Submit 3 Copies To Appropriate District State of New Mexico Form C-103 May 27, 2004 Energy, Minerals and Natural Resources District I WELL API NO. 1625 N French Dr., Hobbs, NM 88240 District II 30-045-26077 OIL CONSERVATION DIVISION 1301 W Grand Ave, Artesia, NM 88210 1220 South St. Francis Dr. District III 5. Indicate Type of Lease 1000 Rio Brazos Rd, Aztec, NM 87410 Santa Fe, NM 87505 STATE | **FEE** District IV 1220 S St Francis Dr., Santa Fe, NM 6. State Oil & Gas Lease No. 87505 SUNDRY NOTICES AND REPORTS ON WELLS 7. Lease Name or Unit Agreement Name (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A Monte Carlo DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS) 1. Type of Well: Oil Well Gas Well X Other 8. Well Number 2 2. Name of Operator 9. OGRID Number Dugan Production Corp. c/o BHP Billiton San Juan Coal 3. Address of Operator 10. Pool name or Wildcat PO Box 561, Waterflow, NM 87421 (505) 598-2000 Wildcat Gallup 4. Well Location M: 800 feet from the South line and 910 Unit Letter feet from the West Section Township 30N Range 15W NMPM San Juan County 11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5365 GL 'KB Pit or Below-grade Tank Application or Closure Pit type Depth to Groundwater Distance from nearest fresh water well Distance from nearest surface water Pit Liner Thickness: Below-Grade Tank: Volume bbls; Construction Material 12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data NOTICE OF INTENTION TO: SUBSEQUENT REPORT OF: PERFORM REMEDIAL WORK □ REMEDIAL WORK ALTERING CASING □ PLUG AND ABANDON П **TEMPORARILY ABANDON CHANGE PLANS** COMMENCE DRILLING OPNS. P AND A \Box **PULL OR ALTER CASING** MULTIPLE COMPL CASING/CEMENT JOB OTHER: П OTHER: 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. Dugan Production as the operator, desires BHP Billiton San Juan Coal to plug and abandon this well per the attached procedure. DIST. 3 I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will/be constructed or closed according to NMOCD guidelines _, a general permit _ or an (attached) alternative OCD-TITLE Superintendent Business Analysis DATE 1/24/2012 **SIGNATURE** Derek Rawson Telephone No. 505-598-3265 E-mail address: Derek.rdj.rawson@bhbilliton.com Type or print name For State Use Only Deputy Oil & Gas Inspector, APPROVED District #3 DATE 1-27-12 TITLE BY:

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Conditions of Approval (frany)

PLUG AND ABANDONMENT PROCURE

Monte Carlo #2

January 24, 2012

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Basin Dakota / Wildcat Gallup 800' FSL and 910' FWL, Section 24, T30N, R15W San Juan County, New Mexico / API 30-045-26077

Note: All cement volumes use 100% excess outside pipe and 50' excess inside. The stabilizing wellbore fluid will be water or drilling mud with sufficient weight to balance all exposed formation pressures. Cement is <u>Class B mixed at 15.6 ppg with 1.18 cf/sxs</u> yield or <u>Class B with 18% salt</u> by weight of water (for expansion, MSHA requirement through the Fruitland Coal zone).

MILLING OUT CASING AND PLUGGING PROCEDURE:

- This project requires a 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.
- Comply with all applicable MSHA, NMOCD, BLM and BHP Billiton safety regulations. Conduct safety meeting for all personnel on location. MOL and RU daylight pulling unit. Lay relief line to the waste pit and blow well down, kill well with water as necessary. ND wellhead and NU BOP. Test BOP. Pull rod and tubing from well if present.

3.	Rods: Yes, No, Unknown
	Tubing: Yes X, No, Unknown, Size <u>2-3/8"</u> , Length <u>4989'</u> .
	Packer: Yes, No _X, Unknown, Type
	If this well has rods, a packer or tubing anchor, then modify the work sequence in step #2
	appropriate.

