

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.

2888

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.

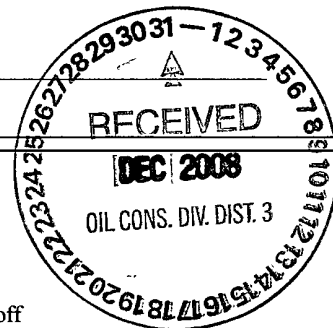
1.  
Operator: Black Hills Gas Resources OGRID #: 013925  
Address: P.O. Box 249 / 3200 North First Street Bloomfield, NM 87413  
Facility or well name: Jicarilla 29-02-09 #143  
API Number: 30-039-30080 OCD Permit Number: \_\_\_\_\_  
U/L or Qtr/Qtr Unit O /SW/SE Section 9 Township 29 North Range 2 West County: Rio Arriba  
Center of Proposed Design: Latitude 36.733645 N Longitude 107.045076' 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 \_\_\_\_\_

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

5.  
☐ **Alternative Method:**  
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.



6.

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

- ☐ Chain link, six feet in height, two strands of barbed wire at top (*Required if located within 1000 feet of a permanent residence, school, hospital, institution or church*)
- ☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet
- ☐ Alternate. Please specify: \_\_\_\_\_

7.

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

- ☐ Screen ☐ Netting ☐ Other \_\_\_\_\_
- ☐ Monthly inspections (If netting or screening is not physically feasible)

8.

**Signs:** Subsection C of 19.15.17.11 NMAC

- ☐ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers
- ☐ Signed in compliance with 19.15.3.103 NMAC

9.

**Administrative Approvals and Exceptions:**

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

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

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

10.

**Siting Criteria (regarding permitting):** 19.15.17.10 NMAC

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

|  |   |
|--|---|
| Ground water is less than 50 feet below the bottom of the temporary pit, permanent pit, or below-grade tank.<br>- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells   | <input type="checkbox"/> Yes <input type="checkbox"/> 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).<br>- Topographic map; Visual inspection (certification) of the proposed site   | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 300 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.<br>(Applies to temporary, emergency, or cavitation pits and below-grade tanks)<br>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image  | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> NA |
| Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.<br>(Applies to permanent pits)<br>- Visual inspection (certification) of the proposed site; Aerial photo; Satellite image   | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><input type="checkbox"/> 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.<br>- NM Office of the State Engineer - iWATERS database search; Visual inspection (certification) of the proposed site | <input type="checkbox"/> Yes <input type="checkbox"/> 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.<br>- Written confirmation or verification from the municipality; Written approval obtained from the municipality  | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within 500 feet of a wetland.<br>- US Fish and Wildlife Wetland Identification map; Topographic map; Visual inspection (certification) of the proposed site  | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within the area overlying a subsurface mine.<br>- Written confirmation or verification or map from the NM EMNRD-Mining and Mineral Division  | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within an unstable area.<br>- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; Topographic map  | <input type="checkbox"/> Yes <input type="checkbox"/> No                                |
| Within a 100-year floodplain.<br>- FEMA map  | <input type="checkbox"/> Yes <input type="checkbox"/> 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<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

☐ 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 identify the facility or facilities for the disposal of liquids, drilling fluids and drill cuttings. Use attachment if more than two facilities are required.

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Will any of the proposed closed-loop system operations and associated activities occur on or in areas that *will not* be used for future service and operations?

☐ Yes (If yes, please provide the information below) ☐ No

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

☐ Soil Backfill and Cover Design Specifications - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

17.

**Siting Criteria (regarding on-site closure methods only):** 19.15.17.10 NMAC

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

Ground water is less than 50 feet below the bottom of the buried waste.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No

☐ NA

Ground water is between 50 and 100 feet below the bottom of the buried waste

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No

☐ NA

Ground water is more than 100 feet below the bottom of the buried waste.

- NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells

☐ Yes ☐ No

☐ NA

Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).

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

☐ Yes ☐ No

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

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

☐ Yes ☐ No

Within 500 horizontal feet of a private, domestic fresh water well or spring that less than five households use for domestic or stock watering purposes, or within 1000 horizontal feet of any other fresh water well or spring, in existence at the time of initial application.

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

☐ Yes ☐ No

Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.

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

☐ Yes ☐ No

Within 500 feet of a wetland.

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

☐ Yes ☐ No

Within the area overlying a subsurface mine.

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

☐ Yes ☐ No

Within an unstable area.

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

☐ Yes ☐ No

Within a 100-year floodplain.

- FEMA map

☐ Yes ☐ No

18.

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

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

☐ Proof of Surface Owner Notice - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Construction/Design Plan of Burial Trench (if applicable) based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Construction/Design Plan of Temporary Pit (for in-place burial of a drying pad) - based upon the appropriate requirements of 19.15.17.11 NMAC

☐ Protocols and Procedures - based upon the appropriate requirements of 19.15.17.13 NMAC

☐ Confirmation Sampling Plan (if applicable) - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Waste Material Sampling Plan - based upon the appropriate requirements of Subsection F of 19.15.17.13 NMAC

☐ Disposal Facility Name and Permit Number (for liquids, drilling fluids and drill cuttings or in case on-site closure standards cannot be achieved)

☐ Soil Cover Design - based upon the appropriate requirements of Subsection H of 19.15.17.13 NMAC

☐ Re-vegetation Plan - based upon the appropriate requirements of Subsection I of 19.15.17.13 NMAC

☐ Site Reclamation Plan - based upon the appropriate requirements of Subsection G of 19.15.17.13 NMAC

19.

**Operator Application Certification:**

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

Name (Print): \_\_\_\_\_ Title: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

e-mail address: \_\_\_\_\_ Telephone: \_\_\_\_\_

20.

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

OCD Representative Signature: Jonathan D. Kelly Approval Date: 1/12/2012

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: December 4, 2008

22.

**Closure Method:**

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

23.

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

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

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

Disposal Facility Name: \_\_\_\_\_ Disposal Facility Permit Number: \_\_\_\_\_

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

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

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

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

24.

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

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

On-site Closure Location: Latitude 36.733645' N Longitude 107.045076' W 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): Daniel Manus Title: Regulatory Technician

Signature: Daniel Manus Date: Dec 30, 2008

e-mail address: daniel.manus@blackhillscorp.com Telephone: 505-634-1111 ext 27



## **Black Hills Gas Resources**

**Jicarilla 29-02-09 #143**

Surface Location: 500' FSL 1650' FEL SW/SE Unit O

Sec. 9 T29N R2W

Rio Arriba County, New Mexico Lease: Tract 4, MDA 701-98-0013

### **Closure Report Compliance Demonstrations**

- **Pit closure date**
  - Pit was closed on December 4, 2008
- **Proof of Closure Notification**
  - See attached letter and certified mail return receipt
- **Proof of Deed Notice**
  - The pit is located on Jicarilla Apache Reservation Lands
- **Plot Plan**
  - See attached Plot Plan for the pit and the well location map.
- **Confirmation Sampling**
  - See attached supporting analytical results
    - Benzene measured ND below the *detection limit of 0.2 mg/kg*
    - BTEX measured ND mg/kg total, below the *detection limit of 50 mg/kg total*
    - TPH measured 200 mg/kg below the *detection limit of 2500 mg/kg*
    - GRO measured ND mg/kg below the *detection limit of 500 mg/kg*
    - DRO measured 80 mg/kg below the *detection limit of 500 mg/kg*
    - Chloride measured 195mg/kg below the *detection limit of 1000 mg/kg*
- **Soil Backfilling and Cover Installation**
  - The pit was closed using BHGR previously approved closure plan.
    - Highlights
      - The pit contents were blended 3 to 1 and sampled
      - Four-foot of soil cover was used to cover the pit contents.
      - Topsoil was applied to the thickness of background topsoil.
      - Seeds were applied using a Land Pride drill seeder set at approximately 21 pounds per acre. Approximately 1.5 acres including the pit were reclaimed and re-seeded with a total of approximately 32 pounds of seed used.
    - See BHGR typical pit closure design
- **Re-vegetation Application Rate**
  - The approved BIA/Jicarilla seed mix was applied at a rate of 21 pounds per acre.
  - See attached BIA/JOAG seed mixture and application rates.
- **Site Reclamation**
  - See attached before and after photos of the pit.
- **Pit inspection**
  - See attached.

