

District I  
1625 N French Dr., Hobbs, NM 88240

District II  
1301 W Grand Ave., 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 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**

- 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: <b>Burlington Resources Oil &amp; Gas Company, LP</b>	OGRID#: <b>14538</b>
Address: <b>PO Box 4289, Farmington, NM 87499</b>	
Facility or well name: <b>Martin 100</b>	
API Number: <b>30-045-34431</b>	OCD Permit Number: _____
U/L or Qtr/Qtr: <b>P(SESE)</b>	Section: <b>34</b> Township: <b>30N</b> Range: <b>11W</b> County: <b>San Juan</b>
Center of Proposed Design: Latitude: <b>36.76307' N</b>	Longitude: <b>107.97203' W</b> NAD: <input type="checkbox"/> 1927 <input checked="" type="checkbox"/> 1983
Surface Owner: <input checked="" type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Private <input type="checkbox"/> Tribal Trust or Indian Allotment	

2	
<input checked="" type="checkbox"/> <b>Pit:</b> Subsection F or G of 19.15.17.11 NMAC	
Temporary: <input checked="" type="checkbox"/> Drilling <input type="checkbox"/> Workover	
<input type="checkbox"/> Permanent <input type="checkbox"/> Emergency <input checked="" type="checkbox"/> Cavitation <input type="checkbox"/> P&A	
<input checked="" type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type: _____ Thickness <b>20</b> mil <input checked="" type="checkbox"/> LLDPE <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____	
<input checked="" type="checkbox"/> String-Reinforced	
Liner Seams: <input checked="" type="checkbox"/> Welded <input checked="" type="checkbox"/> Factory <input type="checkbox"/> Other _____ Volume: <b>4400</b> bbl Dimensions L <b>65'</b> x W <b>45'</b> x D <b>10'</b>	

3	
<input type="checkbox"/> <b>Closed-loop System:</b> Subsection H of 19.15.17.11 NMAC	
Type of Operation: <input type="checkbox"/> P&A <input type="checkbox"/> Drilling a new well <input type="checkbox"/> Workover or Drilling (Applies to activities which require prior approval of a permit or notice of intent)	
<input type="checkbox"/> Drying Pad <input type="checkbox"/> Above Ground Steel Tanks <input type="checkbox"/> Haul-off Bins <input type="checkbox"/> Other _____	
<input type="checkbox"/> Lined <input type="checkbox"/> Unlined Liner type: _____ Thickness _____ mil <input type="checkbox"/> LLDPE <input type="checkbox"/> HDPE <input type="checkbox"/> PVD <input type="checkbox"/> Other _____	
Liner Seams: <input type="checkbox"/> Welded <input type="checkbox"/> Factory <input type="checkbox"/> Other _____	

4	
<input type="checkbox"/> <b>Below-grade tank:</b> Subsection I of 19.15.17.11 NMAC	
Volume: _____ bbl	Type of fluid: _____
Tank Construction material: _____	
<input type="checkbox"/> Secondary containment with leak detection <input type="checkbox"/> Visible sidewalls, liner, 6-inch lift and automatic overflow shut-off	
<input type="checkbox"/> Visible sidewalls and liner <input type="checkbox"/> Visible sidewalls only <input type="checkbox"/> Other _____	
Liner Type: _____	Thickness _____ mil <input type="checkbox"/> HDPE <input type="checkbox"/> PVC <input type="checkbox"/> Other _____

5	
<input type="checkbox"/> <b>Alternative Method:</b>	
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 pit, temporary pits, and below-grade tanks*)

☐

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

☐

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

☐

Alternate. Please specify \_\_\_\_\_

7

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

☐

Screen

☐

Netting

☐

Other \_\_\_\_\_

☐

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

8

**Signs:** Subsection C of 19.15.17.11 NMAC

☐

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

☒

Signed in compliance with 19.15.3.103 NMAC

9

**Administrative Approvals and Exceptions:**

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

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

☐

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

☐

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 watercourse, lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).**

- Topographic map; Visual inspection (certification) of the proposed site

☐ Yes ☐ No

**Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.**

☐ Yes ☐ No

*(Applies to temporary, emergency, or cavitation pits and below-grade tanks)*

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ NA

**Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.**

☐ Yes ☐ No

*(Applied to permanent pits)*

- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image

☐ 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.**

☐ Yes ☐ No

- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site.

**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**

☐ Yes ☐ No

- Written confirmation or verification from the municipality; Written approval obtained from the municipality

**Within 500 feet of a wetland.**

☐ Yes ☐ No

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

**Within the area overlying a subsurface mine.**

☐ Yes ☐ No

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

**Within an unstable area.**

☐ Yes ☐ No

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

**Within a 100-year floodplain**

☐ Yes ☐ No

- FEMA map

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
- ☐ 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 \_\_\_\_\_ or Permit \_\_\_\_\_

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**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 \_\_\_\_\_

☐ Previously Approved Operating and Maintenance Plan API \_\_\_\_\_

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<sub>2</sub>S, 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 (Below-Grade Tank)

☐ Waste Removal (Closed-loop systems only)

☒ On-site Closure Method (only for temporary pits and closed-loop systems)

☒ In-place Burial ☐ On-site Trench

☐ Alternative Closure Method (Exceptions must be submitted to the Santa Fe Environmental Bureau for consideration)

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**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

**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 #: \_\_\_\_\_

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit #: \_\_\_\_\_

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) ☐ No

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

- ☐ Soil Backfill and Cover Design Specification - 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

**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

☐ N/A

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

☐ N/A

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

☐ N/A

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

☐ 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 the 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

**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): \_\_\_\_\_ Crystal Tafoya \_\_\_\_\_ Title: \_\_\_\_\_ Regulatory Technician \_\_\_\_\_  
 Signature: \_\_\_\_\_ *Crystal Tafoya* \_\_\_\_\_ Date: \_\_\_\_\_ 11/18/08 \_\_\_\_\_  
 e-mail address: \_\_\_\_\_ crystal.tafoya@conocophillips.com \_\_\_\_\_ Telephone: \_\_\_\_\_ 505-326-9837 \_\_\_\_\_

20  
**OCD Approval:** ☐ Permit Application (including closure plan) ☒ Closure Plan (only) ☐ OCD Conditions (see attachment)  
**OCD Representative Signature:** \_\_\_\_\_ *Brenda Rich* \_\_\_\_\_ **Approval Date:** \_\_\_\_\_ 12-3-08 \_\_\_\_\_  
**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 (if applicable)  
☐ 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: \_\_\_\_\_

**New Mexico Office of the State Engineer  
POD Reports and Downloads**

Township: 30N Range: 11W Sections: 32,33,34,29,28,27,26,35

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

**WATER COLUMN REPORT 10/24/2008**

(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
RG 50669	30N	11W	27							360	310	5
SJ 03251	30N	11W	32	3	4	4				150	77	7

Record Count: 2

**New Mexico Office of the State Engineer**  
**POD Reports and Downloads**

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Township: 29N Range: 11W Sections: 5,4,3,2

