

5/04/2015 DATE IN	SUSPENSE	PRG ENGINEER	5/04/2015 LOGGED IN	SWD TYPE	PHANIS12457883 APP NO.
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ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



### ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE

#### Application Acronyms:

[NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]  
 [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling]  
 [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement]  
 [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion]  
 [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase]  
 [EOR-Qualified Enhanced Oil Recovery Certification] [PPR-Positive Production Response]

#### [1] TYPE OF APPLICATION - Check Those Which Apply for [A]

[A] Location - Spacing Unit - Simultaneous Dedication  
☐ NSL ☐ NSP ☐ SD

Check One Only for [B] or [C]

[B] Commingling - Storage - Measurement  
☐ DHC ☐ CTB ☐ PLC ☐ PC ☐ OLS ☐ OLM

[C] Injection - Disposal - Pressure Increase - Enhanced Oil Recovery  
☐ WFX ☐ PMX ☒ SWD ☐ IPI ☐ EOR ☐ PPR

[D] Other: Specify \_\_\_\_\_

SWD  
 BC Operating, Inc. 160825  
 Black River 15 State SWD 1  
 30-015-43096  
 SWD; Cherry Canyon

POV  
 SWD; Cherry Canyon  
 47003

#### [2] NOTIFICATION REQUIRED TO: - Check Those Which Apply, or Does Not Apply

[A] ☒ Working, Royalty or Overriding Royalty Interest Owners  
 [B] ☒ Offset Operators, Leaseholders or Surface Owner  
 [C] ☒ Application is One Which Requires Published Legal Notice  
 [D] ☒ Notification and/or Concurrent Approval by BLM or SLO  
 U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office  
 [E] ☒ For all of the above, Proof of Notification or Publication is Attached, and/or,  
 [F] ☐ Waivers are Attached

2015 MAY -4 P 2:32  
 RECEIVED OOD

#### [3] SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE OF APPLICATION INDICATED ABOVE.

[4] **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is **accurate** and **complete** to the best of my knowledge. I also understand that **no action** will be taken on this application until the required information and notifications are submitted to the Division.

Note: Statement must be completed by an individual with managerial and/or supervisory capacity.

Brian Wood

Print or Type Name

Signature

Consultant

Title

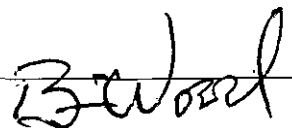
5-4-15

Date

brian@permitswest.com

e-mail Address

**APPLICATION FOR AUTHORIZATION TO INJECT**

- I. PURPOSE: Secondary Recovery Pressure Maintenance XXX Disposal Storage  
Application qualifies for administrative approval? Yes No
- II. OPERATOR: BC OPERATING, INC.  
ADDRESS: P. O. BOX 50820, MIDLAND TX 79710  
CONTACT PARTY: BRIAN WOOD (PERMITS WEST, INC.) PHONE: 505 466-8120
- III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.  
Additional sheets may be attached if necessary.
- IV. Is this an expansion of an existing project? Yes XXX No  
If yes, give the Division order number authorizing the project: \_\_\_\_\_
- V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.
- VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.
- VII. Attach data on the proposed operation, including:
- Black River 15 State SWD 1**  
**30-015-**  
**SWD; Cherry Canyon**
1. Proposed average and maximum daily rate and volume of fluids to be injected;
  2. Whether the system is open or closed;
  3. Proposed average and maximum injection pressure;
  4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
  5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).
- \*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.
- IX. Describe the proposed stimulation program, if any.
- \*X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).
- \*XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.
- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.
- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.
- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
- NAME: BRIAN WOOD  TITLE: CONSULTANT  
SIGNATURE: \_\_\_\_\_ DATE: MAY 1, 2015  
E-MAIL ADDRESS: brian@permitswest.com
- \* If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: \_\_\_\_\_

### III. WELL DATA

A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

- (1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.
- (2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.
- (3) A description of the tubing to be used including its size, lining material, and setting depth.
- (4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

- (1) The name of the injection formation and, if applicable, the field or pool name.
- (2) The injection interval and whether it is perforated or open-hole.
- (3) State if the well was drilled for injection or, if not, the original purpose of the well.
- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.
- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

### XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

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NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

## INJECTION WELL DATA SHEET

OPERATOR: BC OPERATING, INC.WELL NAME & NUMBER: BLACK RIVER 15 STATE SWD 1

WELL LOCATION: 2334 FSL & 1914 FWL      K      15      24 S      27 E  
    FOOTAGE LOCATION      UNIT LETTER      SECTION      TOWNSHIP      RANGE