***Siting Criteria for Jicarilla 29-02-09 #143***



# Black Hills Gas Resources, Inc.

A subsidiary of Black Hills Exploration and Production, Inc.

3200 N 1<sup>st</sup> Street – PO Box 249 Bloomfield, NM 87413

Daniel Manus  
Regulatory Technician

Bus: (505) 634-1111 ext. 28  
Fax: (505) 634-1116  
[daniel.manus@blackhillscorp.com](mailto:daniel.manus@blackhillscorp.com)

December 9, 2008

Bureau of Indian Affairs  
Jicarilla Agency  
P.O. Box 167  
Dulce, NM 87528

Manual Myore:

In accordance with the State of New Mexico Rule 19.15.17.12 NMAC, Surface Owner Notification, Black Hills Gas Resources (BHGR) has closed the drilling pit for the Jicarilla 29-02-09 #143 gas well. The pit was closed on December 4, 2008. Attached are a site map and the Plot Plan indicating the location and the closed pit in reference to the well-head.

If there are any questions contact Daniel Manus (505) 634-1111 extensions 28.

Respectfully,

Daniel Manus  
Regulatory Technician

| SENDER: COMPLETE THIS SECTION  |  | COMPLETE THIS SECTION ON DELIVERY  |  |
|--|--|--|--|
| <ul style="list-style-type: none"><li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li><li>Print your name and address on the reverse so that we can return the card to you.</li><li>Attach this card to the back of the mailpiece, or on the front if space permits.</li></ul> |  | A: Signature<br>   |  |
| 1: Article Addressed to:<br><br>Bureau of Indian Affairs<br>P.O. Box 167<br>Dulce, New Mexico 87528  |  | B: Received by (Printed Name)<br>Daniel Manus  | <input type="checkbox"/> Agent<br><input type="checkbox"/> Addressee |
| By:  |  | C: Date of Delivery<br>DEC 18 2008   |  |
|  |  | D: Is delivery address different from item 1? <input type="checkbox"/> Yes<br>If YES, enter delivery address below: <input type="checkbox"/> No  |  |
|  |  | 3: Service Type<br><input checked="" type="checkbox"/> Certified Mail <input type="checkbox"/> Express Mail<br><input type="checkbox"/> Registered <input checked="" type="checkbox"/> Return Receipt for Merchandise<br><input type="checkbox"/> Insured Mail <input type="checkbox"/> C.O.D. |  |
|  |  | 4: Restricted Delivery? (Extra Fee) <input type="checkbox"/> Yes   |  |

