•	Submit 3 Copies To Appropriate District Office <u>District I</u>	State of New Mexico Energy, Minerals and Natural Resources			Form C-103 June 19, 2008			
	1625 N. French Dr., Hobbs, NM 88240 District II			WELL API NO. 30-039-23689				
	1301 W. Grand Ave., Artesia, NM 88210 OIL CONSERVATION DIVISION		5. Indicate Type of Lea					
	District III 1220 South St. Francis Dr. 1000 Rio Brazos Rd., Aztec, NM 87410			STATE	FEE 🛛			
,	District IV 1220 S. St. Francis Dr., Santa Fe, NM 87505			6. State Oil & Gas Lea	se No.			
·	SUNDRY NOTION (DO NOT USE THIS FORM FOR PROPOSITION OF THE PROPOSALS.)	7. Lease Name or Unit	Agreement Name					
	1. Type of Well: Oil Well	8. Well Number Howard Fed	leral 1 #8					
	2. Name of Operator Black Hills Gas Resource	9. OGRID Number 0139	013925					
	3. Address of Operator P.O. Box 249 / 3200 North 1st Street Bloomfield, NM 87413			10. Pool name or Wild Gavilan N	10. Pool name or Wildcat Gavilan Mancos			
	11. Well Location							
	Unit Letter H: 1,650 fe	et from the North line and 870	feet from the East	_line				
		North Range 2 West N.M.						
	11. Elevation (Show whether DR, RKB, RT, GR, etc.) 7,511' GR							
12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data								
	NOTICE OF IN	TENTION TO:	l su	IBSEQUENT REPOR	RT OF:			
ai	PERFORM REMEDIAL WORK				ERING CASING			
W	TEMPORARILY ABANDON			<u></u>				
	PULL OR ALTER CASING	MULTIPLE COMPL	CASING/CEM	ENT JOB	_			
	DOWNHOLE COMMINGLE							
	OTHER:	п	OTHER:		П			
	13. Describe proposed or compl	eted operations. (Clearly state		and give pertinent dates, inc	luding estimated date			
	of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed comple or recompletion.							
	Black Hills Gas Resources (BHGR) intends to Plug and Abandon (P&A) the Howard Federal 1 #8. Please find BHGR's attached P&A procedures.							
	· ·			ROVD	AUG 24 '09			
		•			ONS. DIV.			
				teresis d	IST. 3			
			•					
	NOTIFY NMOCD AZ	TEC 24 HOURS PRI	OR TO BEGIA	INING OPERATIONS.				
	Spud Date:	Rig Release	Date:					
I hereby certify that the information above is true and complete to the best of my knowledge and belief.								
SIGNATURE / MILL MONTHS TITLE Regulatory Technician DATE AUGUST 24, 2009								
	Type or print name Daniel Manus E-mail address: daniel.manus@blackhillscorp.com PHONE: (505) 634-1111 ext. 28							
	For State Use Only Deputy Oil & Gas Inspector,							
	APPROVED BY: Fall G. E.	TITLE	Distric	t #3	SEP 0 1 2009			
	Conditions of Approval (if any): B	EING TOP OF MANCOS PL	V4 TO 6675' -	ADD CHACRA PLUG FA	ROM 4745 - 4645'			

PLUG AND ABANDONMENT PROCEDURE

August 22, 2008

Howard Federal 1 #8

Gavillan Mancos 1650' FNL & 870' FEL, NE, Section 1, T25N, R2W Rio Arriba County, New Mexico, API #30-039-23689 Lat N. / Long W.

Lat N. _____ / Long W. _ All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing Note: wellbore fluid will be 8.3 ppg, sufficient to balance all exposed formation pressures. All cement will be Class B, mixed at 14.8 ppg with a 1.18 cf/sx yield. 1. This project requires the Operator to obtain an approved NMOCD C-144 CLEZ Closed-Loop System Permit for the use of an A-Plus steel tank to handle waste fluids circulated from the well and cement wash up. 2. Install and test location rig anchors. Comply with all NMOCD, BLM, and Operator safety regulations. MOL and RU daylight pulling unit. Conduct safety meeting for all personnel on location. Record casing, tubing and bradenhead pressures. NU relief line and blow down well. Kill well with water as necessary and at least pump tubing capacity of water down the tubing. ND wellhead and NU BOP. Function test BOP. 3. Rods: Yes X , No , Unknown , Tubing: Yes X , No _ , Unknown , Size <u>2.875"</u>, Length <u>7919'</u>. Packer: Yes____, No_X_, Unknown____, Type____ If this well has rods or a packer, then modify the work sequence in step #2 as appropriate. NOTE: Records indicate a tubing anchor may be in the tubing workstring. The tubing anchor may or may not be set. 6859 - 6675 Mancos 4. Plug #1 (Salts) perforations and top, \$859' - 6759'): PU and TIH with 5.5" cement retainer, set at 6859'. Load casing above the CR with water and circulate well clean. Pressure test casing to 800#. If casing does not test, spot or tag subsequent plugs as appropriate. Mix and pump 17 sxs Class B cement above CR to isolate Gallup interval. PUH. 5. Plug #2 (Mesaverde top, 5494' - 5394'): Mix and pump 17 sxs Class B cement inside casing - Chacka Plug - 4745-4645-6. Plug #3 (Pictured Cliffs, Fruitland, Kirtland and Ojo Alamo tops, 3697' - 3247'): Mix and pump 56 sxs Class B cement inside casing to cover through the Ojo Alamo top. TOH with tubing. 7. Plug #4 (Nacimiento top, 1509' - 1409'): Perforate 3 squeeze holes at 1509'. Attempt to establish rate into squeeze holes if the casing pressure tested. Set 5.5" cement retainer at 1459'. Establish rate into squeeze holes. Mix and pump 47 sxs Class B cement, squeeze 30 sxs outside the casing and leave 17 sxs inside casing. TOH and LD tubing.

