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.

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

431

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 Street , Suite 1800, Denver, CO 80265
Facility or well name: Big Bucks #2
API Number: 30-045-33124 OCD Permit Number:
U/L or Qtr/Qtr L Section 16 Township 30N Range 12W County: San Juan
Center of Proposed Design: Latitude 36.80967 N Longitude -108.10913 W NAD: ☒1927 ☐ 1983
Surface Owner: ☐ Federal ☒ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.
☐ **Pit:** Subsection F or G of 19.15.17.11 NMAC
Temporary: ☐ Drilling ☐ Workover
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A
☐ Lined ☐ Unlined Liner type: Thickness _____mil ☐ LLDPE ☐ HDPE ☐ PVC ☐ Other _____
☐ String-Reinforced
Liner Seams: ☐ Welded ☐ Factory ☐ Other _____ Volume: _____bbl Dimensions: L_____ x W_____ x D_____

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 _____

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SEP 2009
OIL CONS. DIV. DIST. 3

4.
☒ **Below-grade tank:** Subsection I of 19.15.17.11 NMAC
Volume: 95 bbl Type of fluid: Oil & Water
Tank Construction material: Steel
☒ 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.

22

6.

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

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

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

☒ Alternate. Please specify____6'___Chain Link_____

7.

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

☐ Screen ☐ Netting ☒ Other___Expanded Metal_____

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

8.

Signs: Subsection C of 19.15.17.11 NMAC

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

☒ Signed in compliance with 19.15.3.103 NMAC

9.

Administrative Approvals and Exceptions:

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

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

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

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

10.

Siting Criteria (regarding permitting): 19.15.17.10 NMAC

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

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

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

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

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

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

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

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

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

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

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

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

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

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

15.
Waste Excavation and Removal Closure Plan Checklist: (19.15.17.13 NMAC) ***Instructions: Each of the following items must be attached to the closure plan. Please indicate, by a check mark in the box, that the documents are attached.***

- ☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC
- ☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC
- ☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings)
- ☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC
- ☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC
- ☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

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

Disposal Facility Name: Key Four Corners Inc Disposal Facility Permit Number: 9

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): Deborah K Powell Title: Engineering Tech Supervisor

Signature: Deb K Powell Date: 9-3-08

e-mail address: DebbyP@McElvain.com Telephone: 303-893-0933

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

OCD Representative Signature: Jonathan D. Kelly **Approval Date:** 4/24/2012

Title: Compliance Officer **OCD Permit Number:**

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

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

☐ **Closure Completion Date:**

22.
Closure Method:

☐ Waste Excavation and Removal ☐ On-Site Closure Method ☐ Alternative Closure Method ☐ Waste Removal (Closed-loop systems only)

☐ If different from approved plan, please explain.

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

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

Disposal Facility Name: Disposal Facility Permit Number:

Disposal Facility Name: Disposal Facility Permit Number:

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

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

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

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

24.
Closure Report Attachment Checklist: ***Instructions: Each of the following items must be attached to the closure report. Please indicate, by a check mark in the box, that the documents are attached.***

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

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

25.
Operator Closure Certification:

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

Name (Print): Title:

Signature: Date:

e-mail address: Telephone:

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
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	3 Pool Name
30-045-33124	71629	BASIN FRUITLAND COAL

4 Property Code	5 Property Name	6 Well Number
34842	BIG BUCKS	2

7 OGRID No.	8 Operator Name	9 Elevation
22044	McELVAIN OIL & GAS PROPERTIES	5743'

10 Surface Location

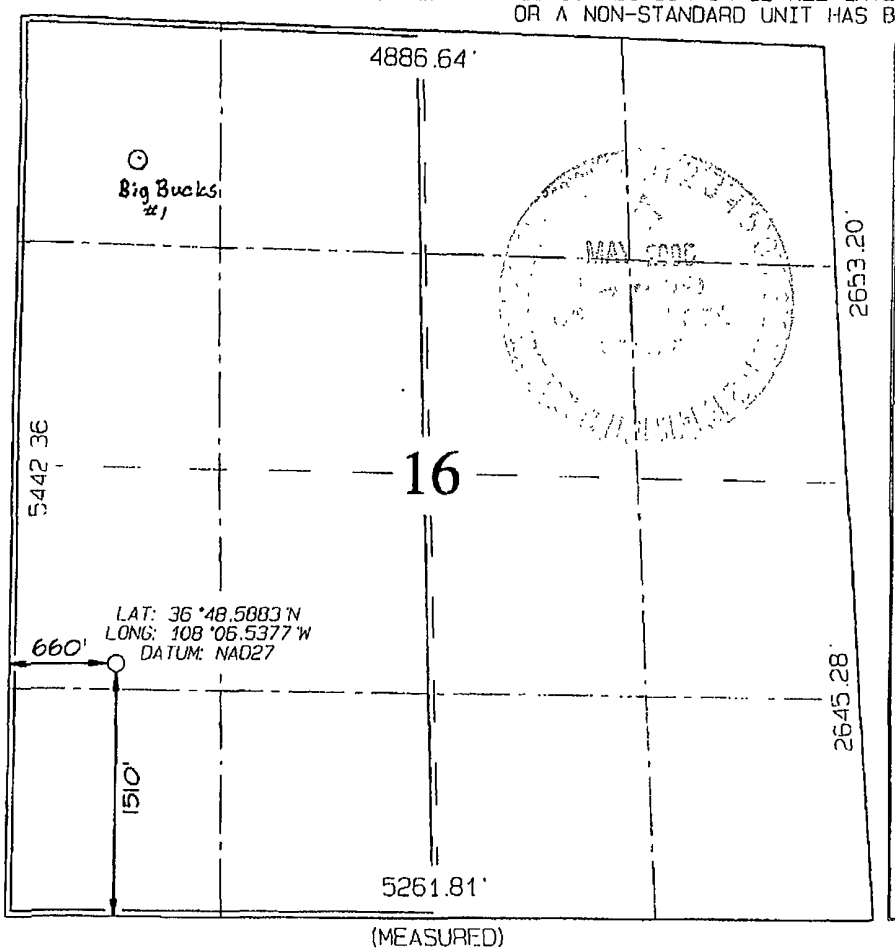
UL or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	16	30N	12W		1510	SOUTH	660	WEST	SAN JUAN

