Form 3160-5
(September 2001)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0135
Expires: January 31, 2004

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other instructions on reverse side

5. Lease Serial No.
NM 40646

6. If Indian, Allottee or Tribe Name

7. If Unit or CA/Agreement, Name and/or No.

1. Type of Well
☐ Oil Well ☑ Gas Well ☐ Other

8. Well Name and No.
Fisher Federal 2-1

2. Name of Operator
Black Hills Gas Resources, Inc.

9. API Well No.
30-039-23684

3a. Address
350 Indiana Street, Suite 400 Golden, CO 80401

3b. Phone No. *(include area code)*
720-210-1308

10. Field and Pool, or Exploratory Area
Basin Dakota, Undes. Gallup

4. Location of Well *(Footage, Sec., T, R., M., or Survey Description)*
790' FNL & 790' FEL (NENE) Unit A
Sec. 2, T25N-R02W

11. County or Parish, State
Rio Arriba, NM

12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
☐ Subsequent Report	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair	☐ New Construction	☑ Recomplete	☐ Other
	☐ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

3. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Black Hills Gas Resources, Inc. intends to complete the Pictured Cliffs formation, if the Mesa Verde formation is unsuccessful, in the above referenced well per attached procedure .

RECEIVED
070 FARMINGTON NM
2005 APR 26 AM 10 34

14. I hereby certify that the foregoing is true and correct
Name *(Printed/Typed)*
Allison Newcomb

Title Engineering Technician

Signature Allison Newcomb

Date 4/25/2005

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by *(Signature)* **Original Signed: Stephen Mason**

Name *(Printed/Typed)*

Title

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

Date APR 29 2005

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on next page)

NMOCD

Black Hills Gas Resources

Fisher Federal 2 #1
API # 30-039-23684
AFE 30167
NE/NE Sec 2, T25N, R2W
Rio Arriba County, New Mexico

Surface casing: 9-5/8", 36 lb/ft, J-55 Casing @ 271'
Production casing: 5-1/2", 17 lb/ft, J-55 LTC casing @ 8419'
Production Tubing: 2 3/8" @ 6122'
Rods/Pump: 105 7/8" rods, 137 ¾" rods, 2"x1 ½"x18' RWAC pump
PBTD: 6281' (estimate), KB Elevation: 7659', GL Elevation: 7648'

Completion Procedure (MV/PC)

1. General Note: All fluids entering the hole will contain 2 % KCl and biocide.

2. MIRU completion rig, ND wellhead, NU BOP.

3. TOOH with rods and pump.

4. TOOH with 2 3/8" tubing. Visually inspect tubing to be used as workstring and completion string.

5. MU 5-1/2" bit & casing scraper, Hydrotest 2 3/8" tubing to 4000 psi and TIH with 2-3/8" workstring and clean out well to PBTD above CIBP of +/- 6281'. TOOH.

6. TIH with 2 3/8" tubing ON/OFF tool and packer to +/- 6080', set packer and pressure test tubing and casing below packer to 3500 psi. Pull up and re-set packer @ +/- 6000'. Set blanking plug, come off the ON/OFF tool.

7. Load the casing with 2 % KCl water. Close the pipe rams and pressure test casing above packer to 3500 psig. Contact engineering if casing leaks exists. TOOH.

IF pressure test is OK, proceed as per procedure. If pressure test is not good, all subsequent fracture treatments will have to be done via 3 ½" tubing.

8. RU wireline company. Run GR-CBL-CCL log from 6000' to 1000'. Email copy of log to jalbi@bhep.com in Adobe PDF format. **Hold 1000 psi on the casing while running the CBL log.**

9. TIH with 2 3/8" tubing and retrieving tool. Swab water from casing.

10. Latch onto the ON/OFF tool. Pull the blanking plug swab test the existing **Upper Pt. Lookout perfs (6030'-6066')** and notify engineering of results prior to proceeding. TOOH.

11. Correlate proposed perfs to GR-CCL cased hole log. RIH with csg gun 0.43 diameter , 16 gram charges, and perforate the **Lower Pt Lookout intervals as follows**:

6096' – 6104', (8 ft) with 2 jspf, 120 degree phasing
6112' – 6124', (12 ft) with 2 jspf, 120 degree phasing

Total Lower Pt. Lookout Formation perforations: 20 ft and 40 holes.

12. TIH w/ 2 3/8"and treating PKR. Set packer @ +/- 6075'. Breakdown perfs (6096'-6124') with 750 gals 7 1/2% HCl. Displace acid with 2% KCl water to bottom perf. Note breakdown pressure and rate. Swab acid load to recovery.

