
SJ	30N	13W	28				2	306	306	306

Record Count: 2

**New Mexico Office of the State Engineer
Point of Diversion Summary**

Back

(quarters are .1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E	N	T
SJ 00992	30N	13W	28	2	1	1	13	213591	4076455	

Driller Licence: 809 CHIVERS BRYCE J.

Driller Name: CHIVERS, BRYCE

Source: Shallow

Drill Start Date: 06/25/1979

Drill Finish Date: 06/30/1979

Log File Date: 07/19/1984

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size: 4.5

Estimated Yield: 20

Depth Well: 624

Depth Water: 306

Water Bearing Stratifications:	Top	Bottom	Description
	590	600	Sandstone/Gravel/Conglomer
Casing Perforations:	Top	Bottom	
	560	620	

GLE - 5440
306
Depth(SS) + 5134

RIVER @ 5360'

ONLY FOUND THIS WELL - NOT 2
This plots IN 21 by UTM coordinates
GOODS double checked -
Different interval?
No way to tell with bad spot of
location. Suspect this is on top
of ridge to east.
call it bad DATA point

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 30N Range: 13W Sections: 29

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☒ Non-Domestic ☐ Domestic
☒ All

AVERAGE DEPTH OF WATER REPORT 09/09/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
SJ	30N	13W	29				10	15	65	31

Record Count: 10

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: **30N** Range: **13W** Sections: **29**

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic
☒ All

POD / Surface Data Report **Avg Depth to Water Report**
Water Column Report
Clear Form **iWATERS Menu** **Help**

POD / SURFACE DATA REPORT 09/09/2008

	DB File Nbr	Use	Diversion	Owner	POD Number	(acre ft per annum)	(qua)
1	SJ ✓00215	DOM	same as 2159? 3	JOHN L. ANDERSON	SJ 00215		
2	X SJ 00262	DOM	same as 868, 9923	JOE L. PRATER	SJ 00262	+5415	
3	SJ 00448	DOM	same as 1502 3	LEWIS E. PHILLIPS	SJ 00448	+5332	
	SJ 00868	DOM	3	ZEBRA CORPORATION	SJ 00868		
	SJ 00892	DOM	3	DEAN A. ANAYA	SJ 00892		
	SJ 01040	SAN	3	WILLIAM R. SCHWAB, JR.	SJ 01040		
	SJ 01062	DOM	3	HAL C. RICHMAN	SJ 01062		
4	X SJ 01357	DOM	last well, see same as 1040	C. B. BOWEN	SJ 01357	+5359	
	SJ 01358	DOM	3	AMY L. BOWEN	SJ 01358		
	SJ 01502	DOM	plug back, new work 01448	JOHN STURGES	SJ 01502		
	SJ ✓02159	DOM	plug back at 215 3	MELISSA FITZ	SJ 02159	+5325	
5	SJ 02754	DOM	3	EDWARD MOSIMANN	SJ 02754	+5280	
6	X SJ 03046	DOM	3	DAVID TRUMBLY	SJ 03046	+5373	

Record Count: 13

AVG = +5347
 Depth to water above SS

**New Mexico Office of the State Engineer
Point of Diversion Summary**

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	^E X	^N X
SJ 03046	30N	13W	29	2	2	4	13	212598	4076293

Driller Licence: 1479 THREE 3-D DRILLING

Driller Name: GILES, DEE

Source: Shallow

Drill Start Date: 05/10/2001

Drill Finish Date: 05/10/2001

Log File Date: 05/21/2001

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size: 6.63

Estimated Yield: 1

Depth Well: 80

Depth Water: 30

Water Bearing Stratifications:	Top	Bottom	Description
	0	80	Shallow Alluvium/Basin Fil
Casing Perforations:	Top	Bottom	
	61	79	

GLE-5403
30
Depth(ss) $\overline{5373}$ ' +

**New Mexico Office of the State Engineer
Point of Diversion Summary**



(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E X	N X
SJ 02754	30N	13W	29	4	4	4	13	212513	4075101