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
320.0 Acres - (W/2)			

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



17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature

Robert E. Fielder R
Printed Name

Agent
Title

May 31, 2005
Date

18 SURVEYOR CERTIFICATION

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

Date of Survey: MARCH 3, 2005

Signature and Seal of Professional Surveyor

JASON C. EDWARDS
NEW MEXICO
15269
REGISTERED PROFESSIONAL SURVEYOR

JASON C. EDWARDS
Certificate Number 15269

New Mexico Office of the State Engineer
POD Reports and Downloads

Township: 30N Range: 12W Sections: 8,9,10,15,16,17,20,21,22

NAD27 X: Y: Zone: Search Radius:

County: SJ 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

WATER COLUMN REPORT 08/14/2008

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

POD Number	Tws	Rng	Sec	q	q	q	Zone	X	Y	Depth Well	Depth Water	Water Column (in feet)
SJ 03767 POD1	30N	12W	10	2	4	2		265151	2121325	265	82	183
SJ 02128	30N	12W	10	3	4					140	60	80
SJ 00945	30N	12W	10	3	4					130	70	60
SJ 00421	30N	12W	10	4	4					126	43	83
SJ 00367	30N	12W	15							95	50	45
SJ 02168	30N	12W	15							78	50	28
SJ 01178	30N	12W	15	1	4					110	80	30
SJ 03401	30N	12W	15	1	4	3				180	56	124
SJ 01881	30N	12W	15	2						157	100	57
SJ 00817	30N	12W	15	2	3	4				96	53	43
SJ 03108	30N	12W	15	2	4	1				110	29	81
SJ 03432	30N	12W	15	2	4	2				165	105	60
SJ 00883	30N	12W	15	3						75	35	40
SJ 02120	30N	12W	15	3						77	55	22
SJ 00709	30N	12W	15	3						52	20	32
SJ 00145	30N	12W	15	3						165	60	105
SJ 01162	30N	12W	15	3						50		
SJ 00416	30N	12W	15	3	1					120	60	60
SJ 02127	30N	12W	15	3	3					55	35	20
SJ 03238	30N	12W	15	3	3	2				75	30	45
SJ 02760	30N	12W	15	3	3	2				50	21	29
SJ 01438	30N	12W	15	3	4					96	66	30
SJ 00730	30N	12W	15	3	4					90	30	60
SJ 00710	30N	12W	15	3	4					90	30	60
SJ 01793	30N	12W	15	3	4					50	22	28
SJ 00816	30N	12W	15	3	4					58	30	28
SJ 00714	30N	12W	15	3	4					92	40	52
SJ 00717	30N	12W	15	3	4					100	60	40
SJ 01215	30N	12W	15	3	4					60	30	30
SJ 01037	30N	12W	15	3	4					50	20	30
SJ 00829	30N	12W	15	3	4					68	30	38
SJ 00684	30N	12W	15	3	4					73	30	43
SJ 00928	30N	12W	15	3	4					68	32	36
SJ 00731	30N	12W	15	3	4					90	30	60
SJ 00912	30N	12W	15	3	4					58	35	23
SJ 00828	30N	12W	15	3	4					59	28	31
SJ 00828 (1)	30N	12W	15	3	4					43	20	23
SJ 00481	30N	12W	15	3	4	2				52	30	22
SJ 00516	30N	12W	15	3	4	3				55	8	47
SJ 00927	30N	12W	15	4	1	2				204	75	129
SJ 00594	30N	12W	15	4	2					145	95	50
SJ 00810	30N	12W	15	4	3	3				96	35	61
SJ 03159	30N	12W	15	4	4	2				60		
SJ 02514	30N	12W	15	4	4	4				57	25	32
SJ 01279	30N	12W	16	4	4					200	100	100
SJ 00950	30N	12W	21	4	4					70	35	35
SJ 02163	30N	12W	21	4	4	4	W	424400	2174000	31	15	16