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

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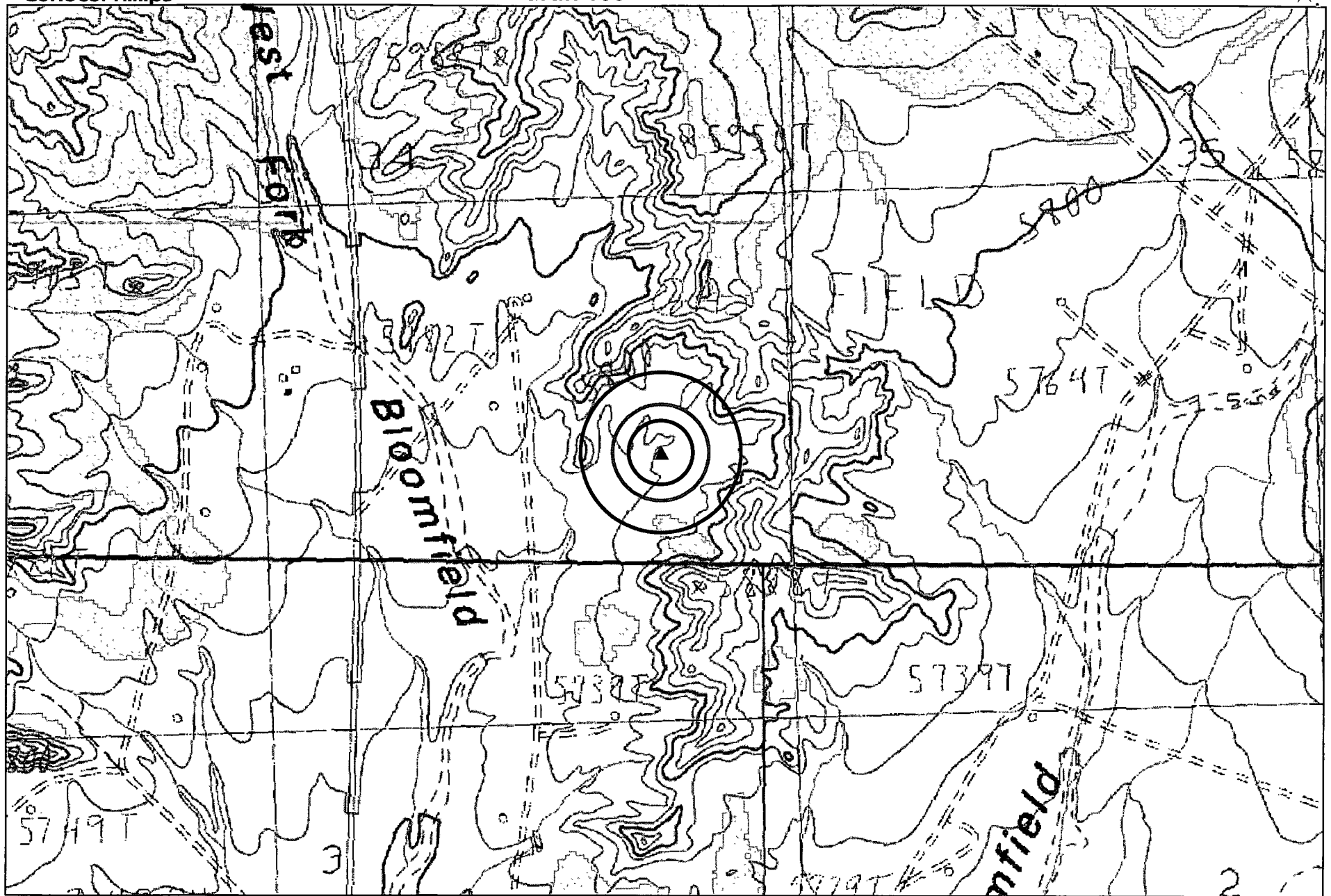
**WATER COLUMN REPORT 10/24/2008**

(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
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No Records found, try again



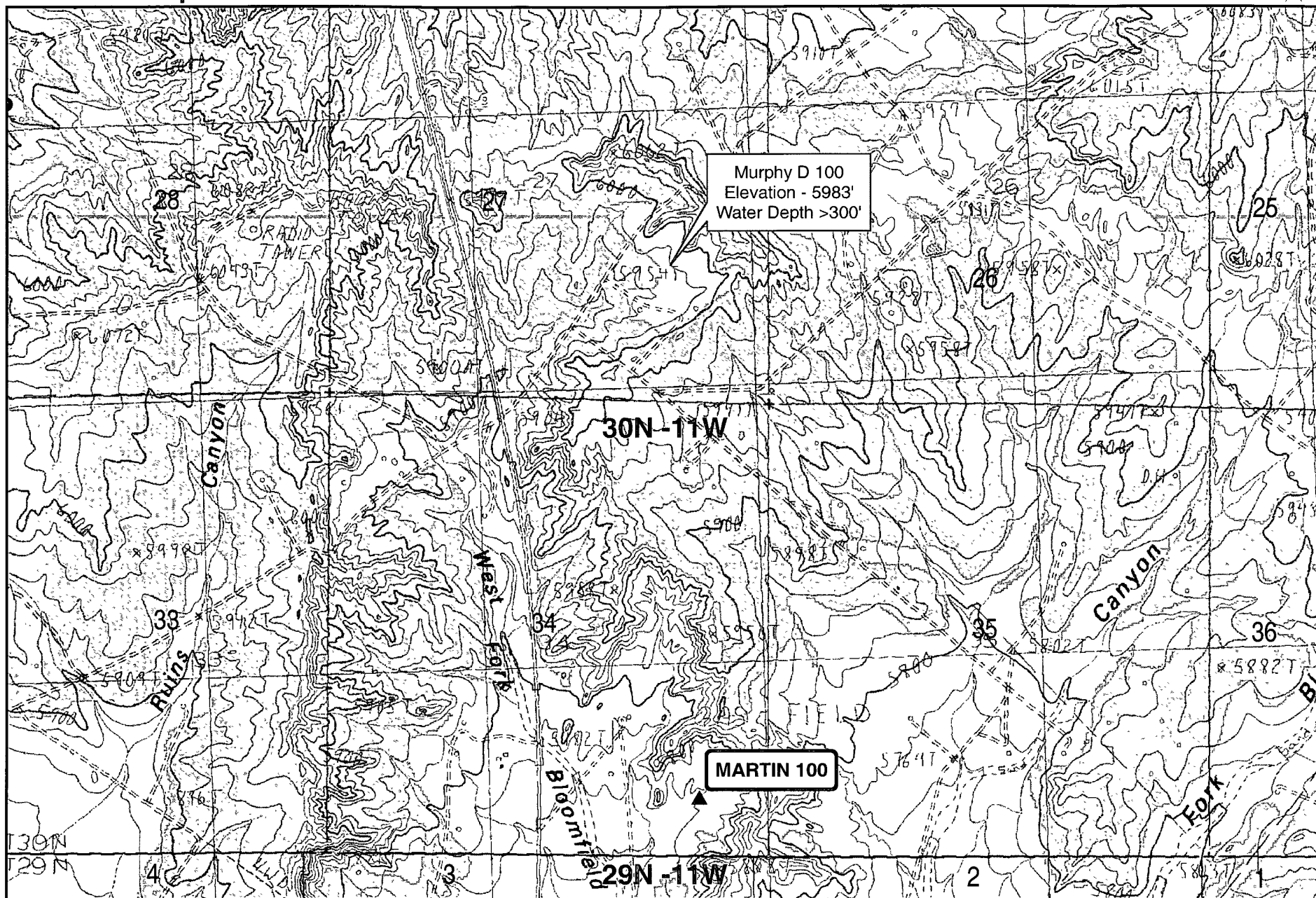
Data Source  
Aerial flown locally Sedgewick in 2005.  
Wetlands Data Acquired from U.S. Fish  
and Wildlife [Http://wetlandswms.er.usgs.gov](http://wetlandswms.er.usgs.gov)  
USGS Topo

 Wetlands  
 City Limits

0 155310 620 930 1,240  
Feet

1:9,354

NAD\_1983\_SP\_  
NM West\_FIPS\_  
3003  
Sep 26, 2008



Wetlands data acquired from U.S. Fish  
and Wildlife  
<http://wetlandswms.er.usgs.gov>

**Ground Water**

- ⊕ iWaters
- + COP

**Buffers**

- 200ft
- 300ft
- 500ft
- Wetlands

0 500 1,000  
Feet  
1:17,852

NAD\_1983\_StatePlane\_  
NMWest\_FIPS\_3003  
8/08

**TIERRA CORROSION CONTROL, INC.**  
**DRILLING LOG**

COMPANY: Conoco Phillips  
LOCATION: Murphy D #100  
STATE: NM  
BIT SIZE: 6 3/4"  
LBS COKE BACKFILL: 2,100#  
ANODE TYPE: 2" X 60" Duriron

DATE: September 18, 2008  
LEGALS: Sec27 T30N R8W  
DRILLER: Eugene Silago  
CASING SIZE/TYPE: 8" X 20' PVC  
VENT PIPE: 300'  
ANODE AMOUNT: 10