Driller Licence: 527 THOMPSON WELL DRILLING	Source: Shallow
Driller Name: THOMPSON, LEON	Drill Finish Date: 03/29/1997
Drill Start Date: 03/21/1997	PCW Received Date:
Log File Date: 04/23/1997	Pipe Discharge Size:
Pump Type:	Estimated Yield:
Casing Size: 6	Depth Water: 65
Depth Well: 65	

Water Bearing Stratifications:	Top	Bottom	Description
	0	65	Other/Unknown
Casing Perforations:	Top	Bottom	
	34	38	

GLE 5345
65
Depth(ss) 5280 +

**New Mexico Office of the State Engineer
Point of Diversion Summary**



(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E	N
SJ 02159	30N	13W	29	4	3		13	212010	4075217

Driller Licence: 733 MO-TE DRILLING, INC.

Driller Name:

Source: Shallow

Drill Start Date: 11/23/1987

Drill Finish Date: 11/24/1987

Log File Date: 11/30/1987

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size: 6

Estimated Yield:

Depth Well: 40

Depth Water: 15

SAME AS 00215

Water Bearing Stratifications:	Top	Bottom	Description
	20	27	Sandstone/Gravel/Conglomer
	27	30	Sandstone/Gravel/Conglomer
Casing Perforations:	Top	Bottom	
	20	40	

*5340
15
Depth (SS) 5325' + - use this
own - later data*

*215 Drld in 1977 to 55'
2159 Drld 10 yrs later but
shallower depth -
rework by plugging
back or redrill?*

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E	N
SJ 01502	30N	13W	29	4			13	212211	4075418

Driller Licence: 666 GILBERT, JOHN G.

Driller Name:

Source: Shallow

Drill Start Date: 11/09/1981

Drill Finish Date: 11/16/1981

Log File Date: 11/30/1981

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size:

Estimated Yield: 15

Depth Well: 47

Depth Water: 20

Water Bearing Stratifications:

Top
44

Bottom
47

Description

Sandstone/Gravel/Conglomer

*Same as 0448
SEE 448 for
DATA
rework*

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E	N
SJ 01358	30N	13W	29	2	2		13	212499	4076394

Driller Licence:

Driller Name:

Drill Start Date:

Log File Date:

Pump Type:

Casing Size:

Depth Well:

Source:

Drill Finish Date:

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water:

4th well @ same
location
NOT plotted
SEE 1357

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	^E X	^N X
SJ 01357	30N	13W	29	2	2		13	212499	4076394

Driller Licence: 527 THOMPSON WELL DRILLING

Driller Name: LEON THOMPSON

Source: Shallow

Drill Start Date: 05/20/1981

Drill Finish Date: 05/30/1981

Log File Date: 07/18/1984

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size:

Estimated Yield: 1

Depth Well: 71

Depth Water: 56

same as 1040
rebill
1062

Water Bearing Stratifications:	Top	Bottom	Description
	64	69	Sandstone/Gravel/Conglomer

GLE-5415'
56'
Depth(SS) 5359 +

plots on section line

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E	N
SJ 01062	30N	13W	29	2	2		13	212499	4076394

Driller Licence:

Driller Name:

Drill Start Date:

Log File Date:

Pump Type:

Casing Size:

Depth Well:

Source:

Drill Finish Date:

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water:

same as 1040?
NO 1357 plotted

**New Mexico Office of the State Engineer
Point of Diversion Summary**

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E	N
SJ 01040	30N	13W	29	2	2		13	212499	4076394

Driller Licence: 527 THOMPSON WELL DRILLING

Driller Name: THOMPSON, LEON

Source: Shallow

Drill Start Date: 09/10/1979

Drill Finish Date: 09/14/1979

Log File Date: 09/25/1979

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size: 7

Estimated Yield: 15

Depth Well: 49

Depth Water: 20

*Same as 1062
and 1357*

Water Bearing Stratifications:	Top	Bottom	Description
	45	49	Sandstone/Gravel/Conglomer

*1062 no records
This well drld in 1979
1357-DEEPING in 1981?
used 1357 data*

*14/12
1357*

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E	N
SJ 00892	30N	13W	29	2			13	212264	4076209

Driller Licence:

◊ Driller Name:

Drill Start Date:

Log File Date:

Pump Type:

Casing Size:

Depth Well:

Source:

Drill Finish Date:

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water:

SAME AS SJ00868?

not plotted

New Mexico Office of the State Engineer
Point of Diversion Summary

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E	N
SJ 00868	30N	13W	29	2			13	X	X
								212264	4076209

Driller Licence: 527 THOMPSON WELL DRILLING

Driller Name: LEON THOMPSON

Source: Shallow

Drill Start Date: 02/01/1979

Drill Finish Date: 02/05/1979

Log File Date: 02/16/1979

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size:

Estimated Yield: 12

Depth Well: 49

Depth Water: 25

Water Bearing Stratifications:	Top	Bottom	Description
	45	49	Sandstone/Gravel/Conglomer

SAME AS
00262 2
Rework of
00262 7
DEEPER -

3440
25
5415

**New Mexico Office of the State Engineer
Point of Diversion Summary**



(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E	N
SJ 00448	30N	13W	29	4			13	212211	4075418

Driller Licence: 717 WESTERN WATER WELLS

Driller Name:

Source: Shallow

Drill Start Date: 09/05/1977

Drill Finish Date: 09/07/1977

Log File Date: 09/12/1977

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size: 6.63

Estimated Yield: 10

Depth Well: 45

Depth Water: 20

same as 1502

Water Bearing Stratifications:	Top	Bottom	Description
	35	45	Sandstone/Gravel/Conglomer
Casing Perforations:	Top	Bottom	
	41	45	

5352 GLE
20
+5332 Depth 55
River depth

+

**New Mexico Office of the State Engineer
Point of Diversion Summary**



(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E X	N Y
SJ 00262	30N	13W	29	2			13	212264	4076209

Driller Licence: 666 GILBERT, JOHN G. Driller Name: GILBERT, JOHN G. Drill Start Date: 05/05/1977 Log File Date: 05/17/1977 Pump Type: Casing Size: 6.63 Depth Well: 38	Source: Shallow Drill Finish Date: 05/10/1977 PCW Received Date: Pipe Discharge Size: Estimated Yield: 15 Depth Water: 25
---	--

Water Bearing Stratifications:	Top	Bottom	Description
	32	38	Sandstone/Gravel/Conglomer

same as
00868
rework

GLE-5440
25
Depth(SS) 5415 +

**New Mexico Office of the State Engineer
Point of Diversion Summary**



(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E	N
SJ 00215	30N	13W	29	4	3		13	212010	4075217

Driller Licence: 666 GILBERT, JOHN G.

Driller Name:

Source: Shallow

Drill Start Date: 04/14/1977

Drill Finish Date: 04/16/1977

Log File Date: 04/25/1977

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size: 6

Estimated Yield: 12

Depth Well: 55

Depth Water: 35

Water Bearing Stratifications:	Top	Bottom	Description
	45	55	Sandstone/Gravel/Conglomer

*SAME as 2159
2159 rework
OF this well
2159 had lesser
water depth
↓
used
2159
data*

*GLE 5375'
35' - ignore
Depth(SS) 5340'*

New Mexico Office of the State Engineer
POD Reports and Downloads

Township:	<input type="text" value="30N"/>	Range:	<input type="text" value="13W"/>	Sections:	<input type="text" value="30"/>	
NAD27	X: <input type="text"/>	Y: <input type="text"/>	Zone:	<input type="text" value="1"/>	Search Radius: <input type="text"/>	
County:	<input type="text"/>	Basin:	<input type="text"/>	Number:	<input type="text"/>	Suffix:
Owner Name: (First) <input type="text"/>		(Last) <input type="text"/>		<input checked="" type="radio"/> Non-Domestic <input checked="" type="radio"/> Domestic		
<input checked="" type="radio"/> All						
<input type="button" value="POD / Surface Data Report"/>			<input type="button" value="Avg Depth to Water Report"/>			
<input type="button" value="Water Column Report"/>						
<input type="button" value="Clear Form"/>		<input type="button" value="iWATERS Menu"/>		<input type="button" value="Help"/>		

AVERAGE DEPTH OF WATER REPORT 09/09/2008

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
RG	30N	13W	30				1	45	45	45
SJ	30N	13W	30				1	21	21	21

Record Count: 2

+5407 SS AVG

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 30N Range: 13W Sections: 30