SJ 01152	30N	12W	22	1	1	2			66	19	47
SJ 01877	30N	12W	22	1	1	2			94	66	28
SJ 01297	30N	12W	22	1	2	2			67	30	37
SJ 00439	30N	12W	22	1	3				97	50	47
SJ 03087	30N	12W	22	1	3	4			40	21	19
SJ 00462	30N	12W	22	1	4				61	12	49
SJ 03056	30N	12W	22	1	4	1			88	30	58
SJ 00312	30N	12W	22	2					94	35	59
SJ 00695	30N	12W	22	2					70	29	41
SJ 00360	30N	12W	22	2	2				35	3	32
SJ 00746	30N	12W	22	2	2	2			42	6	36
SJ 01273	30N	12W	22	2	3				100	38	62
SJ 00800	30N	12W	22	2	3				79	27	52
SJ 01684	30N	12W	22	3	1				80	45	35
SJ 03424	30N	12W	22	3	2				64	24	40
SJ 03661	30N	12W	22	3	2	1			65	19	46
SJ 03289	30N	12W	22	3	2	1			70	19	51
SJ 03607	30N	12W	22	3	2	1	264817	2109564	57	33	24
SJ 03060	30N	12W	22	3	2	2			57	21	36
SJ 03101	30N	12W	22	3	2	2			74	12	62
SJ 03059	30N	12W	22	3	2	2			61	24	37
SJ 03616	30N	12W	22	3	2	2			67	20	47
SJ 03662	30N	12W	22	3	2	2			63	20	43
SJ 03500	30N	12W	22	3	3	1			56	24	32
SJ 03157	30N	12W	22	3	3	2			46	18	28
SJ 01393	30N	12W	22	3	4				39	12	27
SJ 01165	30N	12W	22	3	4				42	14	28
SJ 01312	30N	12W	22	3	4				38	20	18
SJ 00569	30N	12W	22	3	4				44	10	34
SJ 03317	30N	12W	22	3	4	2			50		
SJ 02008	30N	12W	22	4	1				42	7	35
SJ 02014	30N	12W	22	4	1				45	10	35
SJ 01614	30N	12W	22	4	1				45	7	38
SJ 01301	30N	12W	22	4	2				50	10	40
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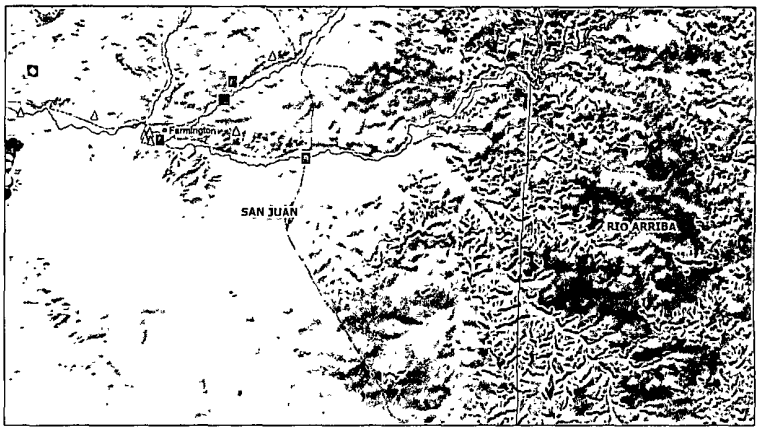
SJ 00224	30N	12W	22	4	2	1			48	22	26
SJ 02305	30N	12W	22	4	2	1			41	20	21
SJ 02133	30N	12W	22	4	3				40	14	26
SJ 03233	30N	12W	22	4	3	3			42	8	34
SJ 03473	30N	12W	22	4	3	3			40		
SJ 01464	30N	12W	22	4	3	3			40	15	25
SJ 00903	30N	12W	22	4	3	3			45	10	35
SJ 01340	30N	12W	22	4	3	4			40	9	31
SJ 01386	30N	12W	22	4	3	4			40	12	28
SJ 01980	30N	12W	22	4	4				20	5	15
SJ 01860	30N	12W	22	4	4				20	3	17
SJ 03038	30N	12W	22	4	4	3			30	5	25
SJ 02876	30N	12W	22	4	4	3			33	23	10
SJ 03397	30N	12W	22	4	4	3			42	5	37
SJ 03041	30N	12W	22	4	4	4			43	8	35
SJ 02387	30N	12W	22	4	4	4			16	5	11

Record Count: 98

San Juan Mines, Mills And Quarries Web Map

Mines, Mills & Quarries Commodity Groups

- △ Aggregate & Stone Mines
- ◆ Coal Mines
- ★ Industrial Minerals Mines
- ▼ Industrial Minerals Mills
- ◪ Metal Mines and Mill Concentrate
- ■ Potash Mines & Refineries
- Smelters & Refinery Ops.
- Uranium Mines