COUNTY: San Juan  
DEPTH: 300'  
COKE TYPE: Asbury  
PERF PIPE: 180' - 300'  
BOULDER DRILLING: None

DEPTH	DRILLER'S LOG	AMPS	DEPTH	DRILLER'S LOG	AMPS
20	Sandstone		310		
25			315		
30			320		
35			325		
40			330		
45			335		
50	Sandstone/Shale		340		
55			345		
60		2.0	350		
65		1.9	355		
70		2.3	360		
75		2.4	365		
80		1.6	370		
85		4.5	375		
90		2.6	380		
95		2.3	385		
100		2.8	390		
105		1.4	395		
110		1.7	400		
115		1.5	405		
120		1.8	410		
125		1.5	415		
130		1.3	420		
135		1.3	425		
140		1.5	430		
145		1.8	435		
150		2.1	440		
155		2.3	445		
160		1.8	450		
165		1.9	455		
170	Shale	2.0	460		
175		2.8	465		
180		2.7	470		
185		3.8	475		
190		3.7	480		
195		3.8	485		
200		3.8	490		
205		3.9	495		
210		4.2	500		
215		4.1			
220		4.1			
225		4.1			
230		4.2			
235		4.2			
240		4.2			
245		4.3			
250		4.6			
255		4.3			
260		4.3			
265		4.7			
270		1.4			
275		4.9			
280		4.1			
285		4.6			
290		4.9			
295		4.7			
300		TD			
305					

ANODE #	DEPTH	NO COKE	COKE
1	290	4.9	6.3
2	280	4.6	8.5
3	270	4.4	9.3
4	260	4.3	8.7
5	250	4.6	9.0
6	240	4.2	8.6
7	230	4.2	8.7
8	220	4.1	8.0
9	210	4.2	8.0
10	200	3.8	7.2
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

WATER DEPTH: None  
ISOLATION PLUGS: None  
LOGGING VOLTS: 12.4  
VOLT SOURCE: AUTO BATTERY  
TOTAL AMPS: 25.4  
TOTAL GB RESISTANCE: .48  
REMARKS:

\*- LAND TYPE MAY BE SHOWN: F-FEDERAL; I-INDIAN; S-STATE; P-FEE  
IF FEDERAL OR INDIAN, ADD LEASE NUMBER.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE  
(See other in-  
structions on  
reverse side)

FOR APPROVED  
OMB NO. 1004-0137

Expires December 31, 1991

WELL COMPLETION OR RECOMPLETION REPORT AND LOG\*

1a TYPE OF WELL OIL WELL ☐ GAS WELL ☒ DRY ☐ Other ☐

b TYPE OF COMPLETION: NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF RESVR ☐ Other ☐

2 NAME OF OPERATOR  
**BURLINGTON RESOURCES OIL & GAS COMPANY**

3 ADDRESS AND TELEPHONE NO.  
**PO BOX 4289, Farmington, NM 87499 (505) 326-9700**

4 LOCATION OF WELL (Report location clearly and in accordance with any State requirements)  
At surface **Unit I (NESE), 1690' FSL & 1090' FEL,**  
At top prod. interval reported below **Same as above**  
At total depth **Same as above**

5 LEASE DESIGNATION AND SERIAL NO.  
**NMNM-02758**

6 IF INDIAN, ALLOTTEE OR TRIBE NAME

7 UNIT AGREEMENT NAME

8 FARM OR LEASE NAME, WELL NO  
**Murphy D 100**

9 API WELL NO  
**30-045-34175 - 0002**

10 FIELD AND POOL, OR WILDCAT  
**Basin FC/Aztec FS**

11 SEC. T, R, M, OR BLOCK AND SURVEY OR AREA  
**Sec. 27, T30N, R11W, NMMPM  
RCVD FEB 15 '08  
OIL CONS. DIV.**

12 COUNTY OR PARISH **San Juan** 13 STATE **DIST. 3 New Mexico**

14. PERMIT NO. DATE ISSUED

15 DATE SPUDDED **4/3/07** 16. DATE TD REACHED **7/18/07** 17 DATE COMPL (Ready to prod.) **1/30/08** 18 ELEVATIONS (DF, RKB, RT, BR, ETC) **GL - 5983'; KB - 5994'** 19 ELEV CASINGHEAD

20 TOTAL DEPTH, MD & TVD **2580'** 21 PLUG, BACK TD, MD & TVD **2531'** 22 IF MULTIPLE COMPL., HOW MANY\* **2** 23 INTERVALS DRILLED BY **yes** 24 ROTARY TOOLS 25 CABLE TOOLS

24 PRODUCTION INTERVAL (S) OF THIS COMPLETION-TOP, BOTTOM, NAME (MD AND TVD)  
**Basin FC 2082' - 2334'**

25 WAS DIRECTIONAL SURVEY MADE **No**

26 TYPE ELECTRIC AND OTHER LOGS RUN **GSL** 27 WAS WELL CORED **No**

28 CASING RECORD (Report all strings set in well)					
CASING SIZE/GRADE	WEIGHT, LB/FT	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
7", J-55	20#	155'	8-3/4"	Surface, 34 sx (55 cf)	2 bbls
4-1/2", J-55	10.5#	2565'	6-1/4"	surface; 306 sx (601 cf)	42 bbls

29. LINER RECORD				30 TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)
					2-3/8"	2346'

31 PERFORATION RECORD (Interval, size and number)	32 ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.
<b>Fruitland Coal .34" holes @ 1 &amp; 3 spf 2082' - 2086', 2089-92', 2132' - 48' 2170 -86', 2202' - 10', 2224' - 2236' 2306' - 2314', 2318' - 2320', 2330' - 2334' Total 218 holes</b>	<b>2318' - 2334'</b> 500 gal 15% HCl; 1764 gal 25# X-link pre-pad w/9744 gal 75 Quality N2 253 linear foamed pad w/78,000# 20/40 AZ sand <b>2066' - 2236'</b> 500 gal 15% HCL; 2016 gal 25# X-link pad w/9744 gal 75Q N2 25# linear foamed pad & 120,000# 20/40 AZ sand <b>NOTE: the FC and FS intervals were stimulated together.</b>

33 PRODUCTION

DATE FIRST PRODUCTION **SI** PRODUCTION METHOD (Flowing, gas lift, pumping-size and type of pump) **Flowing** WELL STATUS (Producing or shut-in) **SI**

DATE OF TEST **1/29/08** HOURS TESTED **1** CHOKER SIZE **2** PROD'N FOR TEST PERIOD **Oil-BBL** GAS-MCF **5.5 mcf** WATER-BBL **2 bwph** GAS-OIL RATIO

FLOW TUBING PRESS **NA** CASING PRESSURE **SI 281#** CALCULATED 24-HOUR RATE **0** OIL-BBL **132 mcf** GAS-MCF **48 bwph** WATER-BBL **0** OIL GRAVITY-API (CORR)

34 DISPOSITION OF GAS (Sold, used for fuel, vented, etc) **To be sold** TEST WITNESSED BY

35 LIST OF ATTACHMENTS  
**This is a FC/FS well being DHC per order #3872. Once well dewatered, will be able to provide a better breakdown of production.**

36 I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [Signature] TITLE **Regulatory Specialist** DATE **2/11/08**

\*(See Instructions and Spaces for Additional Data on Reverse Side)