WELLBORE SCHEMATICWELL CONSTRUCTION DATASurface Casing

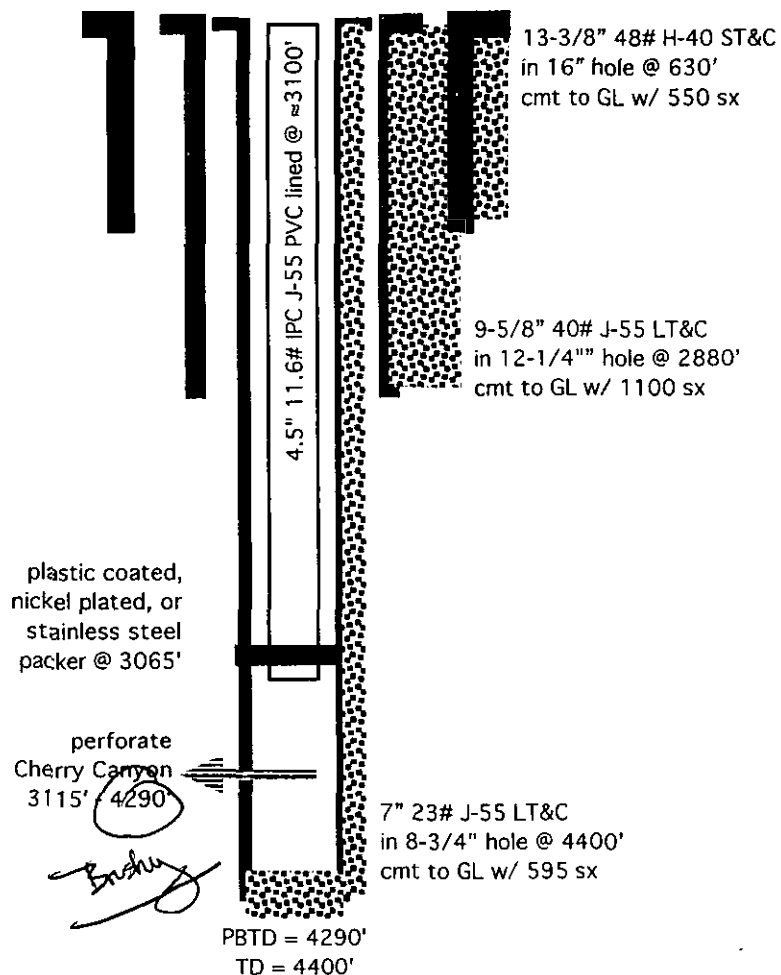
Hole Size: 16"      Casing Size: 13-3/8"  
 Cemented with: 550 sx.      or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: SURFACE      Method Determined: CIRCULATE

Intermediate Casing

Hole Size: 12-1/4"      Casing Size: 9-5/8"  
 Cemented with: 1,100 sx.      or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: SURFACE      Method Determined: CIRCULATE

Production Casing

Hole Size: 8-3/4"      Casing Size: 7"  
 Cemented with: 595 sx.      or \_\_\_\_\_ ft<sup>3</sup>  
 Top of Cement: SURFACE      Method Determined: CIRCULATE  
 Total Depth: SET @ 4400'      PBTD = 4290' & TD = 4400'

Injection Interval3115' feet to 4290'(Perforated ~~or Open Hole~~; indicate which)

(not to scale)

INJECTION WELL DATA SHEETTubing Size: 4-1/2" Lining Material: PVCType of Packer: IPC, NICKEL PLATED, OR STAINLESS STEELPacker Setting Depth: ≈3,065'

Other Type of Tubing/Casing Seal (if applicable): \_\_\_\_\_

Additional Data

1. Is this a new well drilled for injection? XXX Yes \_\_\_\_\_ No

If no, for what purpose was the well originally drilled? \_\_\_\_\_

2. Name of the Injection Formation: CHERRY CANYON

3. Name of Field or Pool (if applicable): SWD;CHERRY CANYON (97003)

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. N/A

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: \_\_\_\_\_

OVER: BELL CANYON (2290')UNDER: BONE SPRING (5,700') & WOLFCAMP (8,900')

BLACK RIVER 15 STATE SWD 1

2334' FSL &amp; 1914' FWL SEC. 15, T. 24 S., R. 27 E.

EDDY COUNTY, NEW MEXICO

I. Goal is to drill a 4,400' deep commercial saltwater disposal well on State surface. Proposed disposal interval will be 3,115' - 4,290' (PBTD = 4,290') in the Cherry Canyon. Pool is the SWD; Cherry Canyon (97003). See Exhibit A for map and C-102.