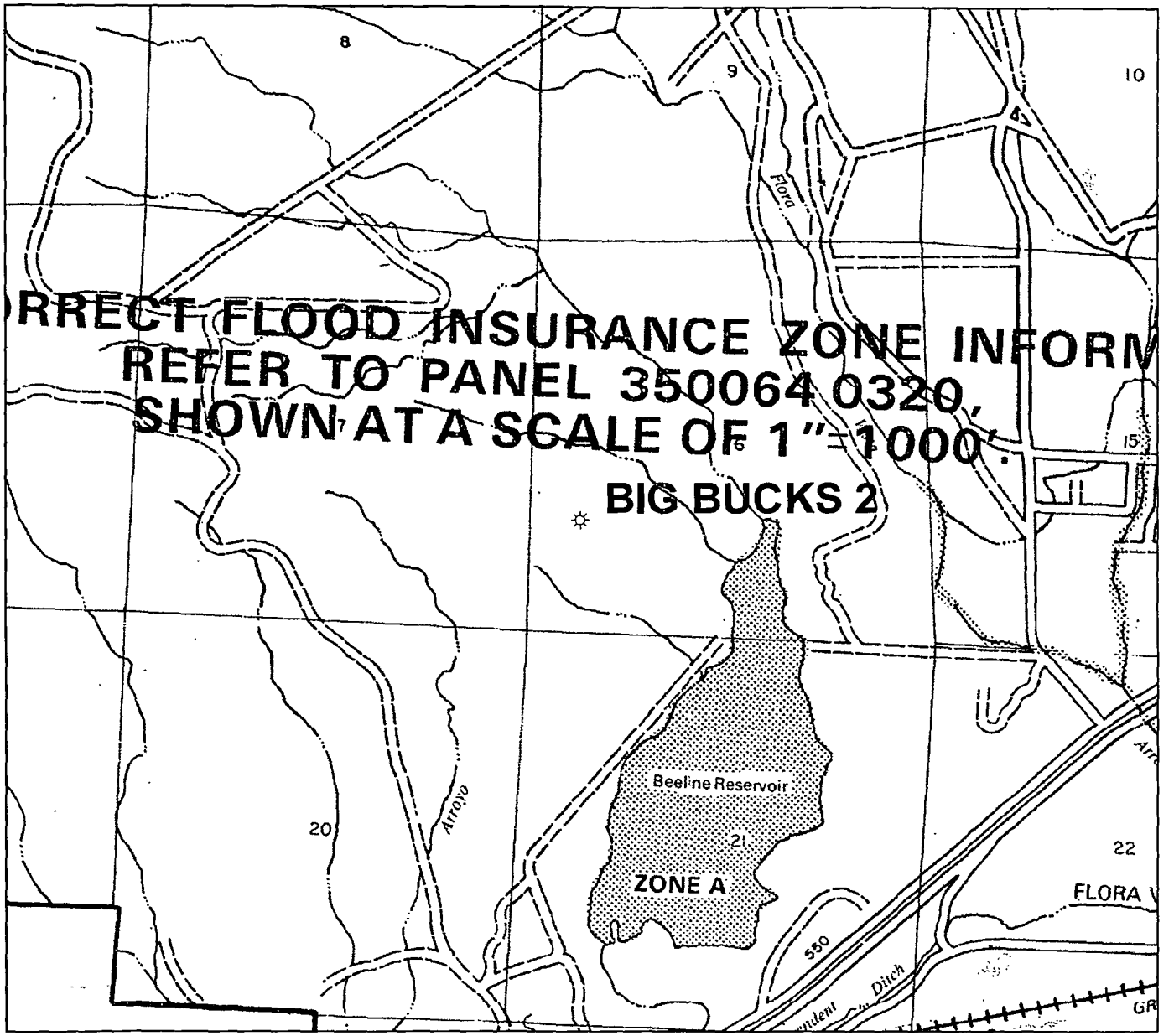


SCALE 1 : 1,065,032

10 0 10 20 30

MILES

N



1:24,000

Feet

0 950 1,900 3,800 5,700 7,600

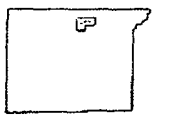
NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