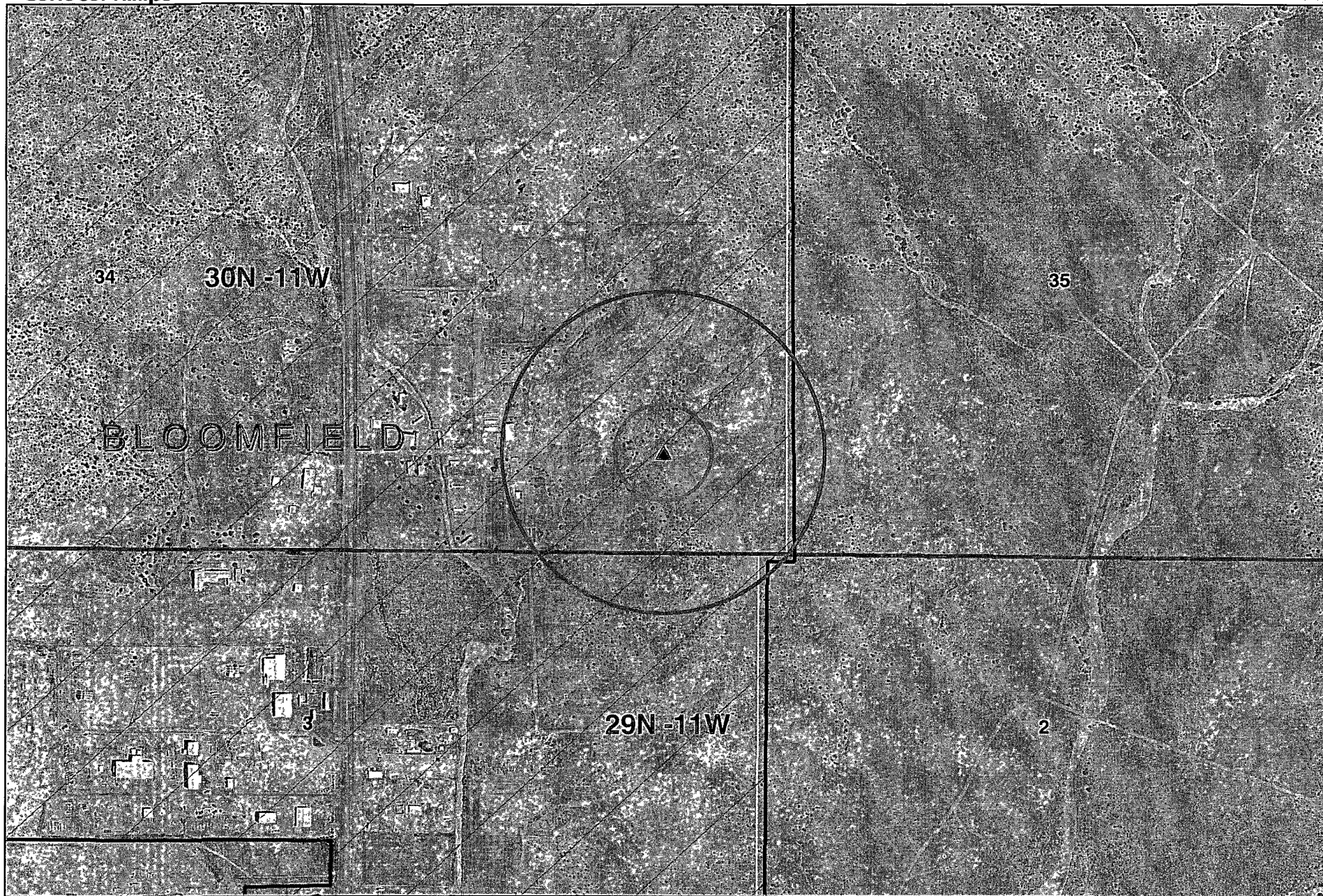
Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department of agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

NMOCD

ACCEPTED FOR RECORD

FEB 13 2008

FARMINGTON FIELD OFFICE  
BY [Signature]



Data Source  
Aerial flown locally Sedgewick in 2005.  
Wetlands Data Aquired from U.S. Fish  
and Wildlife [Http://wetlandswms.er.usgs.gov](http://wetlandswms.er.usgs.gov)  
USGS Topo

 Wetlands  
 City Limits

0 155310 620 930 1,240  
Feet

1:9,354

NAD\_1983\_SP\_  
NM West\_FIPS\_  
3003  
Sep 26, 2008

# Martin 100 Mines, Mills and Quarries Web Map

## Mines, Mills & Quarries Commodity Groups

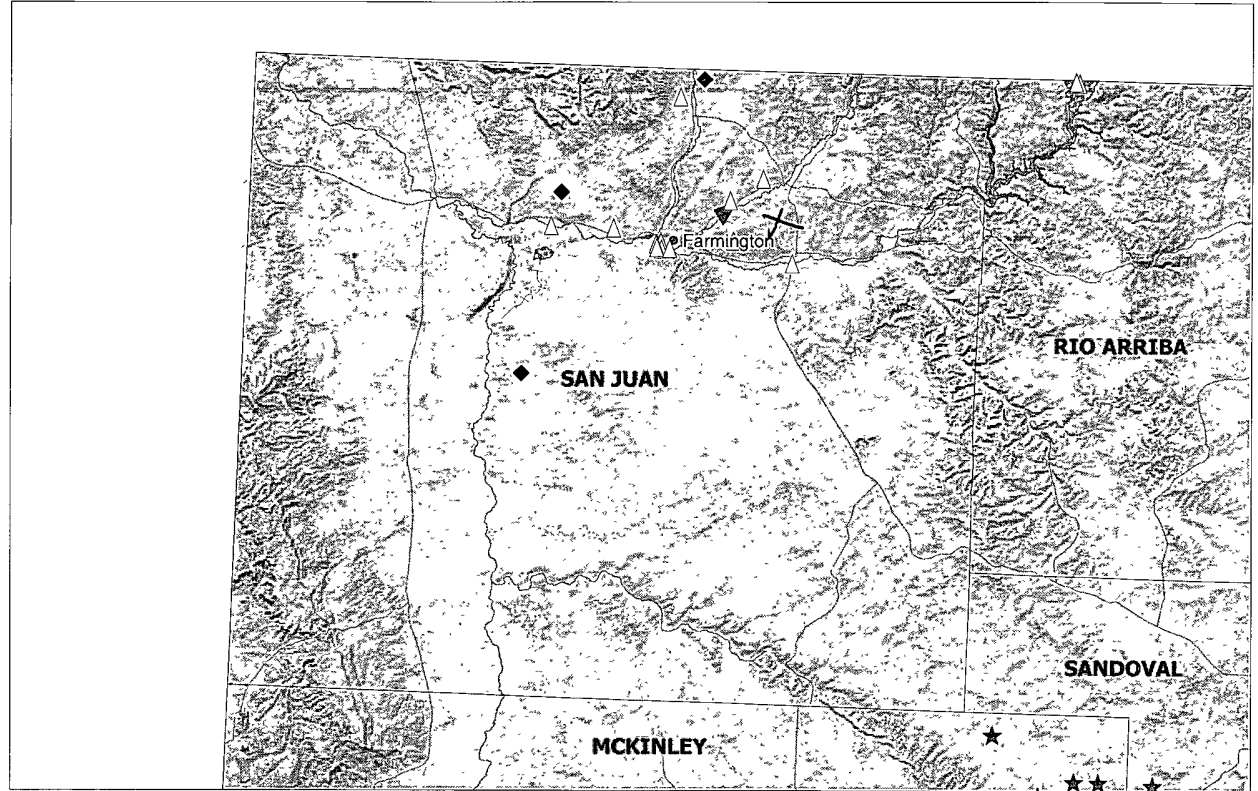
- △ Aggregate & Stone Mines
- ◆ Coal Mines
- ★ Industrial Minerals Mines
- ▼ Industrial Minerals Mills
- ▣ Metal Mines and Mill Concentrate
- ▤ Potash Mines & Refineries
- ⌘ Smelters & Refinery Ops.
- ✦ Uranium Mines
- ⊕ Uranium Mills