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ☐ Non-Domestic ☐ Domestic
☒ All

POD / SURFACE DATA REPORT 09/09/2008

DB File Nbr	(acre ft per annum)	Use	Diversion	Owner	POD Number	(qua
RG 22431	DOM	3	GILBERTO T. APODACA	RG 22431	+5395	(qua
SJ 00467	DOM	3	JAMES A. SHAY	SJ 00467	+5419	

Record Count: 2

New Mexico Office of the State Engineer
Point of Diversion Summary



(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number

RG 22431

Tws

30N

Rng

13W

Sec

30

q

2

q

q

Zone

13

~~E~~

210631

~~N~~

4076258

Driller Licence: 526 U/I

Driller Name: U/I

Drill Start Date: 08/20/1975

Log File Date: 08/29/1975

Pump Type:

Casing Size:

Depth Well: 100

Source: Shallow

Drill Finish Date: 08/27/1975

PCW Received Date:

Pipe Discharge Size:

Estimated Yield:

Depth Water: 45

5440 GLE
45
± 5395' Depth SS

**New Mexico Office of the State Engineer
Point of Diversion Summary**

Back

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are biggest to smallest)

POD Number	Tws	Rng	Sec	q	q	q	Zone	E	N
SJ 00467	30N	13W	30	4	4		13	210798	4075254

Driller Licence: 725 MCDONALD'S WATER WELL DRLG

Driller Name: MCDONALD, D.K.

Source: Shallow

Drill Start Date: 10/27/1977

Drill Finish Date: 10/28/1977

Log File Date: 11/03/1977

PCW Received Date:

Pump Type:

Pipe Discharge Size:

Casing Size: 6.63

Estimated Yield: 16

Depth Well: 36

Depth Water: 21

Water Bearing Stratifications:	Top	Bottom	Description
	30	36	Sandstone/Gravel/Conglomer
Casing Perforations:	Top	Bottom	
	30	36	

GIE - 5440

21

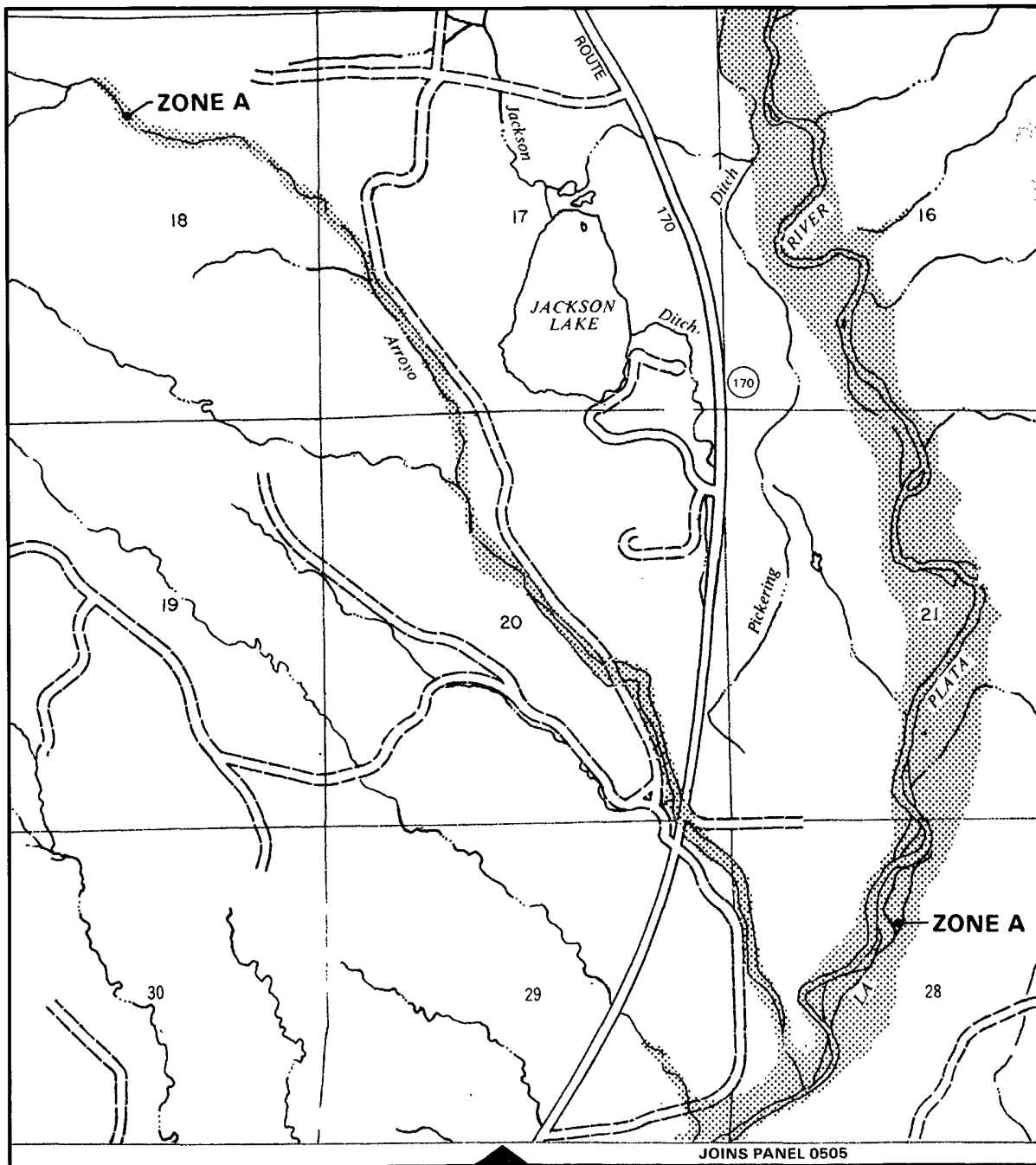
+5419' Depth (ss)