SAN JUAN COUNTY,
NEW MEXICO
UNINCORPORATED AREAS

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

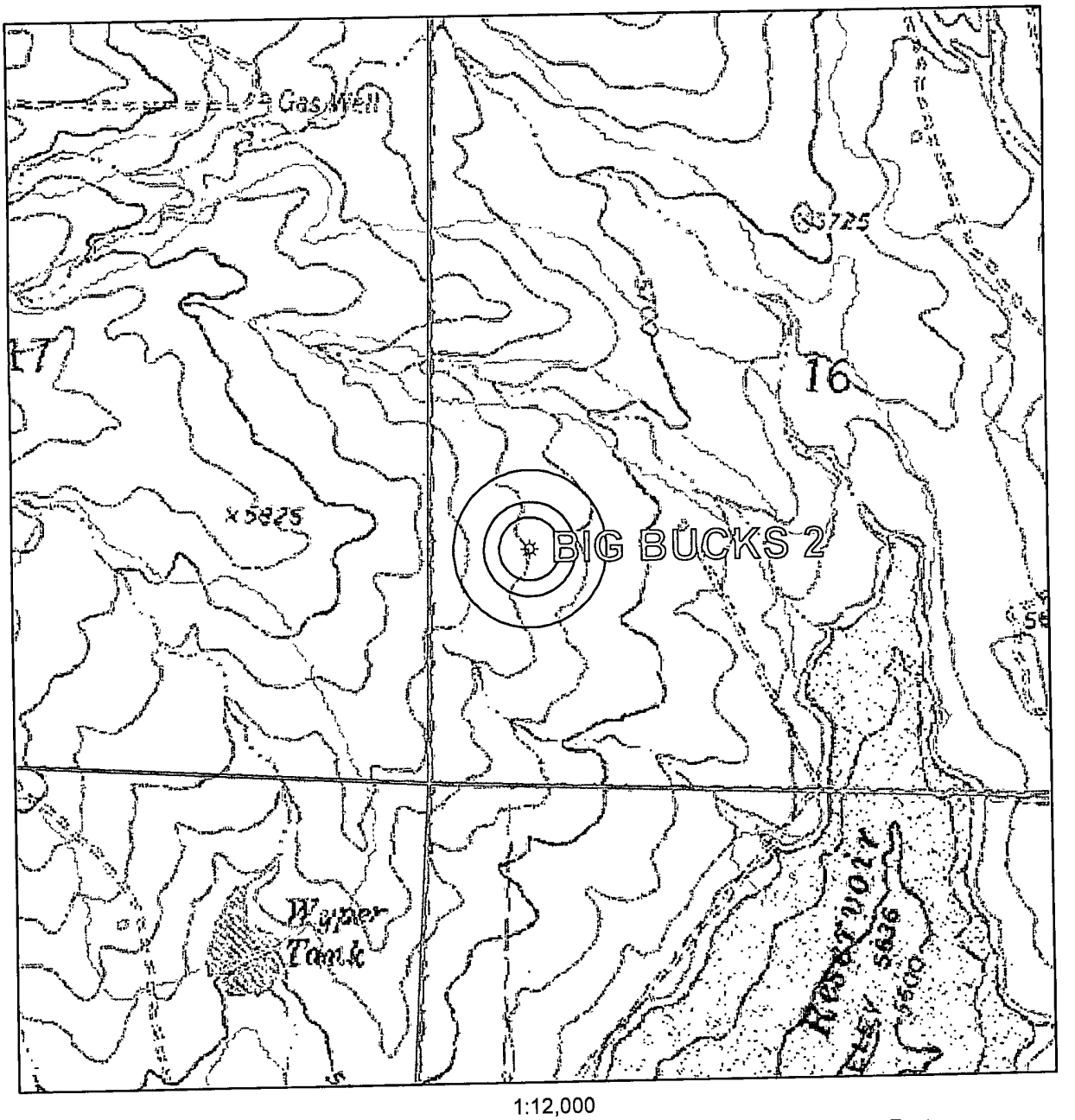


PANEL LOCATION

COMMUNITY-PANEL NUMBER
350064 0325 B

EFFECTIVE DATE:
AUGUST 4, 1988

Federal Emergency Management Agency



1:12,000

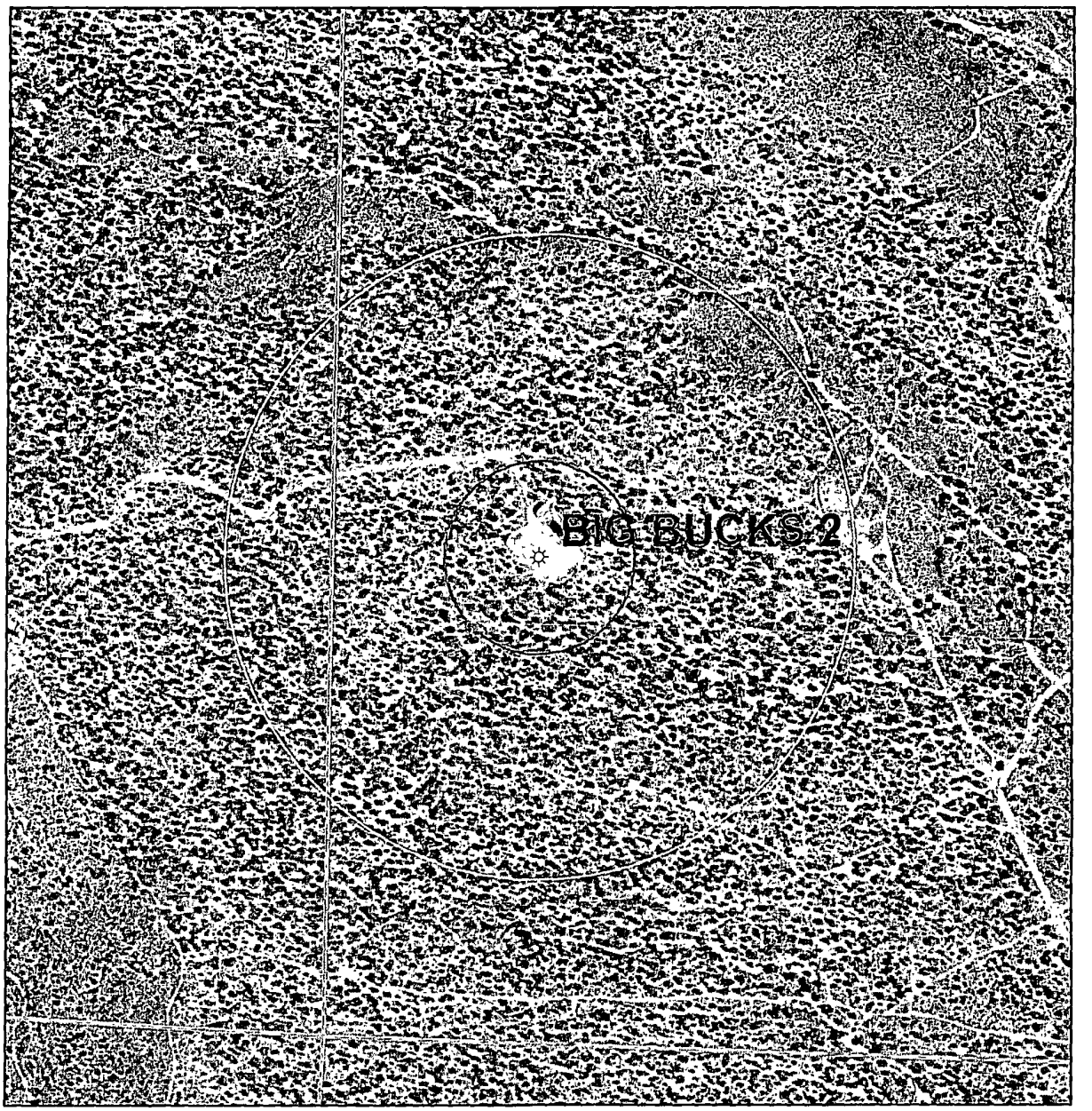
0 500 1,000 2,000 3,000 4,000 Feet

Legend

- McElvain Well & 200' Radius
- McElvain Well & 300' Radius
- McElvain Well & 500' Radius

Source: USGS 1:24,000 Scale
Topographic Map Series

San Juan Basin
New Mexico
Township 30N 12W
Section 16



1:6,000

0 265 530 1,060 1,590 2,120 Feet

Legend

McElvain Well & 300' Radius

McElvain Well & 1000' Radius

Aerial Source: NM Resource Geographic Information System Program made available by the Univeristy of New Mexico and the State of New Mexico 2005-2006 vintage Digital Orthophoto Quarter-Quadrangles were derived from the New Mexico Statewide Orthophotography Project. Source imagery flown at 35,000' above average ground.

San Juan Basin
New Mexico
Township 30N 12W
Section 16

Siting Criteria Compliance Demonstrations

The Big Bucks #1 well is not located in an unstable area. The location is not over a mine and is not on the side of a hill. The location of the excavated pit material is not located within 300' of any continuously flowing watercourse or 200' from any other water course.

McElvain Oil & Gas Properties, Inc.
San Juan Basin
Below Grade Tank Design and Construction

In accordance with Rule 19.15.17 NMAC the following describes the as-built construction of the Below Grade Tank on the McElvain Oil & Gas Properties, Inc (MOG) Big Bucks #2 well located in the NWSW of Sec 16, T30N, 12W.

As-built Installation:

1. The existing tank pit consists of an approximate 15 foot by 5 foot metal shored hole into which a 12 foot by 5 foot double bottom, single wall 95 bbl tank with leak detection is installed.

2. The tank walls are open for visual inspection to identify the occurrence of leaks.

3. There is an expanded metal covering on the top of the below grade tank.

4. The tank pit is surrounded by a 30ft X 30ft X 2ft berm that is contained within a 50 ft X 140 ft berm that encloses the tank battery to prevent overflow or surface water run-on.

5. A general location sign is displayed on site.

6. The pit tank is fenced with 6 foot chain link.

McElvain Oil & Gas Properties, Inc.