## Population

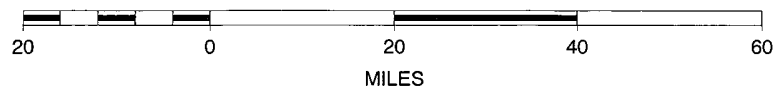
- Cities - major

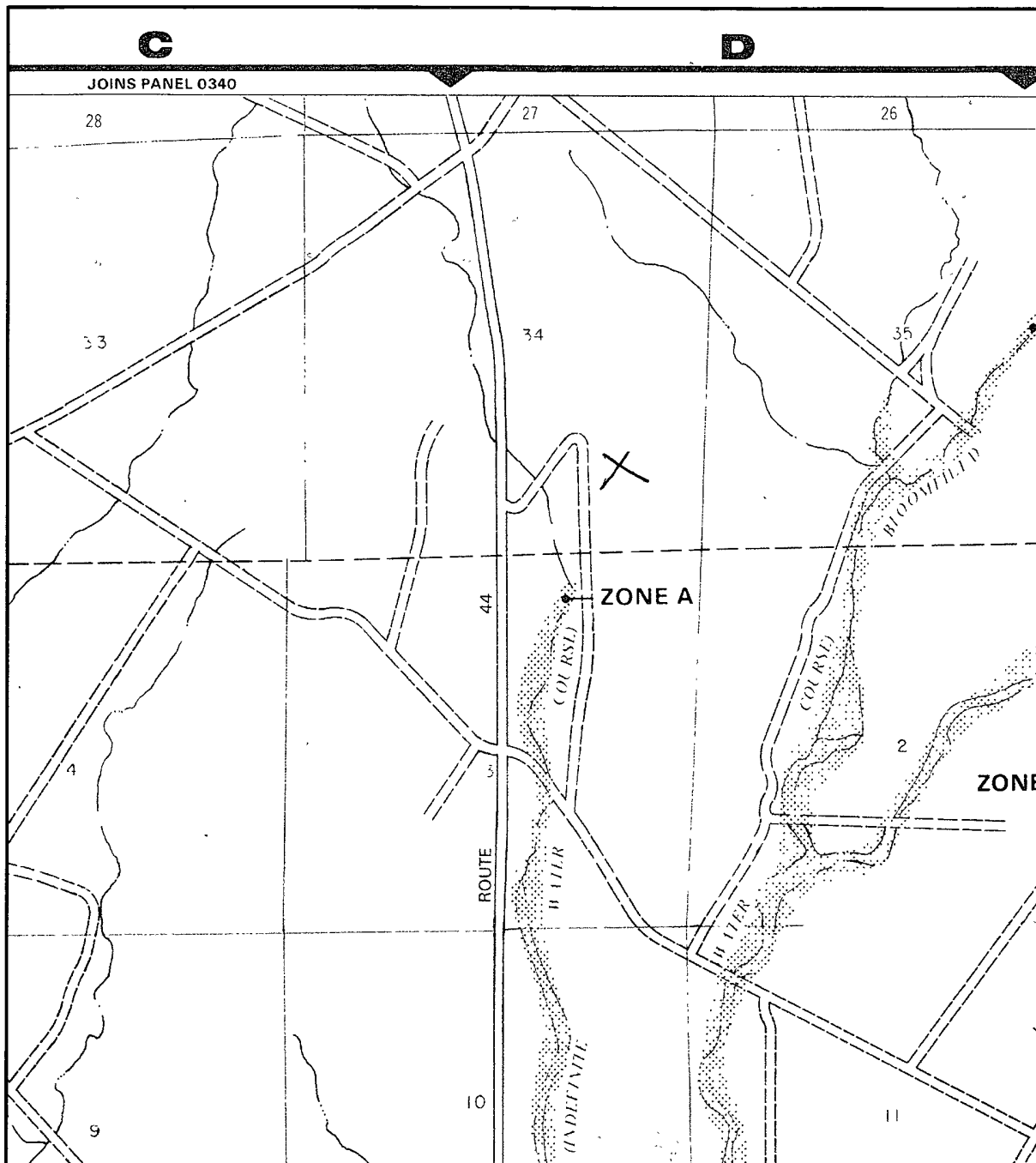
## Transportation


- +—+ Railways
- Interstate Highways
- - - Major Roads



SCALE 1 : 1,290,759







**APPROXIMATE SCALE**

2000 0


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**NATIONAL FLOOD INSURANCE PROGRAM**

**FIRM**  
**FLOOD INSURANCE RATE MAP**

**SAN JUAN COUNTY,  
NEW MEXICO.**  
**UNINCORPORATED AREAS**


**PANEL 550 OF 1450**  
(SEE MAP INDEX FOR PANELS NOT PRINTED)



PANEL LOCATION

**COMMUNITY-PANEL NUMBER**  
350064 0550 B

**EFFECTIVE DATE:**  
AUGUST 4, 1988



Federal Emergency Management Agency

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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](http://www.msc.fema.gov)

## ***Hydrogeological Report for Martin 100***

### **Regional Geological context:**

The Nacimiento Formation is of Paleocene age (Baltz, 1967, p. 35). It crops out in a broad band inside the southern and western margins of the central basin and in a narrow band along the west face of the Nacimiento Uplift. The Nacimiento is a nonresistant unit and typically erodes to low, rounded hills or forms badland topography.

The Nacimiento Formation occurs in approximately only the southern two-thirds of the San Juan Basin where it conformably overlies and intertongues with the Ojo Alamo Sandstone (Fassett, 1974, p. 229). The Nacimiento Formation grades laterally into the main part of the Animas Formation (Fassett and Hinds, 1971, p. 34); thus, in this area, the two formations occupy the same stratigraphic interval.

Strata of the Nacimiento Formation were deposited in lakebeds in the central basin area with lesser deposition in stream channels (Brimhall, 1973, p. 201). In general, the Nacimiento consists of drab, interbedded black and gray shale with discontinuous, white, medium- to very coarse grained arkosic sandstone (Stone et al., 1983, p.30). Stone et al. indicated that the formation may contain more sandstone than commonly reported because some investigators assume the slope-forming strata in the unit area shales, whereas in many places the strata actually are poorly consolidated sandstones. Total thickness of the Nacimiento Formation ranges from about 500 to 1,300 feet. The unit generally thickens from the basin margins toward the basin center (Steven et al., 1974). The sandstone deposits within the Nacimiento Formation are much thinner than the total thickness of the formation because their environment of deposition was localized stream channels (Brimhall, 1973, p. 201). The thickness of the combined San Jose, Animas, and Nacimiento Formations ranges from 500 to more than 3,500 feet.

### **Hydraulic Properties:**

**Reported well yields for** 53 wells completed in either the Animas or Nacimiento Formations range from 2 to 90 gallons per minute and the median yield is 7.5 gallons per minute. The primary use of water from Nacimiento and Animas Formations is domestic and livestock supplies. There are no known aquifer tests for the Animas or Nacimiento Formations, but specific capacities reported for six wells range from 0.24 to 2.30 gallons per minute per foot of drawdown (Levings et al., 1990).

The Animas and Nacimiento Formations are in many ways hydrologically similar to the San Jose Formation because sands in both units produce approximately the same quantities of water. However, the greater percentage of fine materials in the Animas and Nacimiento Formations may restrict downward vertical leakage to the Ojo Alamo Sandstone or Kirtland Shale. The poorly cemented fine material is highly erodible, forms a badland terrain, and supports only spotty vegetation. These conditions are more conducive to runoff than retention of precipitation.

### **References:**

Baltz, E.H., 1967, Stratigraphy and regional tectonic implications of part of Upper Cretaceous rocks, east-central San Juan Basin, New Mexico: USGS Professional Paper

552, 101 p.

Brimhall, R.M., 1973, Ground-water hydrology of Tertiary rocks of the San Juan Basin, New Mexico, in Fassett, J.E., ed., Cretaceous and Tertiary rocks of the Southern Colorado Plateau: Four Corners Geological Society Memoir, p. 197-207.

Fassett, J.E., 1974, Cretaceous and Tertiary rocks of the eastern San Juan Basin, New Mexico and Colorado, in Guidebook of Ghost Ranch, central-northern New Mexico: New Mexico Geological Society, 25th Field Conference, p. 225-230.

Fassett, J.E., and Hinds, J.S., 1971, Geology and fuel resources of the Fruitland Formation and Kirtland Shale of the San Juan Basin, New Mexico and Colorado: USGS Professional Paper 676, 76 p.

Levings, G.W., Craig, 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.

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.