13. If warranted, MIRU Stimulation Company and fracture stimulate the **Lower Pt. Lookout** as per procedure. Frac via 3 ½" fracstring. MAX pressure 6500 psi.

Note: The existing Pt. Lookout perfs will be open above the packer. Monitor annulus during treatment.

14. Flow well back using 1/4" choke immediately after stimulation.

15. TOOH with 3 ½" fracstring and packer. Rig up to handle 2 3/8" tubing. If needed, TIH with 2 3/8" to test **Lower Point Lookout.** TOOH.

If the pressure test in step 7 was good, lay down 3 ½" fracstring and return to rental.

16. RU wireline company. RIH with wireline-set composite BP, set CBP with the top of the CBP @ +/- 6000'. Dump 5 gallons sand on top of the BP.

17. Load the hole with 10 bbls 2% KCl water prior to perforating.

18. Correlate proposed perfs to GR-CCL cased hole log. RIH with csg gun and perforate 0.34 diameter 302 charges and perforate the **Menefee intervals as follows**:

5870-5872', (2 ft) with 2 jspf, 120 degree phasing
5908-5910', (2 ft) with 2 jspf, 120 degree phasing
5916-5925', (9 ft) with 1 jspf, 120 degree phasing
5934-5936', (2 ft) with 2 jspf, 120 degree phasing
5940-5942', (2 ft) with 1 jspf, 120 degree phasing
5958-5962', (4 ft) with 1 jspf, 120 degree phasing
Total Menefee Formation perforations: 21 ft and 27 holes.

19. Trip down, retrieve RBP. Pull and set RBP @ +/- 5972'. Set packer@ +/- 5950'. Breakdown perfs via tubing with 150 gals 7 1/2"% HCl. Displace acid with 2% KCl water to bottom perf. Note breakdown pressure and rate.

20. Trip down, retrieve RBP. Pull and set RBP @ +/- 5950'. Set packer@ +/- 5890'. Breakdown perfs via tubing with 300 gals 7 1/2"% HCl. Displace acid with 2% KCl water to bottom perf. Note breakdown pressure and rate.

21. Trip down, retrieve RBP. Pull and set RBP @ +/- 5890'. Set packer@ +/- 5860'. Breakdown perfs via tubing with 100 gals 7 1/2"% HCl. Displace acid with 2% KCl water to bottom perf. Note breakdown pressure and rate.

22. Trip down, retrieve RBP. TOOH

23. MIRU stimulation company and stimulate the **Menefee** interval with 60Q slick foam and 56000# 20/40 SLC @ 35 bpm as per procedure down casing. MAX pressure 3500 psi.

24. Flow well back using 1/4" choke immediately after stimulation.

25. TIH with 2 3/8" tubing to flow test as needed. TOOH.

26. RU wireline company. RIH with wireline-set composite BP, set CBP @ +/- 5850'. Dump 10 gallons sand on top of the CBP.

27. Load the hole with 10 bbls 2% KCl water prior to perforating.

28. RIH with csg gun and perforate 0.34 diameter 302 charges and perforate the **Cliff House interval as follows**:

    5648' - 5650', (2 ft) with 1 jspf, 120 degree phasing
    5653' - 5658', (5 ft) with 1 jspf, 120 degree phasing
    5676' - 5690', (14 ft) with 1 jspf, 120 degree phasing
    Total Cliff House Formation perforations: 21 ft and 21 holes.

29. Trip down, retrieve RBP. Pull and set RBP @ +/- 5720'. Set packer@ +/- 5665'. Breakdown perfs via tubing with 300 gals 7 1/2"% HCl. Displace acid with 2% KCl water to bottom perf. Note breakdown pressure and rate.

30. Trip down, retrieve RBP. Pull and set RBP @ +/- 5665'. Set packer@ +/- 5640'. Breakdown perfs via tubing with 200 gals 7 1/2"% HCl. Displace acid with 2% KCl water to bottom perf. Note breakdown pressure and rate.

31. Trip down, retrieve RBP. TOOH

32. MIRU stimulation company and stimulate the **Cliff House** interval with 60 Q slick foam and 50000# 20/40 SLC @ 35 bpm as per procedure down casing. MAX pressure 3500 psi.