San Juan Basin
Below Grade Tank Maintenance and Operating Plan

In accordance with Rule 19.15.17 NMAC the following describes the below grade tank operation and maintenance plan for the McElvain Oil & Gas Properties, Inc (MOG) on the Big Bucks #2 well located in the NWSW of Sec 16, T30N, 12W.

General Plan:

1. MOG shall operate and maintain the below grade tank to contain liquids and solids and prevent contamination of fresh water to protect the public health and environment.

2. MOG shall not allow a below grade tank to overflow or allow surface water run-on to enter the below grade tank.

3. MOG shall continuously remove any visible or measurable layer of oil from the fluid surface of a below grade tank in an effort to prevent significant accumulation of oil over time.

4. MOG shall inspect the below grade tank monthly and maintain a written record of each inspection for five years.

5. MOG shall maintain adequate freeboard to prevent overtopping of the below grade tank.

McElvain Oil & Gas Properties, Inc.
San Juan Basin
Closure Plan

In accordance with Rule 19.15.17.1 NMAC the following procedure describes the closure plan for the McElvain Oil & Gas Properties, Inc (MOG) below grade tank on the Big Bucks #2 well located in the NWSW of Sec 16, T30N, 12W.

Closure Requirements:

1. MOG shall close the below grade tank within the time periods provided in 19.15.17.13 NMAC or by an earlier date that the division requires because of imminent danger to fresh water, public health, or the environment.

2. MOG shall close an existing below grade tank that does not meet the requirements of Paragraph (1) through (4) of Subsection I of 19.15.17.11 NMAC or is not included in Paragraph (5) of Subsection I of 19.15.17.11 NMAC within five years after June 16, 2008 if not retrofitted to comply with Paragraphs (1) through (4) of Subsection I of 19.15.17.11 NMAC.

3. MOG shall close a permitted below grade tank within 60 days of cessation of the below ground tank's operation or as required by the transitional provisions of Subsection B of 19.15.17.17 NMAC in accordance with a closure plan that the appropriate division district office approves. The closure report will be filed on C-144.

4. All liquids will be removed from the temporary permit prior to closure and the liquids disposed of in a division approved facility.