### **Siting Criteria Compliance Demonstration & Hydro Geologic Analysis**

The Martin 100 is not located in an unstable area. The location is not over a mine and is not on the side of a hill as indicated on the Mines, Mills and Quarries Map and Topographic Map. The location of the excavated pit material will not be located within 300' of any continuously flowing watercourse or 200' from any other watercourse as indicated on the Topographic Map. The location is not within a 100-year floodplain area as indicated on the FEMA Map. The Cathodic well data from the Murphy D 100 has an elevation of 5983' and groundwater depth of greater than 300'. The subject well has an elevation of 5764' which is 219' less than the Murphy D 100, therefore the groundwater depth is greater than 80'. There are no iWATERS data points located in the area as indicated on the TOPO Map. The hydro geologic analysis indicates the groundwater depth and the Nacimiento formation will create a stable area for this new location.

## Tafoya, Crystal

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**From:** Tafoya, Crystal  
**Sent:** Thursday, July 10, 2008 8:16 AM  
**To:** 'mark\_kelly@nm.blm.gov'  
**Subject:** OCD Pit Closure Notification

The following temporary pits will be closed on-site. The new OCD Pit Rule 17 requires the surface owner be notified. Please feel free to contact me at any time if you have any questions. Thank you!

Allison Unit 2B  
Allison Unit 40N  
Angel Peak B 27E  
Ballard 11F  
Cain 725S  
Canyon Largo Unit 250N  
Canyon Largo Unit 279E  
Canyon Largo Unit 288E  
Canyon largo Unit 297E  
Canyon Largo Unit 465E  
Carson SRC 4E  
Day B 4P  
Day B 5A  
East 17S  
EPNG A 1B  
EPNG B 1M  
Federal A 1E  
Filan 5M  
Filan 5N  
Fogelson 4 100  
Fogelson 4 100S  
Grambling C 202S  
Hagood 19  
Hamner 9S  
Hardie 4P  
Hare 295  
Heaton Com 100  
Helms Federal 1G  
Howell 12  
Huerfanito Unit 103F  
Huerfanito Unit 29S  
Huerfanito Unit 39S  
Huerfanito Unit 47S  
Huerfanito Unit 50E  
Huerfanito Unit 75E  
Huerfanito Unit 83E  
Huerfanito Unit 87E  
Huerfanito Unit 90E  
Huerfanito Unit 90M  
Huerfanito Unit 98S  
Huerfano Unit 108F  
Huerfano Unit 282E  
Huerfano unit 305  
Huerfano unit 307  
Huerfano Unit 554  
Johnston Federal 24S

King 3  
Lackey A Com 100S  
Lambe 1C  
Lambe 7S  
Lively 8M  
Lloyd A 100  
Lloyd A 100S  
Martin 100  
McCord B 1F  
McDermitt Com 100S  
McManus 13R  
Mitchell 1S  
Morris A 14  
Newberry B 1N  
Newsom B 503  
Newsom B 8N  
Pierce A 210S  
Roelofs 1N  
San Juan 27-4 Unit 132G  
San Juan 27-4 Unit 132M  
San Juan 27-4 Unit 139N  
San Juan 27-4 Unit 140B  
San Juan 27-4 Unit 141M  
San Juan 27-4 Unit 147Y  
San Juan 27-4 Unit 153B  
San Juan 27-4 Unit 22M  
San Juan 27-4 Unit 38P  
San Juan 27-4 Unit 41N  
San Juan 27-4 Unit 42N  
San Juan 27-4 Unit 569N  
San Juan 27-4 Unit 59N  
San Juan 27-4 Unit 60M  
San Juan 27-5 Unit 113F  
San Juan 27-5 Unit 59N  
San Juan 27-5 Unit 84N  
San Juan 27-5 unit 901  
San Juan 27-5 Unit 902  
San Juan 27-5 Unit 903  
San Juan 27-5 Unit 904  
San Juan 27-5 Unit 905  
San Juan 27-5 Unit 906  
San Juan 27-5 Unit 907  
San Juan 27-5 Unit 908  
San Juan 27-5 Unit 909  
San Juan 27-5 Unit 910  
San Juan 27-5 Unit 912  
San Juan 27-5 Unit 913  
San Juan 27-5 Unit 914  
San Juan 27-5 Unit 915  
San Juan 27-5 Unit POW 916  
San Juan 28-4 Unit 27M  
San Juan 28-5 Unit 54F  
San Juan 28-5 Unit 62E  
San Juan 28-5 Unit 63M  
San Juan 28-5 Unit 76N  
San Juan 28-5 Unit 77N  
San Juan 28-6 Unit 113N

DISTRICT I  
1025 K. French Dr., Hobbs, NM 88240

DISTRICT II  
1201 W. Grand Avenue, Artesia, N.M. 88210

DISTRICT III  
1030 Rio Grande Rd., Jacona, N.M. 87410

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

RECEIVED

Form C-108  
Revised October 12, 2006

SEP 17 2007

OIL CONSERVATION DIVISION

1220 South St. Francis Dr. Farmington Field Office  
Santa Fe, NM 87505

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-34431	*Pool Code 71629	*Pool Name BASIN FRUITLAND COAL (GAS)
*Property Code 7290	*Property Name MARTIN	*Well Number 100
*Comp No. 14538	*Operator Name BURLINGTON RESOURCES OIL AND GAS COMPANY LP	*Elevation 5784'

10 Surface Location

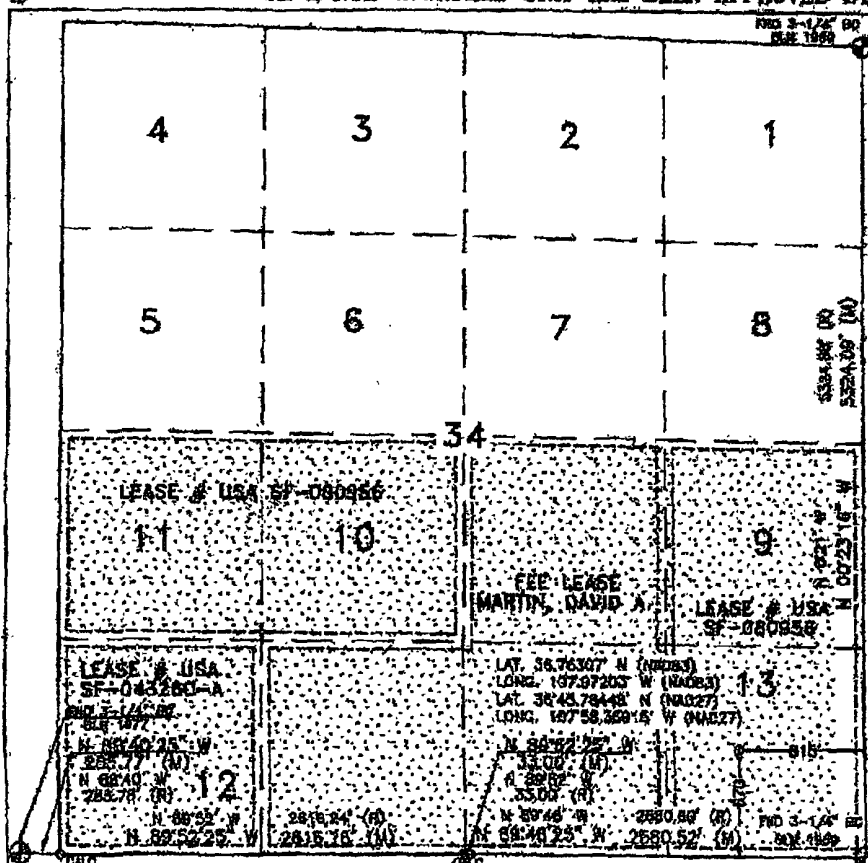
UL or lot no.	Section	Township	Range	Lot No.	Feet from the	North/South line	Feet from the	East/West line	County
P	34	30N	11W	13	678'	SOUTH	815'	EAST	SAN JUAN

11 Bottom Hole Location if Different From Surface

UL or lot no.	Section	Township	Range	Lot No.	Feet from the	North/South line	Feet from the	East/West line	County
P									
*Redeemed Acres: 321.87 ACRES (5/2)					*Lease or Title		*Consolidation Code		*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

12



17 OPERATOR CERTIFICATION

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 retained 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 or a compulsory pooling order previously entered by the state.