II. Operator: BC Operating, Inc. (OGRID 160825)  
Operator phone number: (432) 684-9696  
Operator address: P. O. Box 50820, Midland TX 79710  
Contact for Application: Brian Wood (Permits West, Inc.)  
Phone: (505) 466-8120

III. A. (1) Lease: V0-3772-0001  
Lease Size: 640 acres Closest Lease Line: 1914'  
Lease Area: all Section 15, T. 24 S., R. 27 E.

A. (2) Surface casing (13-3/8", 48#, H-40, ST&C) will be set at 630' with 4 bow spring centralizers in a 16" hole. It will be cemented to the surface with 550 sacks Class C + 1% CaCl<sub>2</sub> + ¼ pound per sack cello-flake mixed at 14.8 pounds per gallon, 1.35 cubic feet per sack, and 6.36 gallons per sack. Excess = 100%.

Intermediate casing (9-5/8", 40#, J-55, LT&C) will be set at 2,880' in a 12-1/4" hole with 15 bow spring centralizers and cemented to the surface. Lead with 880 sacks 35:65 C + 6% salt + ¼ pound per sack cello-flake + 6% bentonite + 0.15% R2 + 0.1% CD35 mixed at 12.6 pounds per gallon, 2.02 cubic feet per sack, and 10.61 gallons per sack. Tail with 220 sacks Class C + 0.15% R20 mixed at 14.8 pounds per gallon, 1.33 cubic feet per sack, and 6.33 gallons per sack. Excess = 30%.

Production casing (7", 23#, J-55, LT&C) will be set at 4,400' in an 8-3/4" hole and cemented to the surface. Lead with 360 sacks 35:65 C + 6% salt + ¼ pound per sack cello-flake + 6% bentonite + 0.15%

BC OPERATING, INC.  
BLACK RIVER 15 STATE SWD 1  
2334' FSL & 1914' FWL SEC. 15, T. 24 S., R. 27 E.  
EDDY COUNTY, NEW MEXICO

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R20 + 0.1% CD35 mixed at 12.6 pounds per gallon, 2.02 cubic feet per sack, and 10.61 gallons per sack. Tail with 235 sacks Class C + 0.15% R20 mixed at 14.8 pounds per gallon, 1.33 cubic feet per sack, and 6.33 gallons per sack. Excess = 30%. Well will be plugged back to 4,290' after logging.

- A. (3) Tubing will be 4-1/2", 11.6#, J-55, PVC lined. Setting depth will be  $\approx 3,100'$ . (Disposal interval will be 3,115' to 4,290'.)
- A. (4) A plastic coated, stainless, or nickel plated packer will be set at  $\approx 3,065'$  ( $\approx 50'$  above the highest proposed perforation of 3,115').
- B. (1) Disposal zone will be SWD; Cherry Canyon (97003).
- B. (2) Perforated disposal interval will be 3,115' - 4,290' in the Cherry Canyon.
- B. (3) Well has not yet been drilled. Goal is to complete it as a disposal well.
- B. (4) BC will perforate from 3,115' to 4,290' with 2-6 shots per foot.
- B. (5) Bell Canyon (2290' - 2302') is the only producing zone above the Cherry Canyon in the area of review. There is no current production below the Cherry Canyon in the area of review. However, a Bone Spring (top = 5767') well is producing 179' south of the area of review. In addition, a Wolfcamp well (TVD = 8900') is planned inside the area of review.

IV. This is not an expansion of an existing injection project. It is disposal only.

## BLACK RIVER 15 STATE SWD 1

2334' FSL &amp; 1914' FWL SEC. 15, T. 24 S., R. 27 E.

EDDY COUNTY, NEW MEXICO

V. Exhibit B shows the 3 existing wells (2 P&A water and 1 oil) and 1 proposed gas well within a half-mile radius. Exhibit C shows all 53 existing wells (19 oil or gas wells + 22 P & A wells + 12 water wells or windmills) within a two-mile radius.