5. MOG shall 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.

6. MOG will remove any on-site equipment associated with the below grade tank unless the equipment is required for some other purpose.

7. MOG shall test the soils beneath the below grade tank to determine whether a release has occurred. MOG shall collect a five point composite sample and individual grab samples from any area that is wet, discolored, or showing other evidence of a release. The samples will be analyzed for BTEX, TPH, and chlorides to demonstrate that the benzene concentration as determined by EPA SW-846 methods 8021B or 8260B or other EPA method that the division approves, does not exceed 50 mg/kg; the TPH concentration as determined by EPA method 418.1 or other EPA method that the division approves does not exceed 100 mg/kg; and the chloride concentration as determined by EPA

method 300.1 or other EPA method that the division approves does not exceed 250 mg/kg or the background concentration, whichever is greater. MOG shall notify the division of its results on form C-141.

8. If MOG or the division determines that a release has occurred, then MOG shall comply with 19.15.3.116 NMAC and 19.15.1.19 NMAC as appropriate.

9. If contamination is confirmed by field sampling. MOG will follow the Guidelines For Remediation Of Leaks, Spills, and Releases NMOCD August 1993 when remediating identified contaminants.

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

11. Notice of closure will be given to the Aztec Division office between 72 hours and one week of closure via email or verbally. The notification of closure will include the following:
    - Operator's name
    - Location by Unit Letter, Section Township, and Range.
    - Well name and API number

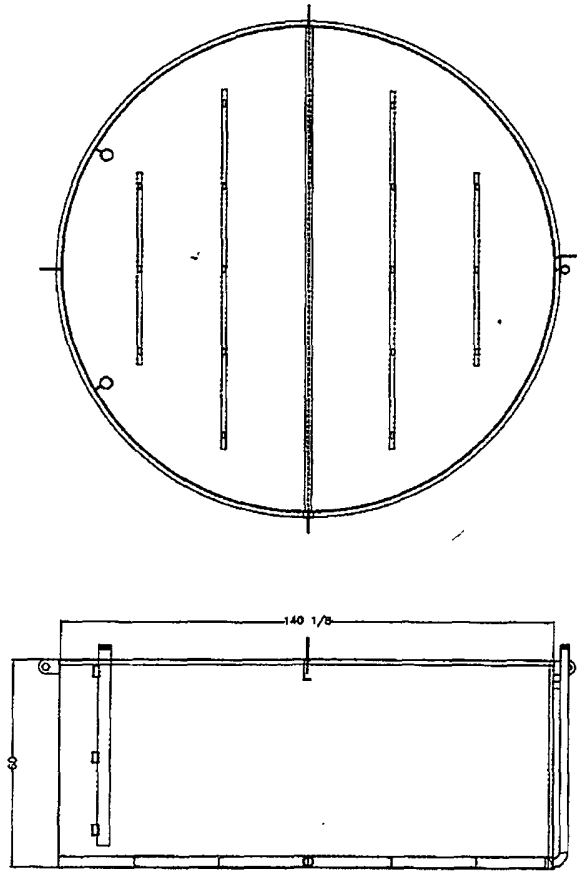
12. All closure activities will include proper documentation and be available for review upon request and will be submitted to OCD within 60 days of closure of the blow grade tank. The closure report will be filed on C-144 and incorporate the following:
    - Details on capping and covering where applicable
    - Inspection reports
    - Sampling results

13. The site will be re-contoured to match the surrounding area. Natural drainages will be unimpeded and erosion control will be utilized where necessary.

14. MOG shall seed the disturbed areas the first growing season with a division approved seed mixture after pit closure. Seeding will be accomplished by drilling on the contour whenever possible or by other division approved methods. Repeat seeding or planting will be continued until successful vegetative growth occurs.

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

16. The surface owner shall be notified of MOG's closing of the below grade tank as per the approved closure plan using certified mail with return receipt requested.



pesco
process equipment & service company llc

12' X 3' 95 BBL DOUBLE BOTTOM PIT TANK

SCALE 1/16

DRAWN BY BUCKLES

DATE 8-11-08

DWG. NO. 0130-D CUSTOMER

Big Bucks #2

McElvain Oil & Gas Properties, Inc.

Hydrogeological Report For

Big Bucks #2

Surface Formation:

Nacimiento and Animas Formations

Regional and Local Geology

The Tertiary Nacimiento Formation is a fluvial deposit of Paleocene age (Baltz, 1967). The Nacimiento is present at the surface in a wide swath inside the western margin of the basin from the Colorado-New Mexico state line to the south where the exposure area thins along the southern margin of the basin towards the town of Cuba, NM. From Cuba and north along the eastern margin of the basin, the Nacimiento is present at the surface as a very thin outcrop along the Nacimiento Uplift.

Much of the Nacimiento consists of shale, siltstone, and to a lesser extent limited fine- to medium-grained sandstone similar to the Cretaceous rocks of nearby regions and presumably derived by erosion from these rocks (Baltz, 1967). The Nacimiento is mainly composed of beds of clays and silts deposited in a low energy environment such as still or slowly moving water (Brimhall, 1973) or in lake-settings (Fassett, 1974). The Nacimiento's sandstone units were deposited in an environment of small, localized stream beds. Most of the sandstones extend only a few thousand feet. The Nacimiento is a non-resistant unit and typically erodes to low, rounded hills or forms badlands topography (Craigg, 2001). The mudstones display popcorn weathering, characteristic of swelling clays. The slope-forming sediments are made up of poorly-consolidated sandstone, instead of shale as previously thought, possibly attributing a greater percentage of sand to the formation than previously considered (Stone et al., 1983).