2: 7007 0220 0004 0187 4990

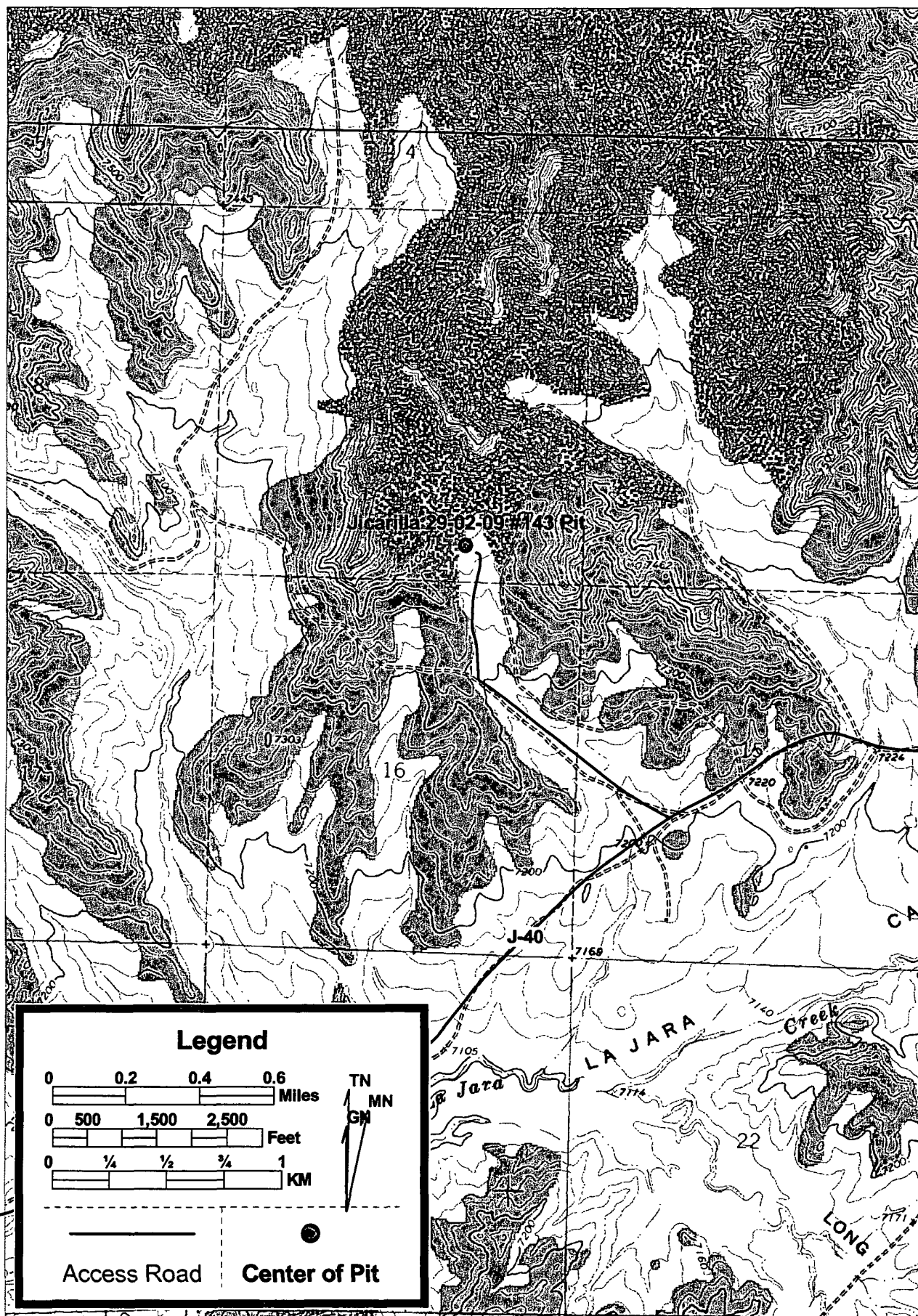
PS Form 3811, February 2004

Domestic Return Receipt

102595-02-M-1540

CERTIFIED MAIL 7007 0220 0004 0187 4990

CC File  
Brandon Powell NMOCD

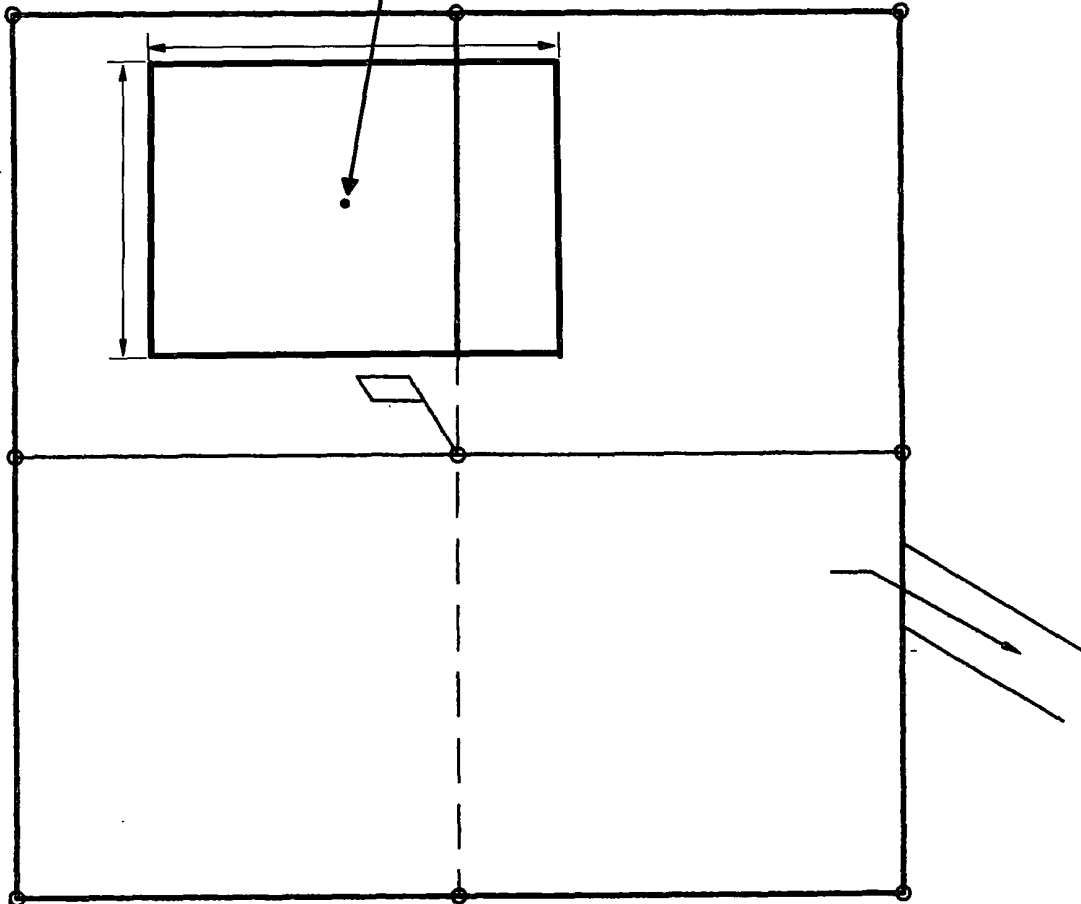


WELL PAD DIAGRAM

COMPANY: BLACK HILLS GAS RESOURCES  
LEASE: JICARILLA 29-02-09 No. 143  
FOOTAGE: 500 FSL 1650 FEL  
SEC.: 9, TWN: 29-N, RNG: 2-W, NMPM  
ELEVATION: 7365'



Center of Pit  
Latitude: 36.733645 N  
Longitude: 107.045076 W





### Sample Analysis Report

**CLIENT:** Black Hills Gas Resources

3200 North 1st Street

PO Box 249

Bloomfield, NM 87413

**Date Reported:** 10/12/2008

**Report ID:** O0810006001

**Project:** Pit Sampling

**Lab ID:** O0810006-002

**Client Sample ID:** Jicarilla 29-02-09#143

**Matrix:** Soil

**Work Order:** O0810006

**Collection Date:** 10/6/2008 12:00:00 PM

**Date Received:** 10/7/2008 10:30:00 AM

**COC:** 116878

| Analyses                                  | Result | PQL  | Limits | Qual | Units | Date Analyzed/Init          |
|---|--------|------|--------|------|-------|-----------------------------|
| <b>8021B MBTEXN-Soil</b>                  |        |      |        |      |       | <b>Prep Date: 10/7/2008</b> |
| Benzene                                   | ND     | 0.50 |        |      | mg/Kg | 10/08/2008 MAB              |
| Toluene                                   | ND     | 0.50 |        |      | mg/Kg | 10/08/2008 MAB              |
| Ethylbenzene                              | ND     | 0.50 |        |      | mg/Kg | 10/08/2008 MAB              |
| m,p-Xylenes                               | ND     | 1.0  |        |      | mg/Kg | 10/08/2008 MAB              |
| o-Xylene                                  | ND     | 0.50 |        |      | mg/Kg | 10/08/2008 MAB              |
| Surr: 4-Bromofluorobenzene                | 106    |      | 80-138 |      | %REC  | 10/08/2008 MAB              |
| <b>8015B Gasoline Range Organics-Soil</b> |        |      |        |      |       | <b>Prep Date: 10/7/2008</b> |
| Gasoline Range Organics (nC6-nC10)        | ND     | 10   |        |      | mg/Kg | 10/08/2008 MAB              |
| Surr. 4-Bromofluorobenzene                | 108    |      | 65-141 |      | %REC  | 10/08/2008 MAB              |
| <b>8015B Diesel Range Organics-Soil</b>   |        |      |        |      |       | <b>Prep Date: 10/6/2008</b> |
| Diesel Range Organics (nC10-nC32)         | 80     | 20   |        |      | mg/Kg | 10/11/2008 ECS              |
| Surr: o-Terphenyl                         | 76.9   |      | 62-112 |      | %REC  | 10/11/2008 ECS              |

These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- D Diluted out of recovery limit
- H Holding times for preparation or analysis exceeded
- M Matrix Effect
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit

Reviewed by:

Tom Patten, Laboratory Manager



## Sample Analysis Report

**CLIENT:** Black Hills Gas Resources  
3200 North 1st Street; P.O. Box 249  
Bloomfield, NM 87413

**Date Reported:** 10/14/2008  
**Report ID:** S0810162001

**Project:** Pit Sampling  
**Lab ID:** S0810162-002  
**Client Sample ID:** Jicarilla 29-02-09 #143  
**COC:** 116878

**Work Order:** S0810162  
**Collection Date:** 10/6/2008  
**Date Received:** 10/7/2008  
**Sampler:**  
**Matrix:** Soil

| Analyses                       | Result | PQL  | Qual | Units | Date Analyzed/Init | Method     |
|--------------------------------|--------|------|------|-------|--------------------|------------|
| <b>General Parameters-Soil</b> |        |      |      |       |                    |            |
| TPH 418.1                      | 200    | 100  |      | ppm   | 10/09/2008 000 LJK | 418.1      |
| <b>Soil Anions</b>             |        |      |      |       |                    |            |
| Chloride                       | 195    | 0.01 |      | ppm   | 10/10/2008 000 LK  | USDA 60-3a |

These results apply only to the samples tested.

**Qualifiers:**

- \* Value exceeds Maximum Contaminant Level
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL
- S Spike Recovery outside accepted recovery limits

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit

Reviewed by: Karen A Secor  
Karen Secor, Soil Lab Supervisor



Inter-Mountain Laboratories, Inc.