8. Plug #5 (13.375" Surface casing, 320' - 0'): Perforate 3 squeeze holes at 320'. Establish circulation out bradenhead with water and circulate the BH annulus clean. Mix approximately 210 sxs Class B cement and pump down the 5.5" casing to circulate good cement out bradenhead. Shut in well and WOC.

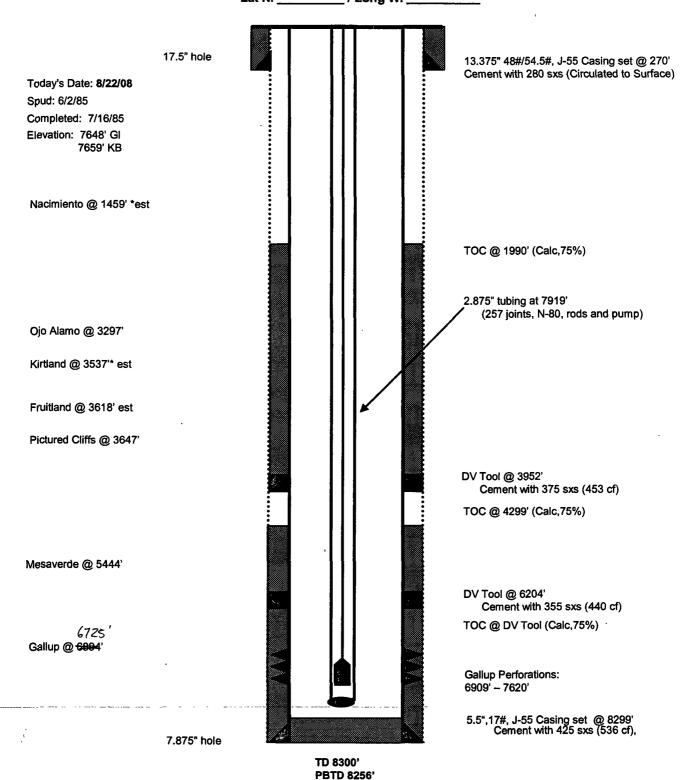
9.	ND cementing valves and cut off wellhead. P&A marker to comply with regulations. RD	Fill 5.5" casing with cement as necessary. , MOL, cut off anchors, and restore location.	Install
		•	
	•		
			v.
		·	

Howard Federal 1 #8

Current

Gavillan Mancos

1650' FNL, 870' FEL, Section 1, T-25-N, R-2-W, Rio Arriba County, NM / API #30-039-23689 Lat N. ______ / Long W. _____



Howard Federal 1 #8 Proposed P&A

Gavillan Mancos

1650' FNL, 870' FEL, Section 1, T-25-N, R-2-W,

Rio Arriba County, NM / API #30-039-23689 Lat N. ______ / Long W. _____

17.5" hole

Today's Date: 8/22/08

Spud: 6/2/85

Completed: 7/16/85 Elevation: 7648' Gl 7659' KB

Nacimiento @ 1459' *est

Ojo Alamo @ 3297'

Kirtland @ 3537" est

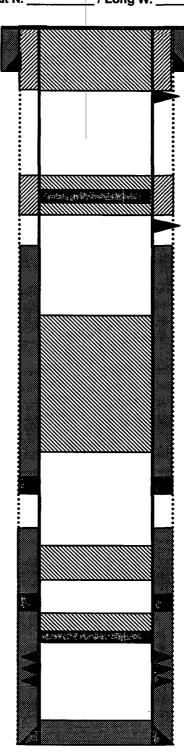
Fruitland @ 3618' est

Pictured Cliffs @ 3647'

Mesaverde @ 5444'

6725 Gallup @ 6894'

7.875" hole



TD 8300' PBTD 8256'

13.375" 48#/54.5#, J-55 Casing set @ 270' Cement with 280 sxs (Circulated to Surface)

Perforate @ 320'

Plug #5: 320' - 0'

Class B cement, 210 sxs

Cmt Retainer @ 1459'

Plug #4: 1509' - 1409' Class B cement, 47 sxs

Perforate @ 1509'

Class B cement, 47 sxs: 17 inside and 30 outside

TOC @ 1990' (Calc,75%)

Plug #3: 3697' - 3247' Class B cement, 56 sxs

CHACRA PLUG 4745'- 4645

DV Tool @ 3952' Cement with 375 sxs (453 cf)

TOC @ 4299' (Calc,75%)

Plug #2: 5494' - 5394' Class B cement, 17 sxs

DV Tool @ 6204'

Cement with 355 sxs (440 cf)

TOC @ DV Tool (Calc,75%)

Set CR @ 6859'

Plug #1: 6859' - 6759'
Class B cement, 17 sxs

Gallup Perforations: 6909' – 7620'

5.5",17#, J-55 Casing set @ 8299' Cement with 425 sxs (536 cf),