The Nacimiento conformably overlies and intertongues with the Tertiary Ojo Alamo Formation in this area. Where buried, the contact of the Nacimiento with the overlying Tertiary San Jose Formation is an erosional and angular unconformity (Fassett, 1974). The Nacimiento grades laterally into into late Cretaceous-early Tertiary Animas Formation in the northern third of the basin (Fassett, 1974). Therefore at this location, the Nacimiento and Animas Formations occupy the same stratigraphic interval.

The late Cretaceous-early Tertiary Animas Formation contains an abundance of material of volcanic origin. It is conglomeratic and characteristically contains boulders and pebbles of andesite in a tuffaceous matrix. The conglomeratic beds are interbedded with variegated shale and sandstone (Fassett, 1974). Less commonly, conglomerate beds contain pebbles of quartz, quartzite and chert (Fassett and Hinds, 1971). The Animas Formation is exposed at the surface only in a narrow belt at the NE margin of the basin and along the La Plata River valley north of Farmington to the Colorado-New Mexico state line.

Hydraulic Properties

Tertiary and Quaternary hydrologic properties, regional flow patterns and water quality do not vary significantly from unit to unit. Where pumping levels and drilling depths are economically feasible and where water quality is suitable, the San Jose, Nacimiento and Animas Formations are a source of water for public-supply, commercial, private-domestic and livestock use. Water in the San Jose, Nacimiento and Animas Formations occurs under both water table and artesian conditions. Recharge to the aquifers is from infiltration of precipitation and stream flow on outcrops, and from vertical upward leakage of water from underlying strata (Levings et al., 1990). Rates of such leakage, however, are very low except in areas of intense fracturing (Stone et al., 1983).

Nacimiento and Animas sandstone "aquifers" are neither generally continuous over large distances nor do they all crop out. They grade laterally into clays and silts (Brimhall, 1973). Transmissivity for the San Jose, Nacimiento and Animas Formations is minimal. A low yield (10 gallons per minute or less) can be expected for Nacimiento and Animas Formations. However, these formations may have relatively high transmissivities in areas of small extent (Stone et al., 1983). Reported or measured discharge from 79 water wells completed in the the San Jose, Nacimiento and/or Animas Formations ranges from 1-61 gallon per minute, median 6 gpm. The specific capacity of 12 of these 79 tests ranges from 0.03 to 2.30 gpm per foot of drawdown (Levings et al., 1990). The aquifers of Tertiary rocks yield water that is

characteristically high in ions of sodium and sulfate. The removal of iron may be required (Stone et al., 1983).

Hydrology & Conclusion

A records search of the NM Office of the State Engineer iWaters database was conducted in the 9-sections centered on the Big Bucks #2 well location, 30N 12W section 16. 94 wells with depth to water measurements were identified. The Big Bucks #2 is located on Hood Mesa approx. 1.8 miles north of the Animas River. Wells nearest the Animas River are found in sections 21 and 22, in the flood plain of the Animas River. Water in those wells is reached at the elevation of the Animas River. Minimum depth to water in those sections is 3'. Farther from the Animas River, and higher in elevation are sections 10, 15 and 16. Average depth to water in section 15 is 64', minimum 43' and maximum 82'. Average depth to water in section 15 is 43', minimum 8' and maximum 105'. In section 16, a water well drilled in the SE/4 at elevation 5630' measured a depth to water at 100'. The Big Bucks #2 is 110' higher in elevation and further from the Animas River than the water well in the same section. It can be concluded that depth to water at the Big Bucks #2 well site is over 100'.

References

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Fassett, J.E., 1974, Cretaceous and Tertiary Rocks of the Eastern San Juan Basin, in Guidebook of Ghost Ranch, Central-Northern New Mexico, New Mexico Geological Society, 25th Field Conference, 404p.

Levings, G.W., Craigg, S.D., Dam, W.L., Kernodle, J.M., and Thorn, C.R., 1990, Hydrogeology of the San Jose, Nacimiento, and Animas Formations in the San Juan Structural Basin, New Mexico, Colorado, Arizona, and Utah, USGS Hydrologic Investigations Atlas HA-720-A, 2 sheets.

Scholle, P.A., 2003, Geologic Map of New Mexico 1:500,000, NM Bureau of Geology and Mineral Resources, published in cooperation with the USGS, 2 sheets.

Stone, W.J., Lyford, F.P., Frenzel, P.F., Mizell, N.H., and Padgett, E.T., 1983, Hydrogeology and water resources of San Juan Basin, New Mexico, New Mexico Bureau of Mines and Mineral Resources, Hydrologic Report 6, 70p.

BGT Closure Sampling Required by NMOCD

Components	Method	Limit
Benzene	EPA SW-846 8021B or 8260B	0.2 mg/Kg
BTEX	EPA SW-846 8021B or 8260B	50 mg/Kg
TPH	EPA SW-846 418.1	100 mg/Kg
Chlorides	EPA 300.1	250 mg/Kg