Sheridan, WY and Gillette, WY

- CHAIN OF CUSTODY RECORD

This is a LEGAL DOCUMENT. All shaded fields must be completed.

|  |                          |   |   |   |                        |  |   |     |     |           |     |
|--|--------------------------|---|---|---|------------------------|--|---|-----|-----|-----------|-----|
| Client Name<br><b>BHGR</b>                               |                          |   | Project Identification<br><b>Pit Sampling</b>   |   |                        | Sampler (Signature/Printed)<br><i>[Signature]</i> / <b>Lynn H. Benally</b>               |   |     |     |           |     |
| Report Address<br><b>PO Box 249 Bloomfield, NM 87413</b> |                          |   | Contact Name and Email<br><b>Lynn H. Benally lbenally@bhop.com</b><br><b>Daniel Manns dmanns@bhop.com</b> |   |                        | ANALYSES / PARAMETERS  |   |     |     |           |     |
| Invoice Address<br><b>Same</b>                           |                          |   | Voice<br><b>505-654-1111 ext 27, 28</b>   |   |                        | FAX<br><b>505-634-1116</b>   |   |     |     |           |     |
| Purchase Order #   |                          |   | Quote #   |   |                        |  |   |     |     |           |     |
| ITEM   | LAB ID<br>(Lab Use Only) | DATE<br>SAMPLED   | TIME  | SAMPLE<br>IDENTIFICATION                                  | Matrix                 | # of<br>Containers   | BTEX  | DDO | GRD | Tph 418.1 | CL- |
| 1  |                          | 10/6/08   | 1045  | MC 29-04-28 #121  | SL                     | 4  | X   | X   | X   | X         | X   |
| 2  |                          | 10/6/08   | 1200  | Jicarilla 29-02-09 #143                                   | SL                     | 4  | X   | X   | X   | X         | X   |
| 3  |                          |   |   |   |                        |  |   |     |     |           |     |
| 4  |                          |   |   |   |                        |  |   |     |     |           |     |
| 5  |                          |   |   |   |                        |  |   |     |     |           |     |
| 6  |                          |   |   |   |                        |  |   |     |     |           |     |
| 7  |                          |   |   |   |                        |  |   |     |     |           |     |
| 8  |                          |   |   |   |                        |  |   |     |     |           |     |
| 9  |                          |   |   |   |                        |  |   |     |     |           |     |
| 10   |                          |   |   |   |                        |  |   |     |     |           |     |
| 11   |                          |   |   |   |                        |  |   |     |     |           |     |
| 12   |                          |   |   |   |                        |  |   |     |     |           |     |
| 13   |                          |   |   |   |                        |  |   |     |     |           |     |
| 14   |                          |   |   |   |                        |  |   |     |     |           |     |
| LAB COMMENTS   |                          | Relinquished By (Signature/Printed)<br><b>Daniel Manns / Daniel Manns</b> |   |   | DATE<br><b>10/6/08</b> | TIME<br><b>15:00</b>   | Received By (Signature/Printed)<br><b>[Signature] / Ed Sc</b> |     |     |           |     |
| SHIPPING INFO  |                          | MATRIX CODES  |   | TURN AROUND TIMES   |                        | COMPLIANCE INFORMATION   |   |     |     |           |     |
| <input type="checkbox"/> UPS                             |                          | Water WT  |   | Check desired service                                     |                        | Compliance Monitoring ?  |   |     |     |           |     |
| <input checked="" type="checkbox"/> Fed Express          |                          | Soil SL   |   | <input type="checkbox"/> Standard turnaround              |                        | Program (SDWA, NPDES, ...)   |   |     |     |           |     |
| <input type="checkbox"/> US Mail                         |                          | Solid SD  |   | <input checked="" type="checkbox"/> RUSH - 5 Working Days |                        | PWSID / Permit #   |   |     |     |           |     |
| <input type="checkbox"/> Hand Carried                    |                          | Trip Blank TB   |   | <input type="checkbox"/> URGENT - 2 Working Days          |                        | Chlorinated?   |   |     |     |           |     |
| <input type="checkbox"/> Other                           |                          | Other OT  |   | Rush & Urgent Surcharges will be applied                  |                        | Sample Disposal: Lab <input checked="" type="checkbox"/> Client <input type="checkbox"/> |   |     |     |           |     |

INTER-MOUNTAIN LABORATORIES, INC.

00810006



## Condition Upon Receipt (Attach to COC)

### Sample Receipt

1 Number of ice chests/packages received

Note as "OTC" if samples are received over the counter, unpackaged

2 Temperature of cooler/samples.

Temps (°C):

4.7

Acceptable is 0.1 to 6°C Also acceptable is "Received on Ice" (ROI) for samples received on the same day as sampled or "Received at Room Temperature" (RRT) for samples received within one hour of sampling.

Client contact for temperature failures must be documented below.

3 COC Number (If applicable):

116878

4 Do the number of bottles agree with the COC?

Yes

No

N/A

5 Were the samples received intact? (no broken bottles, leaks, etc)

Yes

No

N/A

6 Were the sample custody seals intact?

Yes

No

N/A

7 Is the COC properly completed, legible, and signed?

Yes

No

### Sample Verification, Labeling & Distribution

1 Were all requested analyses understood and appropriate?

Yes

No

2 Did the bottle labels correspond with the COC information?

Yes

No

3 Samples collected in proper containers?

Yes

No

4 Were all containers properly preserved?

Yes

No

N/A

Added  
at Lab

Client contact for preservation failures must be documented below.

5 VOA vials have <6mm headspace?

Yes

No

N/A

6 Were all analyses within holding time at the time of receipt?

Yes

No

7 Have rush or project due dates been checked and accepted?

Yes

No

N/A

Attach Lab ID labels to the containers and deliver to appropriate lab section.

Set ID: 00810006

8 Login verification

Client Name: Yes - No

Project Name: Yes - No

Matrix: Yes - No

Sample Receipt, Verification, Login, Labeling & Distribution completed by (initials):

### Discrepancy Documentation (use back of sheet for notes on discrepancies)

Any items listed above with a response of "No" or do not meet specifications must be resolved.

Person Contacted:

Telephone Number:

Initiated By:

Date/Time:

Problem:

Resolution:

Person Contacted:

Telephone Number:

Initiated By:

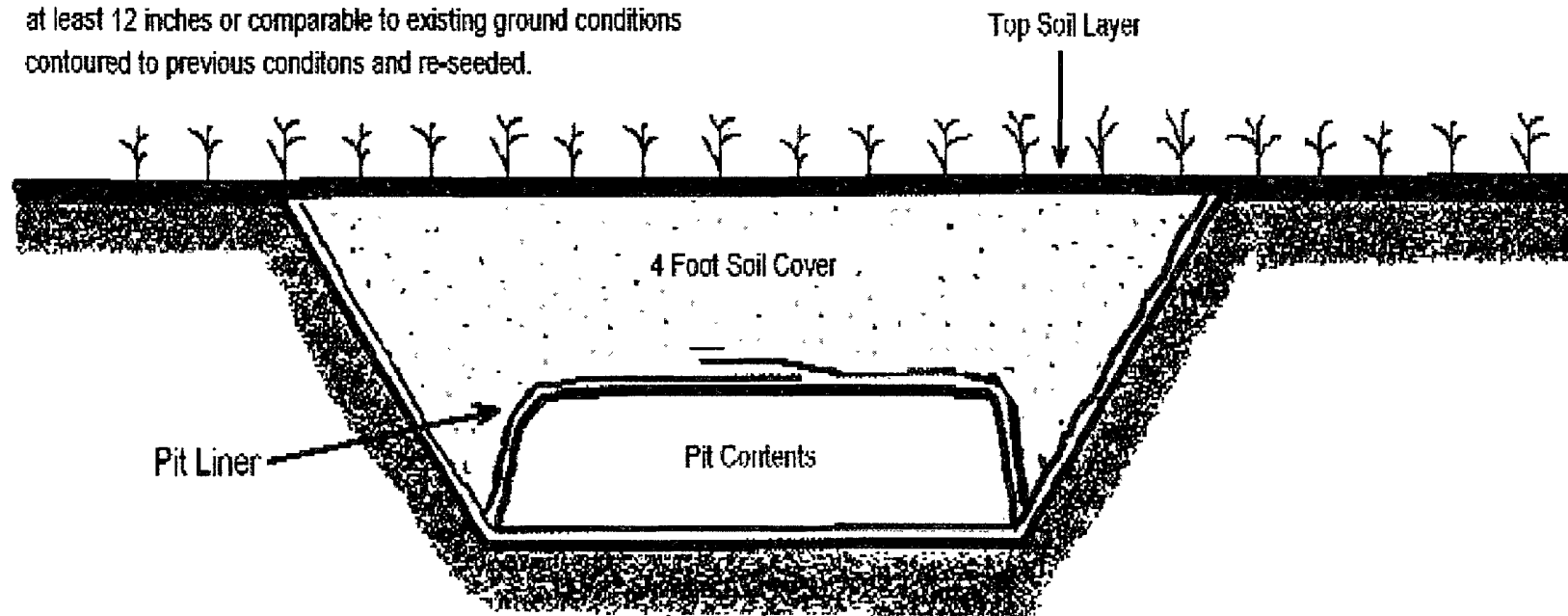
Date/Time:

Problem:

Resolution:

## Black Hills Gas Resources Pit Closure Diagram

Minimum 4 foot soil cover compacted with a topsoil layer  
at least 12 inches or comparable to existing ground conditions  
contoured to previous conditions and re-seeded.