Bob Fielder

From: Bob Fielder [pmci@advantas.net]
Sent: Wednesday, January 27, 2010 6:27 AM
To: Mark Kelly (mark_kelly@nm.blm.gov)
Subject: Notification of On Site Burial

McElvain Oil & Gas Properties, Inc. proposes to use the onsite in place burial technique for the reclamation of the temporary pit on the Big Gulp SWD #1 well, providing the residue passes the NMOCD quality requirements. This is your notification as surface owner. If you have any questions please call 505.320.1435.





APPROXIMATE SCALE

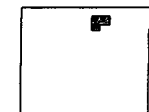
2000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

SAN JUAN COUNTY,
NEW MEXICO
UNINCORPORATED AREAS

PANEL 325 OF 1450
(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANFI LOCATION

COMMUNITY-PANEL NUMBER
350064 0325 B

EFFECTIVE DATE:
AUGUST 4, 1988

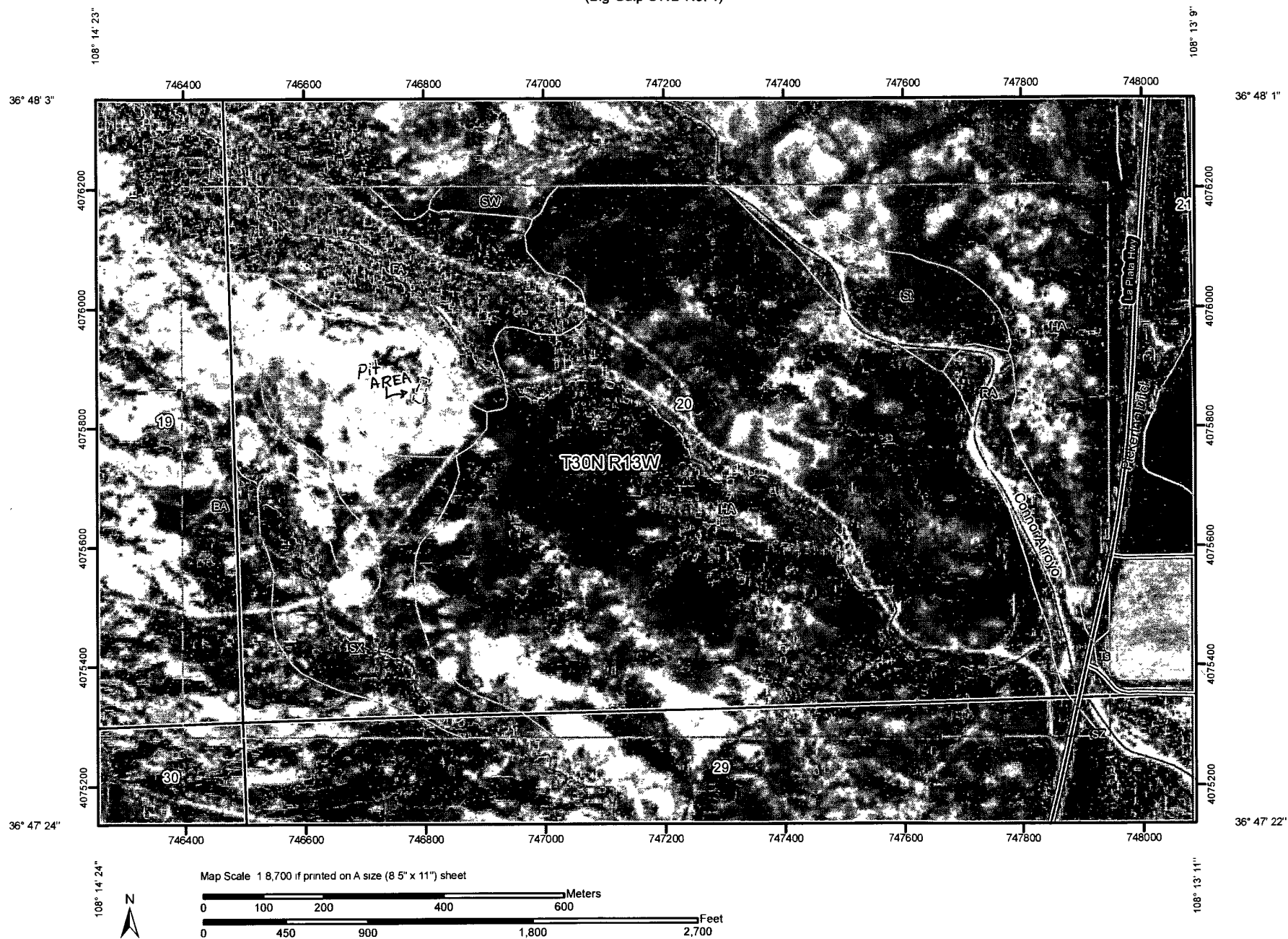


Federal Emergency Management Agency

JOINS PANEL 0505

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov


Soil Map—San Juan County, New Mexico, Eastern Part
(Big Gulp SWD No. 1)



Soil Map—San Juan County, New Mexico, Eastern Part
(Big Gulp SWD No. 1)

MAP LEGEND




Area of Interest (AOI)


 Area of Interest (AOI)


Soils

 Soil Map Units

Special Point Features




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

 Very Stony Spot




 Wet Spot

 Other



Special Line Features