- 4. Round trip 4.5" gauge ring to 5380'. Pump 100 bbls of water and attempt to circulate the well clean.
- 5. Plug #1 (Dakota perforations and top, 5376' 5276'): RIH and set 4.5" CR at 5376'. Pressure test the tubing to 1000 PSI. Pump 100 bbls of water down the tubing, attempt ot circulate the well. Mix 20 sxs Class B cement and spot a balanced plug inside the casing to cover the Dakota top. PUH and WOC. Tag cement. TOH with tubing.
- 6. Plug #2 (Gallup perforations and top, 4473' 4373'): RIH and set 4.5" CR or wireline CIBP at 4473'. Load the casing with water and circulate the well clean. Pressure test casing to 1000 PSI. If the casing does not test then spot or tag plugs as appropriate. Rig up wireline truck and run a CBL log to determine the TOC for each stage. Modify the following plugs as appropriate. Mix 20 sxs Class B cement and spot a balanced plug to isolate the Gallup interval. PUH to 3650'.
- 7 Plug #3 (Mancos, 3550' 3650'): With workstring at 3650'. Mix 12 Class B sxs cement and spot a balance plug to cover the Mancos top PUH to 2336'.

PLUG AND ABANDONMENT PROCURE

Monte Carlo #2

January 24, 2012

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Plugging Procedure Continued:

- 8. **Plug #4 (Mesaverde top, 2336' 2236'):** With workstring at 2336'. Mix 12 Class B sxs cement and spot a balanced plug to cover the Mesaverde top. TOH with tubing.
- 9. Rig up Jet West wireline and run a Gamma Neutron log and a directional survey log. Adjust the milling intervals as appropriate from these logs. All reported depths should be from ground level.
- 10. Perforate the 4.5" casing below the Basel Fruitland Coal Seam (#8): [after making the correcting depth adjustments]: Perforate 6 squeeze holes in a 2 foot interval from 890' to 892'. Attempt to establish a rate into these squeeze holes, up to 1500 PSI. If the CBL log indicates less than adequate cement quality in the 4.5" x 7-7/8" openhole annulus from 890' to 700', then perforate at the appropriate depth(s) from the CBL and attempt to establish an injection rate into the annulus after each set of perforations. (May need to perforate every 50' if necessary at 840', 790' and 740'). Then set a 4.5" wireline cement retainer at the appropriate depth depending on if and at what depth an injection rate was established. If no injection rate(s) were obtained, then set a CR at 860' and pressure up to 2500 PSI. If the CR is set at a different depth, then modify the following plug as appropriate.
- 11. Plug #5 (Pictured Cliffs interval, 890' 700'): TIH with workstring and sting into CR. Establish rate below the CR and into the squeeze holes. Mix and pump 72 sxs Class B cement with 18% salt (by weight of water), squeeze 49 sxs outside 4.5" casing and leave 23 sxs inside the 4.5" casing. PUH out of the cement and then pressure up on the casing to 1000 PSI. Hesitation squeeze the exposed perforations as appropriate. After WOC for 2 hours, TIH and reverse circulate the casing clean at 680'. TOH with workstring. WOC.
- 12. After WOC, TIH with bit and drill collars and clean out to 700'. TOH with bit.
- 13. PU a flat bottom mill, the 3.875" section milling tool and the 6 4-1/2" drill collars (this is the under reaming bottom hole assembly, BHA). TIH with BHA and work string to 665'. Rig up drilling equipment and establish circulation with a high viscosity low solids fresh water mud.
- 14. Note: The intervals to be milled out below are from ground level not KB.
- 15. **Mill out the 4.5" casing from 675' to 690'.** Start milling out the 4.5" casing from 675' to 690'. Mill per the tool hands instructions for weight on mill, circulation rate and power swivel's RPM. Circulate well clean with mud. TOH with section will and workstring; stand back the drill collars. TIH with bit and clean out to 655'. Circulate the well clean. TOH with the bit.

PLUG AND ABANDONMENT PROCURE

Monte Carlo #2

December 28, 2011

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Plugging Procedure Continued:

- 16. Rig up a wireline truck and run a caliper log through the milled interval to insure all the 4.5" casing from the planned milling depths (675' 690') has been removed. Re-mill as appropriate. Re-log as necessary.
- 17. **Perforate the 4.5" casing with 3 SPF at 542' and 538'.** This is the top and bottom of Coal Seam #9 and the depths should be modified as appropriate from the logs run in step #8.
- 18. Plug #6 (Pictured Cliffs top and Fruitland Coal interval, 700' 290'): TIH with workstring to approximately 700' and circulate the mud from the well. Then pump an additional 5 bbls fresh water spacer ahead of the cement. Mix 52 sxs cement with 18% salt (by weight of water) and spot a balanced plug from 700' up to 290' to fill the milled interval. Displace cement with water. TOH with workstring and shut the casing valve. Then hesitation squeeze the cement down to approximately to 290' inside the 4.5" casing up to 1500 PSI.
- 19. WOC. Then TIH with tubing and tag cement. Pressure test the 4.5" casing to 800#.
- 20. Plug #7 (8.625" Surface casing shoe, 256' to Surface): Connect the pump line to the bradenhead valve. Pressure test the BH annulus to 300#; note the fluid volume to load. If the BH annulus tests, then mix approximately 20 sxs cement with or without 18% salt cement and spot a balanced plug inside the 4.5" casing from 256' (or TOC) to surface to cover the 8.625" surface casing shoe. TOH and LD the tubing. If the BH annulus does not test, then perforate at the appropriate depth and fill the bradenhead annulus and 4.5" casing with cement to surface. TOH and LD tubing. Shut in well and WOC.
- 21. ND BOP and cut off wellhead below surface. Install P&A marker with cement to comply with regulations. RD, MOL. Cut off anchors and clean up location.

Monte Carlo #2

Current Well

Basin Dakota / Wildcat Gallup

800' FSL, 910' FWL, Section 24, T-30-N, R-15-W, San Juan County, NM

Lat: _____N / Long: ____ W API #30-045-26077 Today's Date: 1/24/12 Spud: 11/1/84 DK Completion. 3/11/85 Cement Circulated to surface. GL Completion 10/9/90 100% excess of open hole volume Elevation 5321' GL 12.25" hole 8.625", 24#, H-40 Casing set @ 206' Cement with 159 cf, circulate to surface Fruitland @ 340' Fruitland Coal Seam #9 538' - 542' 2-3/8" tubing at 4989' Fruitland Coal Seam #8. 665' - 680' Pictured Cliffs @ 680' DV Tool @ 1077' 3rd Stage Cmt with 538 cf (Cir 1/4 bbls cement to surface) Mesaverde @ 2286' 2nd Stage TOC - Unknown Mancos @ 3600 DV Tool @ 3637' 2nd Stage⁻ Cmt with 974 cf 1st Stage TOC - Unknown Gallup @ 4515' Gallup Perforations. 4523' - 4997' Dakota @ 5364' Dakota Perforations: 5426' - 5636' 4.5" 10.5# J-55 casing set @ 5598' 1st Stage Cmt with 461 cf 7 875" Hole TD 5600'

PBTD 5545'

Monte Carlo #2 Proposed Mine P&A Basin Dakota / Wildcat Gallup

	800' FSL, 910' FW	•	N, R-15-W, San Juan County, NI W API #30-045-26077	VI	
Today's Date: 1/24/12					
Spud: 11/1/184 DK Completion. 3/11/85 GL Completion: 10/9/90 Elevation: 5321' GL 12 25" hole			100% excess of 8 625", 24#, H-40	Cement Circulated to surface: 100% excess of open hole volume 8 625", 24#, H-40 Casing set @ 206' Cement with 159 cf, circulate to surface	
				Plug #7: 256' - Surface' Class B cement, 20 sxs	
Fruitland @ 340'					
Note: These coal sear approximate and need after logging and be re	to be revised			Plug #6: 700' – 290' Class B cement, 52 sxs	
ground level.			Perforate @ 538'		
Fruitland Coal Seam #9	9. 538' – 542'		Perforate @ 542'		
Fruitland Coal Seam #8	s [.] 665' – 680'		Mill out casing from 675' to 690'		
Pictured Cliffs @ 680'	1			Plug #5: 890' - 700'	
				Class B cement, 72 sxs 23 sxs in and 49 sxs out	
			Set CR @ 860'		
			Perforate @ 890'		
Manayarda @ 2296'			DV Tool @ 1077' 3 rd Stage: Cmt v		
Mesaverde @ 2286'				Plug #4: 2336' – 2236' Class B cement, 12 sxs	
	•			Plug #3: 3650' - 3550' Class B cement, 12 sxs	
Mancos @ 3600'	•	•	DV Tool @ 3637' 2 nd Stage: Cmt v		
			Set CIBP @ 4473	,	
Gallup @ 4515'			Gallup Perforatior 4523' – 4997'	Plug #2: 4473' - 4373' Class B cement, 20 sxs	
Dakota @ 5408'			Set CR @ 5376'		
			Dakota Perforatio 5426' – 5436'	ns Plug #1: 5376' - 5276' Class B cement, 20 sxs	
	7 875" Hole		4.5" 10.5# J-55 ca	asing set @ 5598' with 461 cf	

TD 5600' PBTD 5545'