### III. THREATENED AND ENDANGERED SPECIES:

If, in its operations, operator/holder discovers any Threatened/Endangered/Sensitive Species – Plant/Animal, then work in the vicinity of the discovery will be suspended and the discovery promptly reported to the Surface Managing Agency. The Authorized Officer will then specify what action is to be taken. Failure to notify the Surface Managing Agency about a discovery that leads to the take of a listed species may result in civil or criminal penalties in accordance with the Endangered Species Act of 1973 (as amended.)

### IV. RESEEDING AND ABANDONMENT

1. All surface areas disturbed during drilling activities and not in use for production activities will be reseeded. Any stockpiled topsoil on location will be used in the seeding effort. The goal of reseeded is successful revegetation to the site's capability. If, in the opinion of the Surface Managing Agency, the seeding is unsuccessful, the lessee/operator may be required to make subsequent seedings.

In conformance with the BIA, Jicarilla Agency and Jicarilla Apache Nation Environmental Protection Office (EPO), the following recommended seed mixture will be applied to the appropriate proposed action.

12/2004

| <b>NORTH (of Tapacito Wash)</b>                                     |                         |                 |                         |
|---|-------------------------|-----------------|-------------------------|
| <b>SEED MIXTURE</b>   | <b>LBS PLS PER ACRE</b> | <b>% OF MIX</b> | <b>% LIVE SEED/ACRE</b> |
| Alkali Sacaton<br>Salado Variety                                    | 1.0                     | 25              | .25                     |
| Western Wheat Grass<br>Arriba or Barton Variety                     | 8.0                     | 25              | 2.0                     |
| Intermediate Wheat<br>Grass Amur or Oahe Variety                    | 9.0                     | 20              | 1.80                    |
| Galleta<br>Caryopsis  | 2.0                     | 20              | .40                     |
| Blue Gramma<br>Machita, Lovington                                   | 1.0                     | 10              | .10                     |
| <b>SOUTH (of Tapacito Wash)</b>                                     |                         |                 |                         |
| Western Wheat Grass<br>Arriba or Barton Variety                     | 8.0                     | 25              | 2.0                     |
| Intermediate Wheat<br>Grass Amur or Oahe Variety                    | 9.0                     | 20              | 1.80                    |
| Galleta<br>Caryopsis  | 2.0                     | 20              | .40                     |
| Blue Gramma<br>Hachita, Lovington                                   | 1.0                     | 10              | .10                     |
| Multiply LBS/PLS/Per Acre X Total Acres to get total required seed. |                         |                 |                         |

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:

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

Seed mixture used must be *certified*. There shall be NO primary or secondary noxious weeds in seed mixture. Seed labels from each bag shall be available for inspection while seed is being sown.

Seeding shall be accomplished between July 1 and September 15 (later date may be extended on a case-by-case basis with AO approval). Seeding shall be repeated if a satisfactory stand is not obtained as determined by the AO upon evaluation after the second growing season.

Compacted areas shall be ripped to a depth of 12" and disked to a depth of six inches before seeding. Seed with a disk-type drill with two boxes for various seed sizes. The drill rows shall be eight to ten inches apart. Seed shall be planted at not less than one-half inch deep or more than one inch deep. The seeder shall be followed with a drag, packer, or roller to ensure uniform coverage of the seed, and adequate compaction. Drilling shall be done on the contour where possible, not up and down the slope.

Where slopes are too steep for contour drilling a "cyclone" hand seeder or similar broadcast seeder shall be used. Seed shall then be covered to the depth described above by whatever means is practical, i.e. hand raked. If the seed is not covered, the prescribed seed mixture amount (pounds/acre/PLS) will be doubled.

If, upon abandonment of wells, the retention of access road is not considered necessary for the management and multiple use of the natural resources, it will be ripped a minimum of 12" in depth. After ripping, water bars will be installed. All ripped surfaces are to be protected from vehicular travel by construction of a dead end ditch and earthen barricade at the entrance to these ripped areas. (Reseeding of affected areas may be required.)

**ABANDONMENT:** Ninety days prior to termination of the ROW, the holder shall contact the AO to arrange a joint inspection of the ROW. This inspection will be held to agree to an acceptable termination (and rehabilitation) plan. This plan shall include, but is not limited to, removal of facilities, drainage structures, or surfacing material, recontouring, topsoiling or seeding. The AO must approve the plan in writing prior to the holder's commencement of any termination actions.