Exhibit D shows all leases and lessors (only State) within a half-mile radius. Exhibit E shows all leases and lessors (BLM, fee, and State) within a two-mile radius. Details on the leases within a half-mile radius are:

Aliquot Parts in Area of Review (T 24 S, R 27 E)	Lease (all NMSLO)	Lessee(s) of Record	Cherry Canyon operator, if any
all Sec. 15	V0-3772-0001	Oxy USA	N/A*
E2NE4 Sec. 16	VB-1762-0001	Devon Energy	N/A
E2SE4 Sec. 16	VB-1763-0001	Devon Energy	N/A
NWNE & N2NW4 Sec. 22	VB-1534-0001	COG	N/A
			*Oxy operates a Bell Canyon well in L-15-24s-27e

VI. Three existing wells are within a 2,640' radius. Only one of those wells penetrated the Cherry Canyon (top = 3020'). A summary of the one penetrator is attached as Exhibit F. Wells in or near the area of review are:

API	WHO	UL	T24S, R27E, SECTION	TVD	WELL	TYPE WELL	ZONE	FEET FROM SWD
3001501125	Lubbock Machine & Supply	J	15	2417	Lubbock Machine & Supply 1	P&A	Delaware	1056
3001527100	Oxy	L	15	5975	BR 15 State 1	oil	Delaware (Bell Canyon)	1428
3001542728	BC	B, G, J, O	15	8900 planned	Black River 10 State Com 2H	gas	Wolfcamp	1686



BC OPERATING, INC.

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BLACK RIVER 15 STATE SWD 1

2334' FSL & 1914' FWL SEC. 15, T. 24 S., R. 27 E.

EDDY COUNTY, NEW MEXICO

3001501126	Miller	M	15	2455	State Hamilton Dome 1	P&A	Delaware	2554
3001540162	COG	D	22	9418	Bullseye 22 State Com 1H	oil	Bone Spring	2819

- VII. 1. Average injection rate will be  $\approx 7,500$  bwpd.  
Maximum injection rate will be 10,000 bwpd.
2. System will be open. Water will be trucked to the well.
3. Average injection pressure will be  $\approx 500$  psi  
Maximum injection pressure will be 623 psi ( $= 0.2$  psi/foot  $\times 3,115'$  (highest perforation)).
4. There is no report of problems disposing in the closest (12.4 miles SSW) active Cherry Canyon SWD well (30-015-35435). 708,322 barrels were disposed from 2007 to now.  
Main source of water will be produced water from Wolfcamp and Bone Spring wells. However, BC will accept produced water from other zones too. A summary of the water analyses in Exhibit G follows.

Well	Boyles 24 1H	Nel 2	Thistle Unit 5
<b>API #</b>	3001538246	3001523759	3002534580
<b>Location</b>	N-24-25s-28e	I-9-23s-28e	F-34-23s-33e
<b>Zone</b>	Bone Spring	Cherry Canyon	Wolfcamp
<b>Parameter mg/l</b>			
barium (Ba)	0	0	0
bicarbonate (HCO <sub>3</sub> )	1403	61	704
calcium (Ca)	3700	19200	10500
carbon dioxide (CO <sub>2</sub> )	400	0	
chloride (Cl)	128800	100000	78366

hydrogen sulfide (H <sub>2</sub> S)	0	0	0
iron (Fe)	17	10	212.5
magnesium (Mg)	841	4636	14500
nitrate (NO <sub>3</sub> )			187
manganese (Mn)	0	0	
pH	6.69	7.2	6.7
potassium (K)	1109		43.8
sodium (Na)	69386	34488	
strontium (Sr)	483		
sulfate (SO <sub>4</sub> )	700	870	1350
total dissolved solids (TDS)	206441	159385	105950

5. Closest Cherry Canyon production is >26 miles ENE in 24-23s-31e in the Sand Dunes; Cherry Canyon Pool (53810). Closest Delaware production is 1,428' west in the Malaga; Delaware, West Pool (43130) at 30-015-27000 in L-15-24s-27e. Production is from the Bell Canyon (2290' - 2302') of the Delaware.

VIII. The Cherry Canyon is ≈1,100' thick poorly consolidated fine to very fine marine sandstones with shale and carbonate layers. Injection will likely occur in the sandstones.

There is a 1,460' interval of salt and anhydrite above the top perforation. Closest underground source of drinking water above the proposed disposal interval is the alluvium along the Black River. The river is 1-1/4 miles north. Maximum depth to water recorded within a 2-mile radius is 70' in well C 01452 that is supposedly 5,123' south. No evidence of it was found during a March 26, 2015 field inspection nor does it show on historical (1996-2013) Google Earth imagery. Maximum well depth recorded within a 2-mile radius is 2,270'. No water depths were reported for this well (C00364) that is 8,557' northwest. No underground source of drinking water is below the proposed disposal interval. See Exhibit H.