33. Flow well back using 1/4" choke immediately after stimulation.

34. TIH with 2 3/8" tubing to flow test as needed. TOOH.

35. RU wireline company. RIH with wireline-set composite BP, set BP @ +/- 4000'. Dump 10 gallons sand on top of the BP.

36. Load the hole with 10 bbls 2% KCl water prior to perforating.

37. RIH with csg gun and perforate 0.34 diameter 302 charges and perforate the **Pictured Cliffs interval as follows**:

3814' – 3818', (4 ft) with 2 jspf, 120 degree phasing
3823' – 3826', (3 ft) with 2 jspf, 120 degree phasing
3879' – 3882', (3 ft) with 2 jspf, 120 degree phasing
3885' – 3887', (2 ft) with 2 jspf, 120 degree phasing
3891' – 3894', (3 ft) with 2 jspf, 120 degree phasing
Total Picture Cliffs Formation perforations: 15 ft and 30 holes. Estimated zone height is 40 ft.

38. TIH 2 3/8" tubing, treating PKR and RBP. Set RBP @ +/- 3930' and packer @ +/- 3850'. Breakdown perfs down tubing (3879'-3894') with 250 gals 7 1/2% HCl. Displace acid with source water to bottom perf. Note breakdown pressure and rate. Swab acid load to recovery.

39. Reset RBP @ +/- 3850' and packer @ +/-3775'. Breakdown perfs (3814'-3826') down tubing with 250 gals 7 ½% HCl. Displace acid with source water to bottom perf. Note breakdown pressure and rate. Swab acid load to recovery.

40. TOOH with RBP and packer.

41. TIH with 2 3/8" tubing and treating packer. Set packer @ 3775'.

42. If justified, MIRU stimulation company and stimulate the **Pictured Cliffs** interval with 70 Q XL foam and 95000# 20/40 Brady @ 18 bpm as per procedure down casing. Fracture treatment will be tagged with tracer material.

43. Flow well back using 1/4" choke immediately after stimulation.

44. TIH with 2 3/8" tubing to flow test as needed. TOOH.

45. TIH with workstring, drill collars and bit. Drill out composite plugs @ and clean out well to +/-6281'.

46. Production string to be determined pending completion results tests.

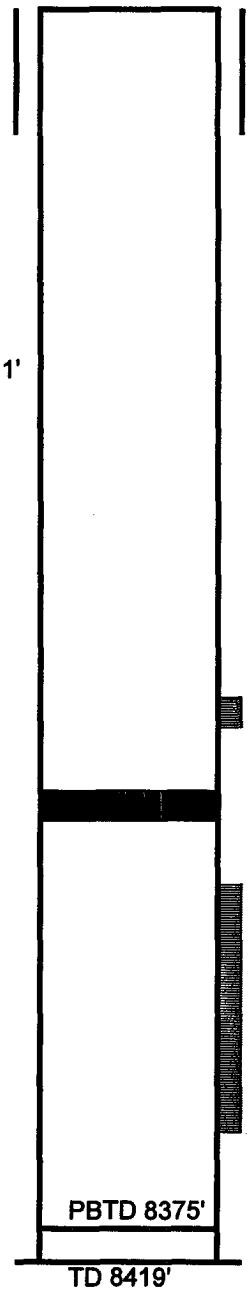
J.T. Albi
10/22/04
Rev. 3-24-05 L. Diede
Rev. 4-07-05 L. Diede

First-call Services:

Logging/perforating:	Blue Jet	325-5584
Acid/frac:	Key PPS	325-4192
Trucking:	open	
Water:	open	

Fisher Federal 2 #1
Completion Diagram

KB: 7659'
GL: 7648'



9-5/8", 36#, J-55 csg @ 271'

Tubing Information
Possibly 2 3/8", 4.7#, Tbg 6111'
W/137 3/4" & 105 7/8" rods &
2"X1.5"X18' RWAC

Point Lookout
6030'- 6066'

CIBP @ 6,300'

Gallup Formation (Perf 0.5" holes)
7066',7078',7112',7122',7125',7136',7153'
7164',7175',7185',7203',7221',7254',7272'
7275',7278',7282',7291',7295',7302',7311,
7316',7329',7336',7345',7351',7357',7372',7388',
7406',7423',7435',7439',7454',7459',7467',7483',
7487',7495',7507',7521',7533',7538',7543',7550',7555',
7568',7575',7580',7595',7613',7671',7682',7744',7768',
7792',7805',7828',7845',7855',7866',7872',

PBTD 8375'

5-1/2", 17#, J-55 LTC casing @ 8419'

TD 8419'