## **Black Hills Gas Resources**

### **Jicarilla 29-02-09 #143**

Surface Location: 500' FSL 1650' FEL SW/SE Unit O

Sec. 9 T29N R2W

Bottom Hole Location:  $\pm 2306'$  FSL  $\pm 2413'$  FEL NW/SE Unit J

Sec. 8 T29N R2W

Rio Arriba County, New Mexico Lease: Tract 701-98-0013

### **Inspection report for Jicarilla 29-02-09 #143**

- Information taken from daily drilling logs

**Jicrailla 29-02-09 #143**

**DRILLING RIG**

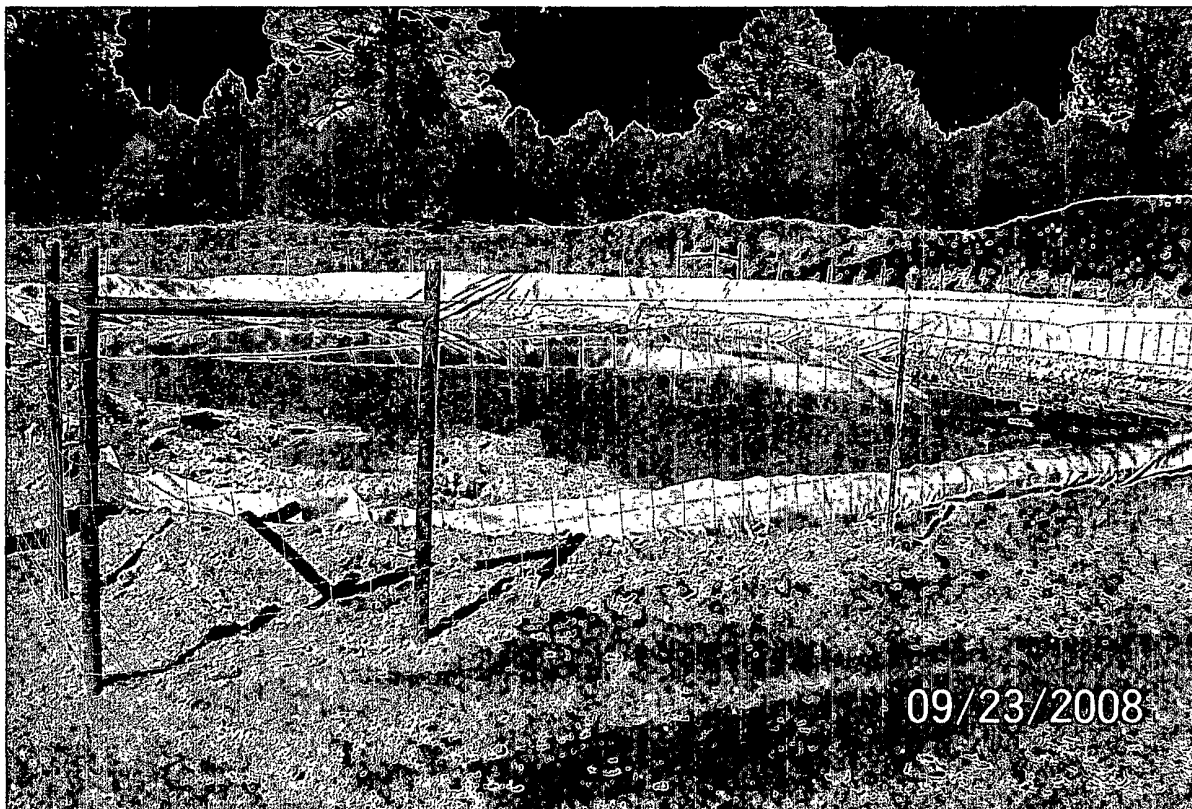
| <b>DATE</b> | <b>PIT LEVEL DATA</b>                             |
|-------------|---|
| 8/17/2008   | RESERVE PIT IS 5' FROM TOP, 3' FROM MAX LEVEL     |
| 8/18/2008   | RESERVE PIT IS 6' FROM TOP, 4' FROM MAX LEVEL     |
| 8/19/2008   | RESERVE PIT IS 6' FROM TOP, 4' FROM MAX LEVEL     |
| 8/20/2008   | RESERVE PIT IS 6' FROM TOP, 4' FROM MAX LEVEL     |
| 8/21/2008   | RESERVE PIT IS 6' FROM TOP, 4' FROM MAX LEVEL     |
| 8/22/2008   | RESERVE PIT IS 6' FROM TOP, 4' FROM MAX LEVEL     |
| 8/23/2008   | RESERVE PIT IS 5.5' FROM TOP, 3.5' FROM MAX LEVEL |
| 8/24/2008   | RESERVE PIT IS 5.5' FROM TOP, 3.5' FROM MAX LEVEL |
| 8/25/2008   | RESERVE PIT IS 5.5' FROM TOP, 3.5' FROM MAX LEVEL |
| 8/26/2008   | RESERVE PIT IS 5.5' FROM TOP, 3.5' FROM MAX LEVEL |
| 8/27/2008   | RESERVE PIT IS 5.5' FROM TOP, 3.5' FROM MAX LEVEL |
| 8/28/2008   | RESERVE PIT IS 5.5' FROM TOP, 3.5' FROM MAX LEVEL |
| 8/29/2008   | RESERVE PIT IS 5.5' FROM TOP, 3.5' FROM MAX LEVEL |
| 8/30/2008   | RESERVE PIT IS 5.5' FROM TOP, 3.5' FROM MAX LEVEL |
| 8/31/2008   | RESERVE PIT IS 5.5' FROM TOP, 3.5' FROM MAX LEVEL |
| 9/1/2008    | RESERVE PIT IS 5.5' FROM TOP, 3.5' FROM MAX LEVEL |
| 9/2/2008    | RESERVE PIT IS 5.5' FROM TOP, 3.5' FROM MAX LEVEL |
| 9/3/2008    | RESERVE PIT IS 5.5' FROM TOP, 3.5' FROM MAX LEVEL |
| 9/4/2008    | RESERVE PIT IS 4' FROM TOP, 2' FROM MAX LEVEL     |
| 9/5/2008    | RESERVE PIT IS 4' FROM TOP, 2' FROM MAX LEVEL     |
| 9/6/2008    | RESERVE PIT IS 4' FROM TOP, 2' FROM MAX LEVEL     |
| 9/7/2008    | RESERVE PIT IS 4.5' FROM TOP, 2.5' FROM MAX LEVEL |
| 9/8/2008    | RESERVE PIT IS 4.5' FROM TOP, 2.5' FROM MAX LEVEL |
| 9/9/2008    | RESERVE PIT IS 5' FROM TOP, 3' FROM MAX LEVEL     |
| 9/10/2008   | RESERVE PIT IS 5' FROM TOP, 3' FROM MAX LEVEL     |
| 9/11/2008   | RESERVE PIT IS 5' FROM TOP, 3' FROM MAX LEVEL     |
| 9/12/2008   | RESERVE PIT IS 5' FROM TOP, 3' FROM MAX LEVEL     |
| 9/13/2008   | RESERVE PIT IS 5' FROM TOP, 3' FROM MAX LEVEL     |

**PHIL HENSON / DARREL BAXTER**

**Completion Rig**

| <b>DATE</b> | <b>PIT LEVEL DATA</b>                             |
|-------------|---|
| 9/25/2008   | RESERVE PIT IS 4.5' FROM TOP, 2.5' FROM MAX LEVEL |
| 9/26/2008   | RESERVE PIT IS 5" FROM TOP, 3" FROM MAX LEVEL     |
| 9/27/2008   | RESERVE PIT IS 5" FROM TOP, 3" FROM MAX LEVEL     |
| 9/28/2008   | RESERVE PIT IS 5" FROM TOP, 3" FROM MAX LEVEL     |
| 10/16/2008  | RESERVE PIT IS 6' FROM TOP, 4' FROM MAX LEVEL     |
| 10/17/2008  | RESERVE PIT IS 6' FROM TOP, 4' FROM MAX LEVEL     |
| 10/18/2008  | RESERVE PIT IS 6' FROM TOP, 4' FROM MAX LEVEL     |
| 10/19/2008  | RESERVE PIT IS 6' FROM TOP, 4' FROM MAX LEVEL     |
| 10/20/2008  | RESERVE PIT IS 6' FROM TOP, 4' FROM MAX LEVEL     |
| 10/21/2008  | RESERVE PIT IS 6' FROM TOP, 4' FROM MAX LEVEL     |

**MIKE ROMO**



*Jicarilla 29-04-09 #143 Drilling Pit before closure*



*Jicarilla 464-31 #233 Drilling Pit After Closure*

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

- 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

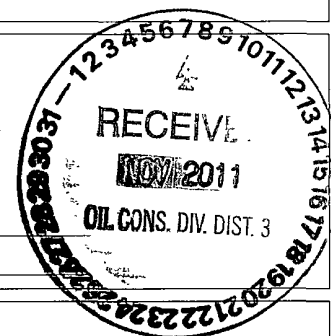
1.  
Operator: **Black Hills Gas Resources** OGRID #: **013925**  
Address: **3200 N 1st St Bloomfield, NM 87413**  
Facility or well name: **Jicarilla 29-02-09 #143**  
API Number: **30-039-30080** OCD Permit Number: **2888**  
U/L or Qtr/Qtr **Unit O** Section **9** Township **29N** Range **2W** County: **Rio Arriba**  
Center of Proposed Design: Latitude **36.73358 N** Longitude **107.04521 W** NAD: ☐ 1927 ☒ 1983  
Surface Owner: ☐ Federal ☐ State ☐ Private ☒ Tribal Trust or Indian Allotment

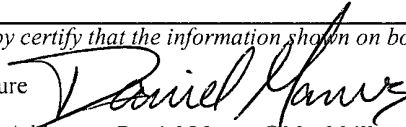
2.  
☒ **Pit:** Subsection F or G of 19.15.17.11 NMAC  
Temporary: ☒ Drilling ☐ Workover  
☐ Permanent ☐ Emergency ☐ Cavitation ☐ P&A  
☒ Lined ☐ Unlined Liner type: Thickness **20** mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other \_\_\_\_\_  
☐ String-Reinforced  
Liner Seams: ☐ Welded ☒ Factory ☐ Other \_\_\_\_\_ Volume: **≈ 15,000** bbl Dimensions: L **90'** x W **40'** x D **10'**