BC OPERATING, INC.  
BLACK RIVER 15 STATE SWD 1  
2334' FSL & 1914' FWL SEC. 15, T. 24 S., R. 27 E.  
EDDY COUNTY, NEW MEXICO

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Estimated formation tops are:

Rustler = 0'  
Castile = 570'  
Top Salt = 1430'  
Base Salt = 1,990'  
Lamar = 2,220'  
Bell Canyon = 2,280'  
Cherry Canyon = 3,020'—  
PBTD = 4,290' ]  
Brushy Canyon = 4,300'  
TD = 4,400'  
(Bone Spring = 5,700'  
Wolfcamp = 8,900')

*Brushy Canyon to be pulled  
from completion - poor  
Pick*

There will be >3,000' of vertical separation and the salt and anhydrite interval between the bottom of the only likely underground water source (alluvium) and the top of the Cherry Canyon.

There has been no report of problems disposing in the closest (12.4 miles SSW) active Cherry Canyon SWD well (30-015-35435). 708,322 barrels were disposed from 2007 to now.

IX. The well will be stimulated with acid to clean out scale or fill.

X. Compensated neutron density and resistivity logs will be run.

XI. Based on a March 26, 2015 field inspection and a review of the State Engineer's records, ~~no~~ <sup>one</sup> water well is within a one-mile radius.

*See Exhibit H - C1452  
3 of 3*

*Caleb Hobson for BC*  
XII. ~~BC Operating, Inc.~~ is not aware of any geologic or engineering data which may indicate the Cherry Canyon is in hydrologic connection with any underground

BC OPERATING, INC.

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BLACK RIVER 15 STATE SWD 1

2334' FSL & 1914' FWL SEC. 15, T. 24 S., R. 27 E.

EDDY COUNTY, NEW MEXICO

sources of water. There are 63 Cherry Canyon saltwater disposal wells active in New Mexico. Closest Quaternary fault is >47 miles southwest (Exhibit I).

XIII. A legal ad (see Exhibit J) was published on April 2, 2015. Notice (this application) has been sent (Exhibit K) to the surface owner (NM State Land Office), lessor (NM State Land Office), and all lessees (COG, Devon, Oxy) within ½ mile. There is no Cherry Canyon operator within ½ mile.