*Kandis Roland*  
Signature  
Kandis Roland

Printed Name

Printed Name

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was obtained from field notes or official records kept by me or under my supervision, and that the same, as true and correct to the best of my belief.

JUNE 15, 2007

Date of Survey

Signature and Seal of Professional Surveyor

*David F. Russell*



DAVID RUSSELL

Certificate Number

10201

LATITUDE: 36.76307°N  
 LONGITUDE: 107.97203°W  
 DATUM: NAD 83

# BURLINGTON RESOURCES O&G CO LP

MARTIN #100

670' FSL & 815' FEL

LOCATED IN THE SE/4 SE/4 OF SECTION 34,

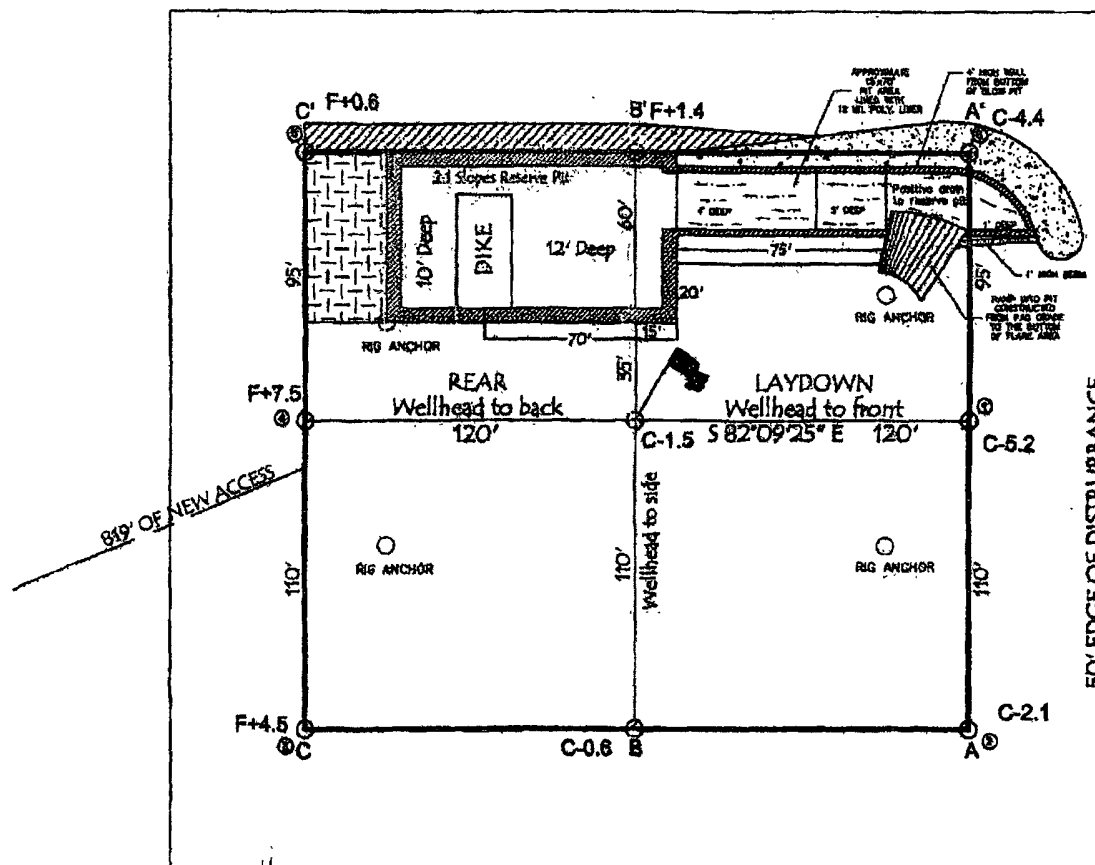
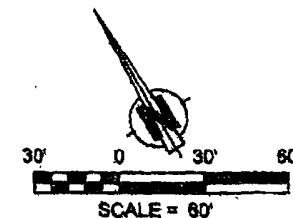
T30N, R11W, N.M.P.M.,

SAN JUAN COUNTY, NEW MEXICO

GROUND ELEVATION: 5764', NAVD 88

FINISHED PAD ELEVATION: 5762.6', NAVD 88

SLOPES TO BE CONSTRUCTED TO  
 MATCH THE ORIGINAL CONTOURS  
 AS CLOSE AS POSSIBLE.



305' x 340' = 2.38 ACRES OF DISTURBANCE  
 SCALE: 1" = 60'  
 JOB No.: COPC088  
 DATE: 08/28/07

## NOTE:

RESERVE PIT DIKE: TO BE 8" ABOVE DEEP SIDE (OVERFLOW - 3' WIDE AND 1' ABOVE SHALLOW SIDE).  
 RUSSELL SURVEYING, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES.  
 CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED, BURIED PIPELINES OR  
 CABLES ON WELL PAD, IN CONSTRUCTION ZONE AND/OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR  
 TO CONSTRUCTION.