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

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

5.  
☐ **Alternative Method:**  
Submittal of an exception request is required. Exceptions must be submitted to the Santa Fe Environmental Bureau office for consideration of approval.



|  |   |  |                        |                                       |             |  |                        |                               |               |                   |
|--|---|--|------------------------|---------------------------------------|-------------|--|------------------------|-------------------------------|---------------|-------------------|
| Submit To Appropriate District Office<br>Two Copies<br><b>District I</b><br>1625 N. French Dr., Hobbs, NM 88240<br><b>District II</b><br>811 S First St., Artesia, NM 88210<br><b>District III</b><br>1000 Rio Brazos Rd., Aztec, NM 87410<br><b>District IV</b><br>1220 S St. Francis Dr., Santa Fe, NM 87505   | <b>State of New Mexico</b><br><b>Energy, Minerals and Natural Resources</b><br><br><b>Oil Conservation Division</b><br><b>1220 South St. Francis Dr.</b><br><b>Santa Fe, NM 87505</b> | <b>Form C-105</b><br>Revised August 1, 2011  |                        |                                       |             |  |                        |                               |               |                   |
|  |   | 1. WELL API NO.<br><b>30-039-30080</b>   |                        |                                       |             |  |                        |                               |               |                   |
|  |   | 2. Type of Lease<br><input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/> FED/INDIAN |                        |                                       |             |  |                        |                               |               |                   |
|  |   | 3. State Oil & Gas Lease No  |                        |                                       |             |  |                        |                               |               |                   |
| <b>WELL COMPLETION OR RECOMPLETION REPORT AND LOG</b>  |   |  |                        |                                       |             |  |                        |                               |               |                   |
| 4. Reason for filing<br><br><input type="checkbox"/> <b>COMPLETION REPORT</b> (Fill in boxes #1 through #31 for State and Fee wells only)<br><br><input checked="" type="checkbox"/> <b>C-144 CLOSURE ATTACHMENT</b> (Fill in boxes #1 through #9, #15 Date Rig Released and #32 and/or #33; attach this and the plat to the C-144 closure report in accordance with 19 15 17 13 K NMAC) |   | 5. Lease Name or Unit Agreement Name<br><br><b>MDA 701-98-0013, Tract 4</b>  |                        |                                       |             |  |                        |                               |               |                   |
|  |   | 6. Well Number.<br><br><b>Jicarilla 29-02-09 #143</b>  |                        |                                       |             |  |                        |                               |               |                   |
| 7. Type of Completion.<br><input checked="" type="checkbox"/> <b>NEW WELL</b> <input type="checkbox"/> WORKOVER <input type="checkbox"/> DEEPENING <input type="checkbox"/> PLUGBACK <input type="checkbox"/> DIFFERENT RESERVOIR <input type="checkbox"/> OTHER   |   |  |                        |                                       |             |  |                        |                               |               |                   |
| 8. Name of Operator<br><b>Black Hills Gas Resources</b>  |   | 9. OGRID<br><b>013925</b>  |                        |                                       |             |  |                        |                               |               |                   |
| 10. Address of Operator<br><b>3200 N 1st Street</b><br><b>Bloomfield, NM 87413</b>   |   | 11. Pool name or Wildcat   |                        |                                       |             |  |                        |                               |               |                   |
| 12. Location   | Unit Ltr  | Section  | Township               | Range                                 | Lot         | Feet from the                                  | N/S Line               | Feet from the                 | E/W Line      | County            |
| <b>Surface:</b>  | <b>O</b>  | <b>90'</b>   | <b>29N</b>             | <b>2W</b>                             |             | <b>500'</b>                                    | <b>South</b>           | <b>1650'</b>                  | <b>East</b>   | <b>Rio Arriba</b> |
| <b>BH:</b>   |   |  |                        |                                       |             |  |                        |                               |               |                   |
| 13. Date Spudded   | 14. Date T D Reached  | 15. Date Rig Released<br><b>October 10, 2008</b>   |                        | 16. Date Completed (Ready to Produce) |             | 17. Elevations (DF and RKB, RT, GR, etc.)      |                        |                               |               |                   |
| 18. Total Measured Depth of Well   |   | 19. Plug Back Measured Depth   |                        | 20. Was Directional Survey Made?      |             | 21. Type Electric and Other Logs Run           |                        |                               |               |                   |
| 22. Producing Interval(s), of this completion - Top, Bottom, Name  |   |  |                        |                                       |             |  |                        |                               |               |                   |
| <b>23. CASING RECORD (Report all strings set in well)</b>  |   |  |                        |                                       |             |  |                        |                               |               |                   |
| CASING SIZE  | WEIGHT LB /FT   |  | DEPTH SET              |                                       | HOLE SIZE   |  | CEMENTING RECORD       |                               | AMOUNT PULLED |                   |
|  |   |  |                        |                                       |             |  |                        |                               |               |                   |
|  |   |  |                        |                                       |             |  |                        |                               |               |                   |
|  |   |  |                        |                                       |             |  |                        |                               |               |                   |
|  |   |  |                        |                                       |             |  |                        |                               |               |                   |
|  |   |  |                        |                                       |             |  |                        |                               |               |                   |
|  |   |  |                        |                                       |             |  |                        |                               |               |                   |
| 24. LINER RECORD   |   |  |                        |                                       |             | 25. TUBING RECORD                              |                        |                               |               |                   |
| SIZE   | TOP   | BOTTOM   | SACKS CEMENT           | SCREEN                                |             | SIZE   | DEPTH SET              | PACKER SET                    |               |                   |
|  |   |  |                        |                                       |             |  |                        |                               |               |                   |
|  |   |  |                        |                                       |             |  |                        |                               |               |                   |
|  |   |  |                        |                                       |             |  |                        |                               |               |                   |
| 26. Perforation record (interval, size, and number)  |   |  |                        |                                       |             | 27. ACID, SHOT, FRACTURE, CEMENT, SQUEEZE, ETC |                        |                               |               |                   |
|  |   |  |                        |                                       |             | DEPTH INTERVAL                                 |                        | AMOUNT AND KIND MATERIAL USED |               |                   |
|  |   |  |                        |                                       |             |  |                        |                               |               |                   |
|  |   |  |                        |                                       |             |  |                        |                               |               |                   |
| <b>28. PRODUCTION</b>  |   |  |                        |                                       |             |  |                        |                               |               |                   |
| Date First Production  |   | Production Method (Flowing, gas lift, pumping - Size and type pump)  |                        |                                       |             | Well Status (Prod or Shut-in)                  |                        |                               |               |                   |
| Date of Test   | Hours Tested  | Choke Size   | Prod'n For Test Period | Oil - Bbl                             | Gas - MCF   | Water - Bbl                                    | Gas - Oil Ratio        |                               |               |                   |
| Flow Tubing Press.   | Casing Pressure   | Calculated 24-Hour Rate  | Oil - Bbl              | Gas - MCF                             | Water - Bbl | Oil Gravity - API - (Corr.)                    |                        |                               |               |                   |
| 29. Disposition of Gas (Sold, used for fuel, vented, etc.)   |   |  |                        |                                       |             | 30. Test Witnessed By                          |                        |                               |               |                   |
| 31. List Attachments   |   |  |                        |                                       |             |  |                        |                               |               |                   |
| 32. If a temporary pit was used at the well, attach a plat with the location of the temporary pit. <b>Plat on closure attachment</b>   |   |  |                        |                                       |             |  |                        |                               |               |                   |
| 33. If an on-site burial was used at the well, report the exact location of the on-site burial.  |   |  |                        |                                       |             |  |                        |                               |               |                   |
| Latitude <b>36.73358 N</b> Longitude <b>107.04521 W</b> NAD 1927 1983  |   |  |                        |                                       |             |  |                        |                               |               |                   |
| I hereby certify that the information shown on both sides of this form is true and complete to the best of my knowledge and belief   |   |  |                        |                                       |             |  |                        |                               |               |                   |
| Signature   |   | Printed Name <b>Daniel Manus</b>   |                        | Title <b>Regulatory Technician</b>    |             |  | Date <b>11/07/2011</b> |                               |               |                   |
| E-mail Address <b>Daniel.Manus@blackhillscorp.com</b>  |   |  |                        |                                       |             |  |                        |                               |               |                   |