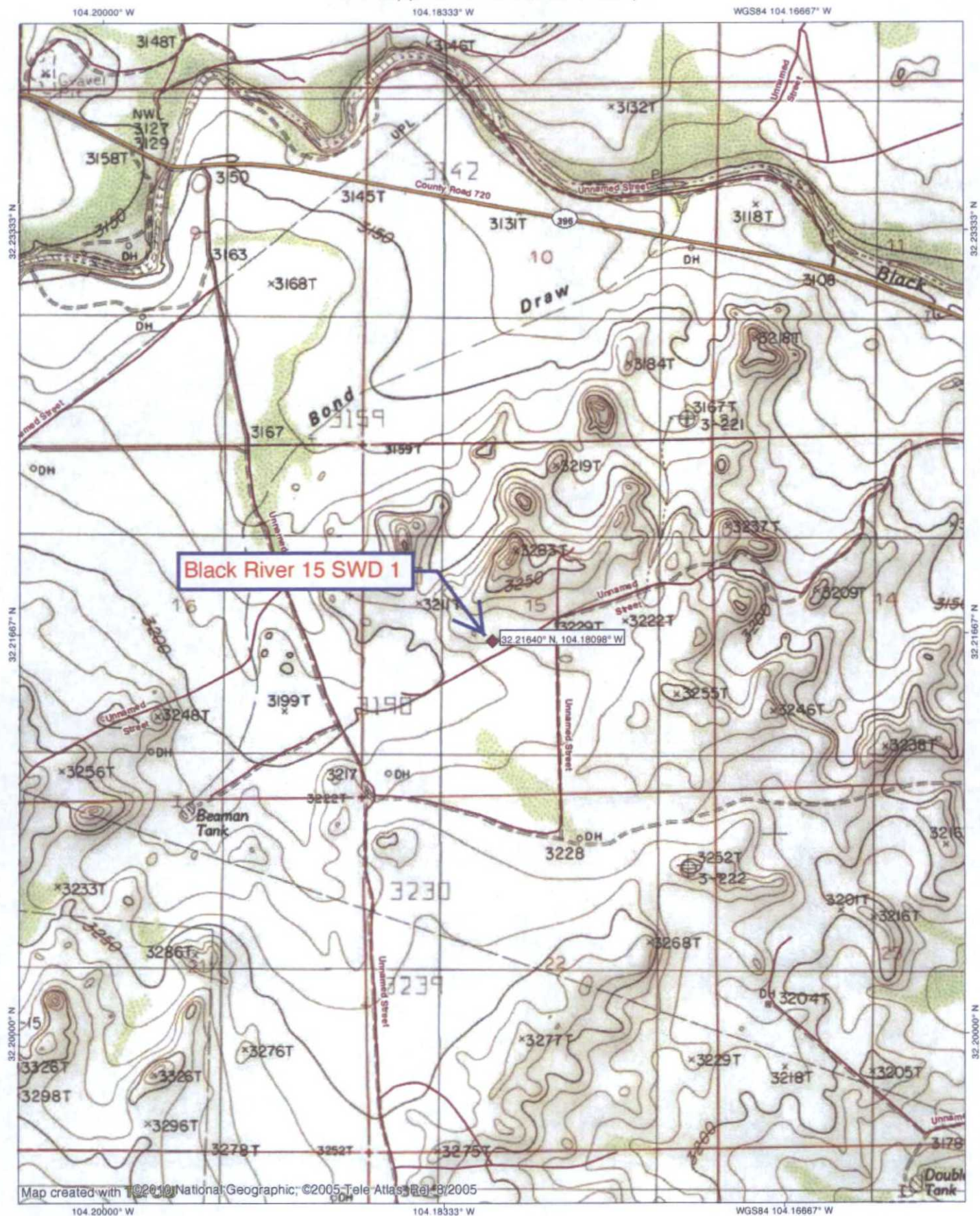


EXHIBIT A

TN-MN  
7.5'  
03/24/15



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  
Energy, Minerals & Natural Resources Department  
OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number <b>30-015-</b>		<sup>2</sup> Pool Code <b>97003</b>	<sup>3</sup> Pool Name <b>SWD; Cherry Canyon</b>
<sup>4</sup> Property Code	<sup>5</sup> Property Name <b>BLACK RIVER 15 STATE SWD</b>		<sup>6</sup> Well Number <b>1</b>
<sup>7</sup> OGRID No. <b>160825</b>	<sup>8</sup> Operator Name <b>B.C. OPERATING, INC.</b>		<sup>9</sup> Elevation <b>3219'</b>

<sup>10</sup> Surface Location

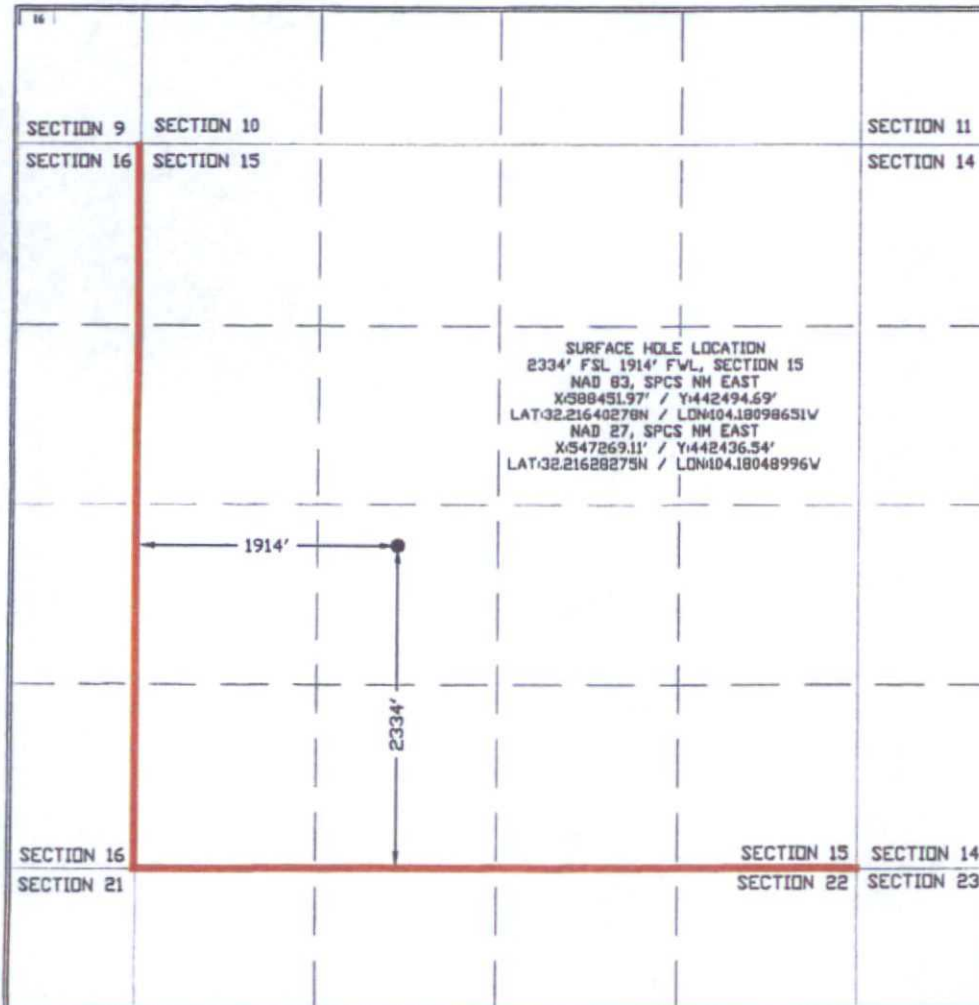
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	15	T24S	R27E		2334'	SOUTH	1914'	WEST	EDDY