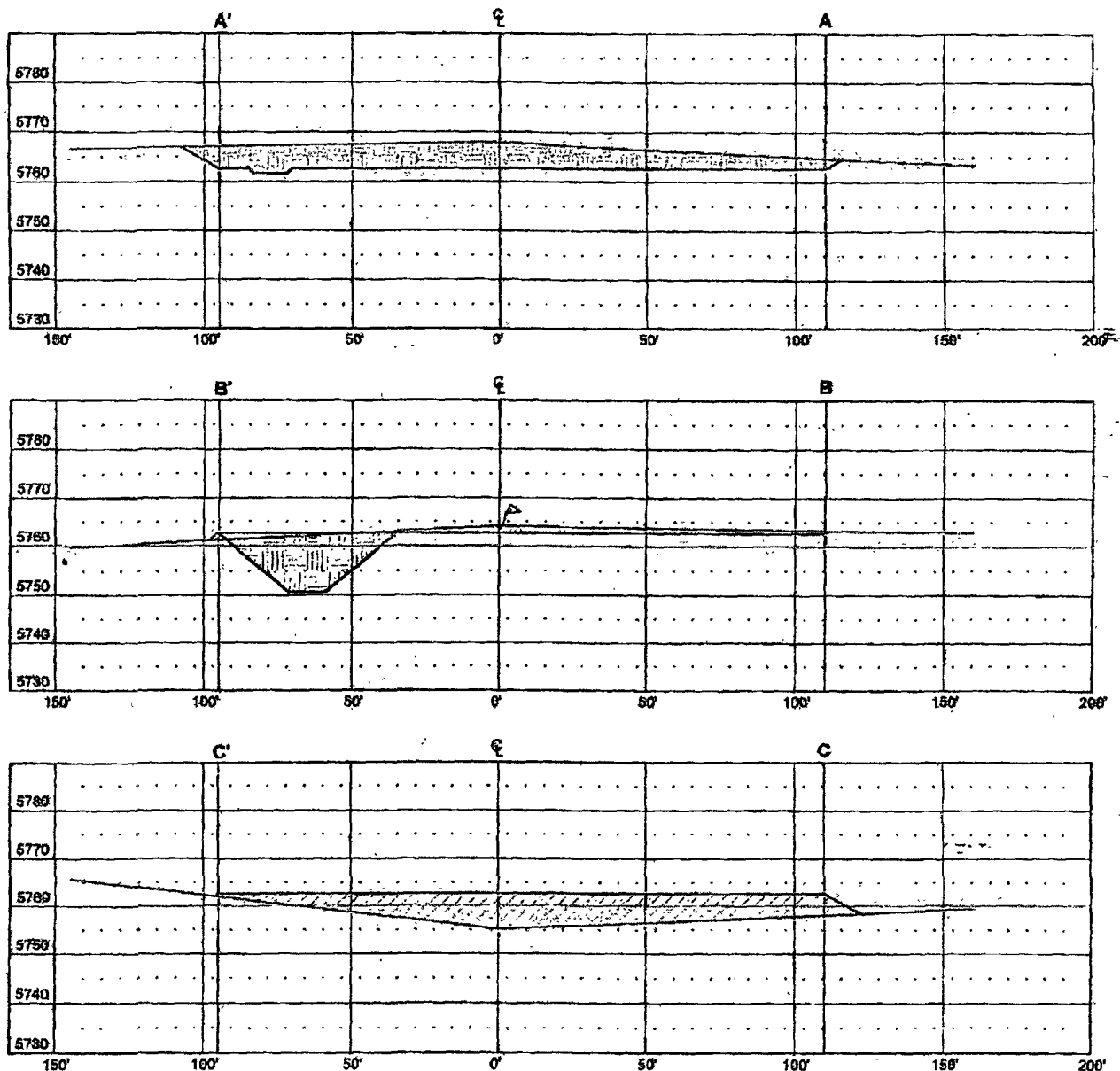


**Russell Surveying**  
 1409 W. Aztec Blvd. #2  
 Aztec, New Mexico 87410  
 (505) 334-8637

LATITUDE: 36.76307°N  
LONGITUDE: 107.97203°W  
DATUM: NAD 83

**BURLINGTON RESOURCES O&G CO LP**

MARTIN #100  
670' FSL & 815' FEL  
LOCATED IN THE SE/4 SE/4 OF SECTION 34,  
T30N, R11W, N.M.P.M.,  
SAN JUAN COUNTY, NEW MEXICO  
GROUND ELEVATION: 5764', NAVD 88  
FINISHED PAD ELEVATION: 5762.6', NAVD 88



THIS DIAGRAM IS AN ESTIMATE OF DIRT BALANCE AND IS NOT INTENDED TO BE AN EXACT MEASURE OF VOLUME

VERT. SCALE: 1" = 30'  
HORZ. SCALE: 1" = 50'  
JOB No.: COP083  
DATE: 08/28/07



**Russell Surveying**  
1408 W. Aztec Blvd. #2  
Aztec, New Mexico 87410  
(505) 334-8837

# **Burlington Resources Oil & Gas Company, LP**

## **San Juan Basin**

### **Closure Plan**

In accordance with Rule 19.15.17.12 NMAC the following information describes the closure requirements of temporary pits on Burlington Resources Oil & Gas Company, LP (BR) locations. This is BR's standard procedure for all temporary pits. A separate plan will be submitted for any temporary pit which does not conform to this plan.

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 pit closure. Closure report will be filed on C-144 and incorporate the following:

- Details on Capping and Covering, where applicable.
- Plot Plan (Pit Diagram)
- Inspection Reports
- Sampling Results
- C-105
- Copy of Deed Notice will be filed with County Clerk

#### **General Plan:**

1. All free standing liquids will be removed at the start of the pit closure process from the pit and disposed of in a division-approved facility or recycle, reuse or reclaim the liquids in a manner that the appropriate division district office approves. The facilities to be used will be Basin Disposal (Permit #NM-01-005) and Envirotech Land Farm (Permit #NM-01-011)
2. The preferred method of closure for all temporary pits will be on-site burial, assuming that all the criteria listed in sub-section (B) of 19.15.17.13 are met.
3. The surface owner shall be notified of BR's closing of the temporary pit prior to closure as per the approved closure plan via certified mail, return receipt requested.
4. Within 6 months of the Rig Off status occurring BR will ensure that temporary pits are closed, re-contoured, and reseeded.
5. Notice of Closure will be given prior to the Aztec Division office between 72 hours and one week via email, or verbally. The notification of closure will include the following:
  - i. Operator's name
  - ii. Location by Unit Letter, Section, Township, and Range. Well name and API number.
6. Liner of temporary pit shall be removed above "mud level" after stabilization. Removal of liner will consist of manually or mechanically cutting liner at mud level and removing all remaining liner. Care will be taken to remove "All" of the liner i.e., edges of liner entrenched or buried. All excessive liner will be disposed of at the San Juan County Landfill located on CR 3100.
7. Pit contents shall be mixed with non-waste containing, earthen material in order to achieve the solidification process. The solidification process will be accomplished using a combination of natural drying and mechanically mixing. Pit contents will be mixed with non-waste, earthen material to a consistency that is deemed a safe and stable. The mixing ratio shall not exceed 3 parts clean soil to 1 part pit contents.
8. A five point composite sample will be taken of the pit using sampling tools and all samples tested per Subsection B of 19.15.17.13(B)(1)(b). In the event that the criteria are not met, all contents will be handled per Subparagraph (a) of Paragraph (1) of Subsection B of 19.15.17.13 i.e., Dig and haul.

<b>Components</b>	<b>Tests Method</b>	<b>Limit (mg/Kg)</b>
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	1000/500

9. A five point composite sample will be taken from the cavitation pit pursuant to 19.15.17.13(B)(1)(b)(i) in order to assure there has not been any type of release.

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	500

10. Upon completion of solidification and testing standards being passed, the pit area will be backfilled with compacted, non-waste containing, earthen material. A minimum of four feet of cover shall be achieved and the cover shall include one foot of suitable material to establish vegetation at the site, or the background thickness of topsoil, whichever is greater. If standard testing fails BR will dig and haul all contents pursuant to 19.15.17.13.i.a. After doing such, confirmation sampling will be conducted to ensure a release has not occurred.
11. During the stabilization process if the liner is ripped by equipment the Aztec OCD office will be notified within 48 hours and the liner will be repaired if possible. If the liner can not be repaired then all contents will be excavated and removed.
12. Dig and Haul Material will be transported to the Envirotech Land Farm located 16 miles south of Bloomfield on Angel Peak Road, CR 7175. Permit # NM010011
13. Re-contouring of location will match fit, shape, line, form and texture of the surrounding. Re-shaping will include drainage control, prevent ponding, and prevent erosion. Natural drainages will be unimpeded and water bars and/or silt traps will be place in areas where needed to prevent erosion on a large scale. Final re-contour shall have a uniform appearance with smooth surface, fitting the natural landscape.
14. Notification will be sent to OCD when the reclaimed area is seeded.
15. BR shall seed the disturbed areas the first growing season after the operator closes the pit. Seeding will be accomplished via drilling on the contour whenever practical or by other division-approved methods. BLM or Forest Service stipulated seed mixes will used on federal lands. Vegetative cover will equal 70% of the native perennial vegetative cover (un-impacted) consisting of at least three native plant species, including at least one grass, but not including noxious weeds, and maintain that cover through two successive growing seasons. Repeat seeding or planting will be continued until successful vegetative growth occurs.

Type	Variety or Cultivator	PLS/A
Western wheatgrass	Arriba	3.0
Indian ricegrass	Paloma or Rimrock	3.0
Slender wheatgrass	San Luis	2.0
Crested wheatgrass	Hy-crest	3.0
Bottlebrush Squirreltail	Unknown	2.0
Four-wing Saltbrush	Delar	.25

**Species shall be planted in pounds of pure live seed per acre:**

**Present Pure Live Seed (PLS) = Purity X Germination/100**

**Two lots of seed can be compared on the basis of PLS as follows:**

Source No. One (poor quality)	Source No. two (better quality)
Purity 50 percent	Purity 80 percent
Germination 40 percent	Germination 63 percent
Percent PLS 20 percent	Percent PLS 50 percent
<b>5 lb. bulk seed required to make 1 lb. PLS</b>	<b>2 lb. bulk seed required to make 1 lb. PLS</b>

16. The temporary pit will be located with a steel marker, no less than four inches in diameter, cemented in a hole three feet deep in the center of the onsite burial upon the abandonment of all the wells on the pad. The marker will be flush with the ground to allow access of the active well pad and for safety concerns. The marker will include a threaded collar to be used for future abandonment. The top of the marker will contain a welded steel 12" square plate that indicates the onsite burial of the temporary pit. The plate will be easily removable and a four foot tall riser will be threaded into the top of the collar marker and welded around the base with the operator's information at the time of all wells on the pad are abandoned. The operator's information will include the following: Operator Name, Lease Name, Well Name and number, Unit Number, Section, Township, Range and an indicator that the marker is an onsite burial location.