3200 N 1<sup>st</sup> Street – PO Box 249 Bloomfield, NM 87413

**Daniel Manus**  
*Regulatory Technician II*

Bus: (505) 634-5104  
Fax: (505) 634-1116  
[daniel.manus@blackhillscorp.com](mailto:daniel.manus@blackhillscorp.com)

November 7, 2011

New Mexico Oil Conservation Division  
Aztec Office  
1000 Rio Brazos Road  
Aztec, NM 87410

Subject: Jicarilla 29-02-09 #143 temporary drilling pit closure

Dear Sir or Madam

Black Hills Gas Resources' (BHGR) Jicarilla 29-02-09 #143 temporary drilling pit was closed on December 4, 2008 and the rig was release on October 2, 2008.

As for the notification to the NMOCD of closure of the pit, it is unknown if the notification was made by phone or email. BHGR understands going forward that all contact will be made or followed up by email for documentation.

If you have any questions, please contact me.

Respectfully,

A handwritten signature in black ink, appearing to read 'Daniel Manus', is written over the printed name.

Daniel Manus

DISTRICT I  
1625 N French Dr., Hobbs, N.M. 88240

DISTRICT II  
1301 W. Grand Ave., Artesia, N.M. 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

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

Form C-102

Revised October 12, 2005

Submit to Appropriate District Office

State Lease -- 4 Copies

Fee Lease -- 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|   |   |   |
|---|---|---|
| <sup>1</sup> API Number<br>30-039-30080 | <sup>2</sup> Pool Code<br>72400                         | <sup>3</sup> Pool Name<br>EAST BLANCO PICTURED CLIFFS |
| <sup>4</sup> Property Code<br>24247     | <sup>5</sup> Property Name<br>JICARILLA 29-02-09        | <sup>6</sup> Well Number<br>143                       |
| <sup>7</sup> GRID No.<br>013925         | <sup>8</sup> Operator Name<br>BLACK HILLS GAS RESOURCES | <sup>9</sup> Elevation<br>7365                        |

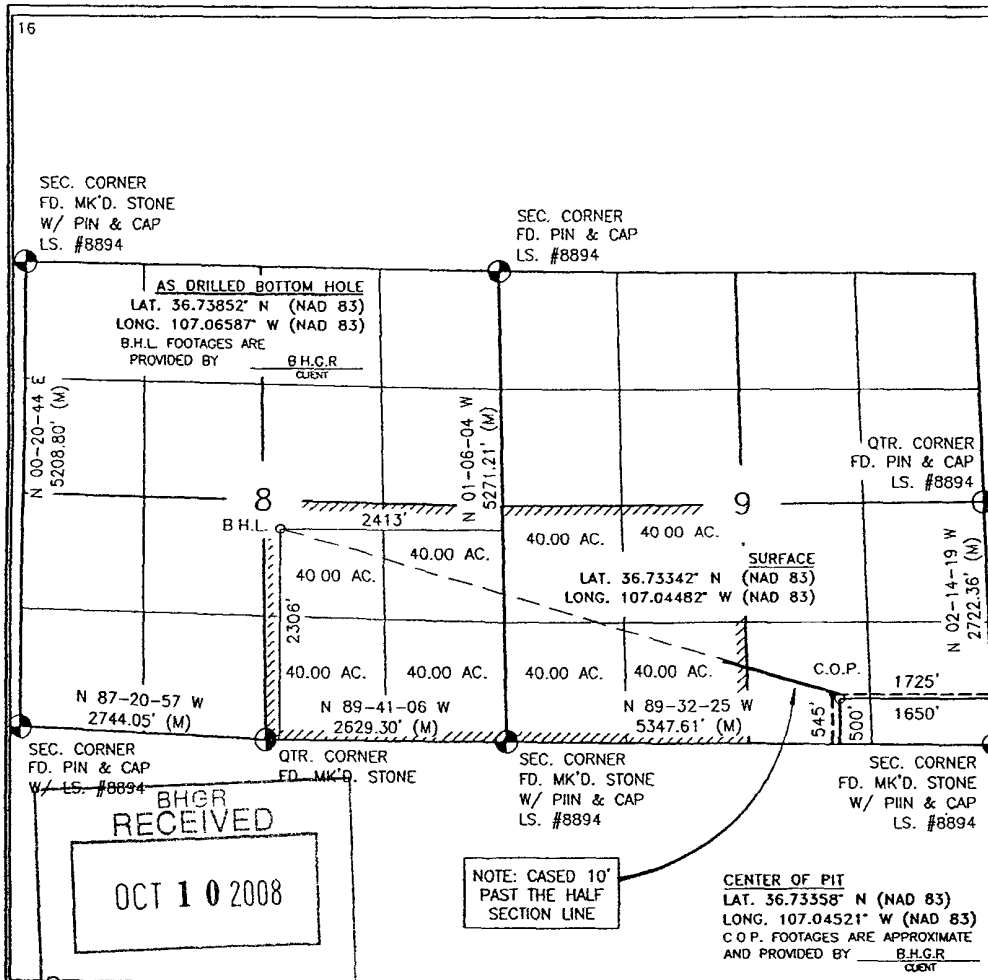
<sup>10</sup>Surface Location

|                    |              |                  |              |         |                      |                           |                       |                        |                      |
|--------------------|--------------|------------------|--------------|---------|----------------------|---------------------------|-----------------------|------------------------|----------------------|
| UL or lot no.<br>O | Section<br>9 | Township<br>29-N | Range<br>2-W | Lot Idn | Feet from the<br>500 | North/South line<br>SOUTH | Feet from the<br>1650 | East/West line<br>EAST | County<br>RIO ARRIBA |
|--------------------|--------------|------------------|--------------|---------|----------------------|---------------------------|-----------------------|------------------------|----------------------|

<sup>11</sup>Bottom Hole Location If Different From Surface

|   |              |                  |                               |         |                                  |                           |                         |                        |                      |
|---|--------------|------------------|-------------------------------|---------|----------------------------------|---------------------------|-------------------------|------------------------|----------------------|
| UL or lot no.<br>J  | Section<br>8 | Township<br>29-N | Range<br>2-W                  | Lot Idn | Feet from the<br>2306            | North/South line<br>SOUTH | Feet from the<br>2413   | East/West line<br>EAST | County<br>RIO ARRIBA |
| <sup>12</sup> Dedicated Acres<br>160 - SW/4 SECTION 9<br>160 - SE/4 SECTION 8 |              |                  | <sup>13</sup> Joint or Infill |         | <sup>14</sup> Consolidation Code |                           | <sup>15</sup> 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



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 unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

*Mike Pippin* 9/26/08  
Signature Date  
MIKE PIPPIN  
Printed Name

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 knowledge and belief.

SEPT 16 2008  
Date of Survey  
Signature and Seal of Registered Professional Land Surveyor  
ROY A. RUSH  
8894  
Certificate Number

PCVD JAN 12 12

OIL CONS. DIV.

DIST. 3