<sup>11</sup> 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

<sup>12</sup> Dedicated Acres	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> 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.



<sup>17</sup> OPERATOR CERTIFICATION

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.

*Brian Wood* 4-23-15  
Signature Date

Brian Wood

Printed Name  
brian@permitswest.com

E-mail Address

<sup>18</sup> SURVEYOR CERTIFICATION

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.

MARCH 26, 2015  
Date of Survey

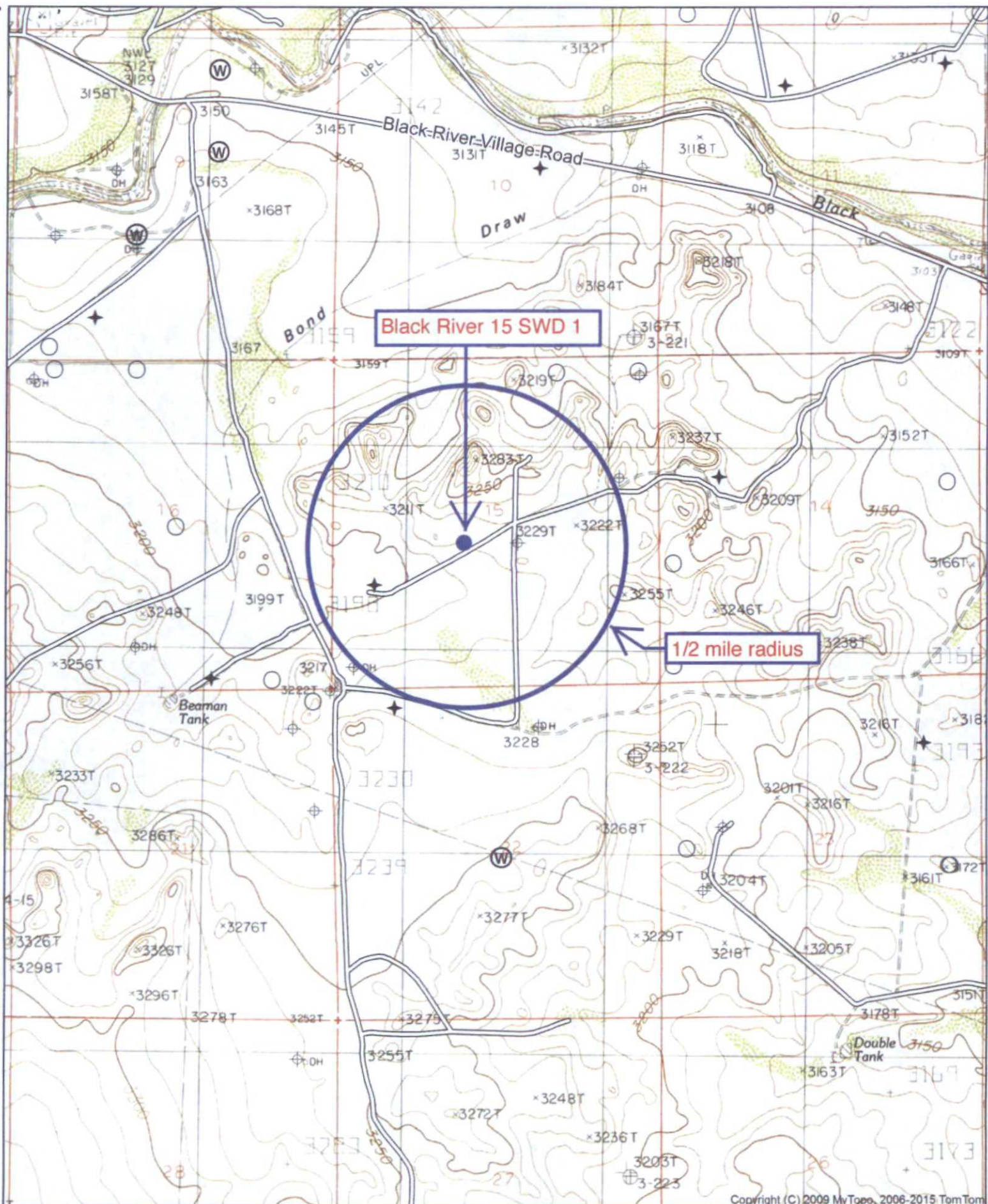
Signature and Seal of Professional Surveyor