-  Gully
-  Short Steep Slope
-  Other






Political Features

-  Cities
-  PLSS Township and Range
-  PLSS Section

Water Features

-  Oceans
-  Streams and Canals

Transportation

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

MAP INFORMATION

Map Scale: 1:8,700 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:63,360.

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

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 12N NAD83

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

Soil Survey Area: San Juan County, New Mexico, Eastern Part
Survey Area Data: Version 10, Sep 23, 2009

Date(s) aerial images were photographed: 10/13/1997

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

Map Unit Legend

San Juan County, New Mexico, Eastern Part (NM618)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BA	Badland	52.1	14.7%
FA	Farb-Persayo-Rock outcrop complex, moderately steep	31.1	8.8%
HA	Haplargids-Blackston-Torriorthefts complex, very steep	213.4	60.3%
RA	Riverwash	11.3	3.2%
St	Stumble loamy sand, 0 to 3 percent slopes	13.1	3.7%
SW	Stumble-Fruitland association, gently sloping	2.3	0.6%
SX	Stumble-Notal complex, gently sloping	30.2	8.5%
SZ	Stumble-Slickspots complex, gently sloping	0.1	0.0%
Ts	Turley clay loam, 3 to 5 percent slopes	0.3	0.1%
Totals for Area of Interest		353.8	100.0%

MMQonline Public Version

