

**District I**  
1625 N. French Dr., Hobbs, NM 88240  
Phone, (575) 393-6161 Fax (575) 393-0720  
**District II**  
811 S. First St., Artesia, NM 88210  
Phone (575) 748-1283 Fax (575) 748-9720  
**District III**  
1000 Rio Brazos Road, Aztec, NM 87410  
Phone (505) 334-6178 Fax (505) 334-6170  
**District IV**  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone (505) 476-3460 Fax (505) 476-3462

State of New Mexico

Form C-101  
Revised December 16, 2011

Energy Minerals and Natural Resources

**HOBBS OCD**

Permit

Oil Conservation Division

1220 South St. Francis Dr.

**JUL 30 2012**

Santa Fe, NM 87505

**RECEIVED**

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>1</sup> Operator Name and Address BC Operating, Inc. P.O. Box 50820 Midland, Texas 79710		<sup>2</sup> OGRID Number 160825
		<sup>3</sup> API Number 30-025-39734
<sup>4</sup> Property Code 38111	<sup>5</sup> Property Name South Denton 6 State	
		<sup>6</sup> Well No. 2

**<sup>7</sup> Surface Location**

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
D	6	16S	38E	5	330	N	330	W	Lea

**<sup>8</sup> Pool Information**

SWD - San Andres & Glorieta	<b>96127</b> 96117
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**Additional Well Information**

<sup>9</sup> Work Type Plug Back	<sup>10</sup> Well Type SWD	<sup>11</sup> Cable/Rotary R	<sup>12</sup> Lease Type State	<sup>13</sup> Ground Level Elevation 3751' GR
<sup>14</sup> Multiple	<sup>15</sup> Proposed Depth 6850'	<sup>16</sup> Formation San Andres/Glorieta	<sup>17</sup> Contractor	<sup>18</sup> Spud Date 1/6/11
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

**<sup>19</sup> Proposed Casing and Cement Program**

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Surface	12 1/4"	8 5/8"	24#	2019'	1035	Surface
Production	7 7/8"	5 1/2"	15.5#	6500'	980	Surface
Open Hole	4 3/4"	N/A	N/A	6850'	N/A	N/A

**Casing/Cement Program: Additional Comments**

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**Proposed Blowout Prevention Program**

Type	Working Pressure	Test Pressure	Manufacturer
Double Ram	3000	3000	3M

**Permit Expires 2 Years From Approval**

**Date Unless Drilling Underway**

I hereby certify that the information given above is true and correct to the best of my knowledge and belief.

I further certify that the drilling pit will be constructed according to NMOCD guidelines ☐, a general permit ☐, or an (attached) alternative OCD-approved plan ☒.

Signature: *Pam Stevens*

Printed name: Pam Stevens

Title: Regulatory Analyst

E-mail Address: pstevens@bcooperating.com

Date 07/26/12

Phone 432-684-9696

**plugback OIL CONSERVATION DIVISION**

Approved By:

Title: **PETROLEUM ENGINEER**

Approved Date: **AUG 03 2012**

Expiration Date:

Conditions of Approval Attached

HOBBS OCD

AUG 02 2012

## DISTRICT I

1625 N. French Dr., Hobbs, NM 88240

## DISTRICT II

1301 W. Grand Avenue, Artesia, NM 88210

## DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

## DISTRICT IV

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

State of New Mexico  
Energy, Minerals and Natural Resources DepartmentForm C-102  
Revised October 15, 2009Submit one copy to appropriate  
District OfficeOIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, New Mexico 87505

## WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number 30-025-39734	Pool Code 96127	Pool Name SWD - San Andres & Glorieta
Property Code 38111	Property Name SOUTH DENTON "6" STATE	Well Number 2 SWD
OGRID No. 160825	Operator Name BC OPERATING, Inc.	Elevation 3781'

## Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	6	16 S	38 E		330	NORTH	330	WEST	LEA.

## Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres		Joint or Infill	Consolidation Code		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

	<b>SURFACE LOCATION</b> Lat - N 32°57'56.70" Long - W 103°11'36.91" NMSPCE - N 716967.203 E 890902.033 (NAD-83)		<b>OPERATOR CERTIFICATION</b>  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.  <i>Pam Stevens</i> 07/31/12 Signature Date  Pam Stevens Printed Name
			<b>SURVEYOR CERTIFICATION</b>  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 belief.  Date Surveyed Signature Professional Surveyor No. 282 Certificate No. Gary L. Jones 7977 BASIN SURVEYS
			NOVEMBER 2010 Date Surveyed Signature Professional Surveyor No. 282 Certificate No. Gary L. Jones 7977 BASIN SURVEYS
			BASIN SURVEYS

**South Denton 6 State #2 SWD  
330' FNL & 330' FWL, Sec. 6, T16S, R38E  
Lea County, New Mexico  
API# 30-025-39734**

7/25/2012

**SWD Well Recompletion – Squeeze Queen & Frac San Andres & Glorieta**

**Well Data**

Tubing: None  
Casing: 5-1/2", 15.5#, J-55 @ 6500' with 980 sx  
TD: 6850' PBD: 6850' Elevation: 3751' GL 12' KB

CIBP @ 4160' with 35' cmt on top

**Queen Perforations**

4210' – 4240', 4270' – 4278', 4342' – 4352', and 4436' – 4452'

CIBP @ 5150' w/ 35' cmt on top

**San Andres Perforations**

5200' – 5222', 5230' – 5238', 5962' – 5970', 6230' – 6240', and 6322' – 6332'

CIBP @ 6450' w/ 35' cmt on top

**4-3/4" Open Hole (Glorieta)**

6500' – 6850'

**Procedure**

1. Comply with all company and governmental safety regulations.
2. Rig up pulling unit. ND wellhead and NU BOP. Drill out CIBP @ 4160' and clean well out to 4500' with 4-1/2" bit and collars with reverse unit on 2-7/8" workstring. TOH with bit and collars. Set 7 frac tanks with fresh water for frac.
3. TIH with 5-1/2" cement retainer to 4110' and set retainer. Injection rate and pressure with water is +/-1 BPM @ 2660 psig. Design cement job accordingly. Squeeze cement below retainer. Sting out of retainer and reverse circulate two tubing volumes. TOH with stinger. WOC 12 hours.
4. Drill out CICR @ 4110', CIBP @ 5150', CIBP @ 6450', and clean well out to TD @ 6850' with bit and collars with reverse unit on 2-7/8" workstring. TOH with bit and collars.
5. TIH with 5-1/2" full bore stimulation packer on 3-1/2", N-80 workstring. Set packer at +/-5100'. Pressure test backside to 500 psig for 30 min and note any leaks.

6. MIRU pumping services. Fracture stimulate San Andres & Glorieta formations (5200'-6850') as designed. Under displace frac by 3 bbl to top perforation. Rig down pumping services. Leave well shut in and monitor tubing pressure for several hours. Bleed off pressure and TOH with treating packer, laying down 3-1/2" workstring.
7. TIH with 4-1/2" bit and collars on 2-7/8" workstring. Clean well out to TD with reverse unit. TOH with bit and collars.
8. TIH with packer on 2-7/8" workstring. Set packer @ +/-5150'. Conduct step rate injectivity test at 0.5, 1.0, 1.5, 2.0, 2.5, 3.0 and 3.5 BPM. Record pressures at each rate after injecting for 5 minutes at each step. TOH with packer, laying down workstring. ND BOP and NU wellhead. RDMO pulling unit.
9. Rig up pulling unit. ND wellhead and NU BOP.
10. TIH with 5-1/2", 15.5# nickel plated injection packer (1.87" profile in on/off tool) on 3-1/2", 9.3#, J-55 fiberglass lined injection tubing. Set packer at +/-5150'. Pressure test casing/tubing annulus to 500# for 30 minutes. Flange up wellhead and rig down pulling unit. Schedule MIT with NMOCD.
11. ND BOP and NU wellhead. RDMO pulling unit. Perform MIT. Run water transfer line and set surface facilities. Begin injection into the San Andres and Glorieta formations. Gather injection test information and evaluate.

### **Contacts**

Jason Wacker	Operations Manager	432-684-9696
Val Saenz	Well Site Supervisor	575-631-9249