Submit 3 Copies To Appropriate District Office		New Mexico		Form C-103 Revised June 10, 2003	
District I 1625 N. French Dr., Hobbs, NM 88240	Energy, Minerals a	Energy, Minerals and Natural Resources		Revised June 10, 2003	
<u>District II</u> 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERV	ATION DIVISION	30-039-27 <del>72</del> 9		
<u>District III</u> 1000 Rio Brazos Rd., Aztec, NM 87410	1220 South	St. Francis Dr.	5. Indicate Type STATE		
District IV	Santa Fe, NM 87505		6. State Oil & C	Gas Lease No.	
1220 S. St. Francis Dr., Santa Fe, NM 87505		Jicarilla Contrac	t 451		
SUNDRY NOTICES AND REPORTS ON WELLS  (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C 404) FOR SUCH PROPOSALS.)				or Unit Agreement Name	
1. Type of Well: Oil Well ☐ Gas Well ☒ Other			8. Well Number Jicarilla 451-04		
2. Name of Operator			9. OGRID Num	ıber	
Black Hills Gas Resources, Inc.		<u> </u>	013925	W. 11 4	
3. Address of Operator 350 Indiana St, Suite 400 Golden, Co	O 80401	20131311382	10. Pool name of East Blanco; Pic Canyon, Tertiary	tured Cliffs and Cabresto	
4. Well Location					
Unit Letter P:660 feet from the South line and 660 feet from the East line					
Section 4	Township 291		NMPM	Rio Arriba County	
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 7048' GL					
	opropriate Box to Inc				
NOTICE OF INT PERFORM REMEDIAL WORK □	PLUG AND ABANDON	☐ REMEDIAL V	UBSEQUENT RI	EPORT OF: ALTERING CASING	
TEMPORARILY ABANDON	CHANGE PLANS		DRILLING OPNS.	PLUG AND	
PULL OR ALTER CASING	MULTIPLE COMPLETION	CASING TES	· —	ABANDONMENT	
OTHER Remarks to Committee to Fermi			,		
OTHER: Downhole Commingle Form		OTHER:	and give pertinent da	utes including estimated date	
13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.					
Black Hills Gas Resources, Inc. intends to complete the subject well and downhole commingle the Cabresto Canyon; Tertiary and East Blanco; Pictured Cliffs under Division Order R-11363. All gas production is to be allocated based on initial production tests as 60 percent to the East Blanco; Pictured Cliffs formation and 40 percent to Cabresto Canyon; Tertiary formation. See attached Supplemental Data Sheet for the information fracture pressures and flow test. The commingling will not reduce the value of the total remaining production. A Sundry Notice form 3160-5 has been sent, notifying the BLM of downhole commingling formations.					
1 hereby cortify that the information character and an interest of the latest the information character and an interest of the latest the lates					
I hereby certify that the information above is true and complete to the best of my knowledge and belief.					
SIGNATURE (LLUCION DE TITLE Engineering Technician DATE 9/27/2004					
Type or print name: Allison Newcomb  E-mail address: anewcomb@bhep.com  Telephone No. 720-210-1308					
APPPROVED BY TITLE TITLE DATE DATE  Conditions of approval, if any:					

## C103 Supplemental Information

## Jicarilla 451-04 #44 Production and Pressure Date Pictured Cliffs and Tertiary Formations

The Pictured Cliffs formation was perforated at intervals 3651' - 3671' with 2 jspf. Based upon pressure data obtained from the breakdown and fracture stimulation treatment the fracturing pressure of the Pictured Cliffs formation at mid-perforation is 2782 psi with a fracture gradient of 0.76 psi/ft. After fracture stimulation and clean up the Pictured Cliffs formation was flow tested for twenty-four hours. FTP 180 psig, 650 MCFPD, and <12 BWPD.

The Tertiary formation was perforated at intervals 1012'-1014', 1306'-1312', 1984'-1986', 2070'-2072', 2075'-2077', 2088'-2092', 2218'-2220, 2226'-2230', 2358'-2362', 2366'-2370', 2404'-2408', 2554'-2558', 2662'-2672', 2746'-2750', 2756'-2762' with 2 jspf. Based upon the pressure data obtained from the fracture stimulation treatment of the formation, the fracturing pressure of the Upper Nacimiento formation (2218-2558) is 1791 psi at the mid perforation of 2388' with a fracture gradient of 0.75 psi/ft. The fracturing pressure of the Nacimiento Sandstone formation (2662-2762) is 2034 psi at the mid perforation of 2712' with a fracture gradient of 0.75 psi/ft. The fracturing pressure of the San Jose formation is 883 psi at the mid perforation of 1162' with a fracture gradient of 0.76 psi/ft. After fracture stimulation of the Cabresto Canyon tertiary formation a stabilized flow test was conducted for twenty-four hours. FTP 50 psig, 433 MCFPD, and 72 BWPD.

The allocation method that has been agreed upon between Black Hills Gas Resources, Inc. and the Jicarilla Apache Nation is to use a percent based on the initial test for allocation of the produced volumes from the downhole commingled formations. In summary, the following calculations reflect the allocation percentages for the subject well.

Formation Name	Gas Flow Rate (MCFPD)	Water Rate (BWPD)	Allocation Factor
Pictured Cliffs	650	<12	60%
Tertiary	433	72	40%
1	otal 1083	<84	100.000%