*Lloyd P. Short*  
Certificate Number



EXHIBIT A

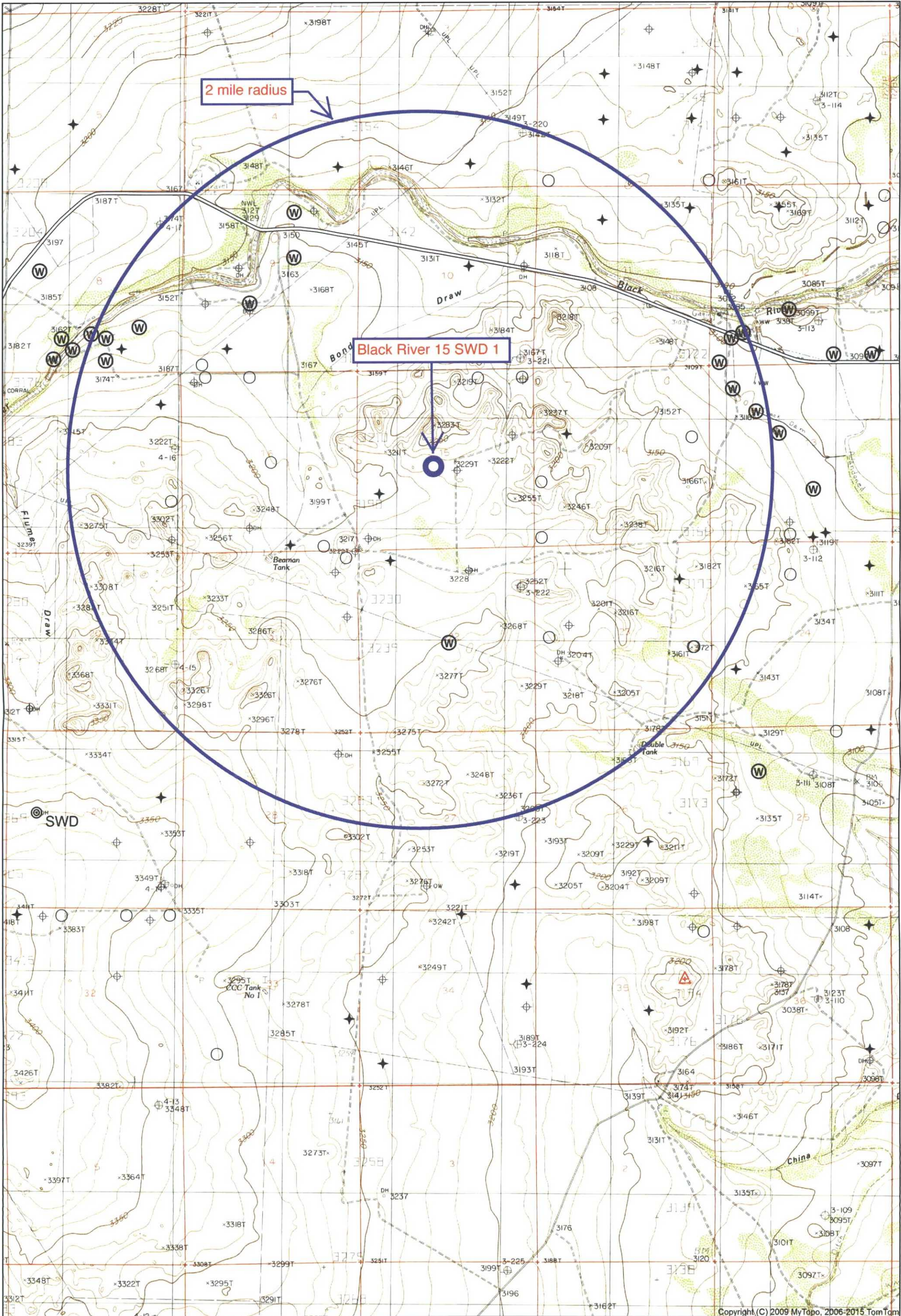




Quad: BOND DRAW  
Scale: 1 inch = 2,000 ft.

EXHIBIT B

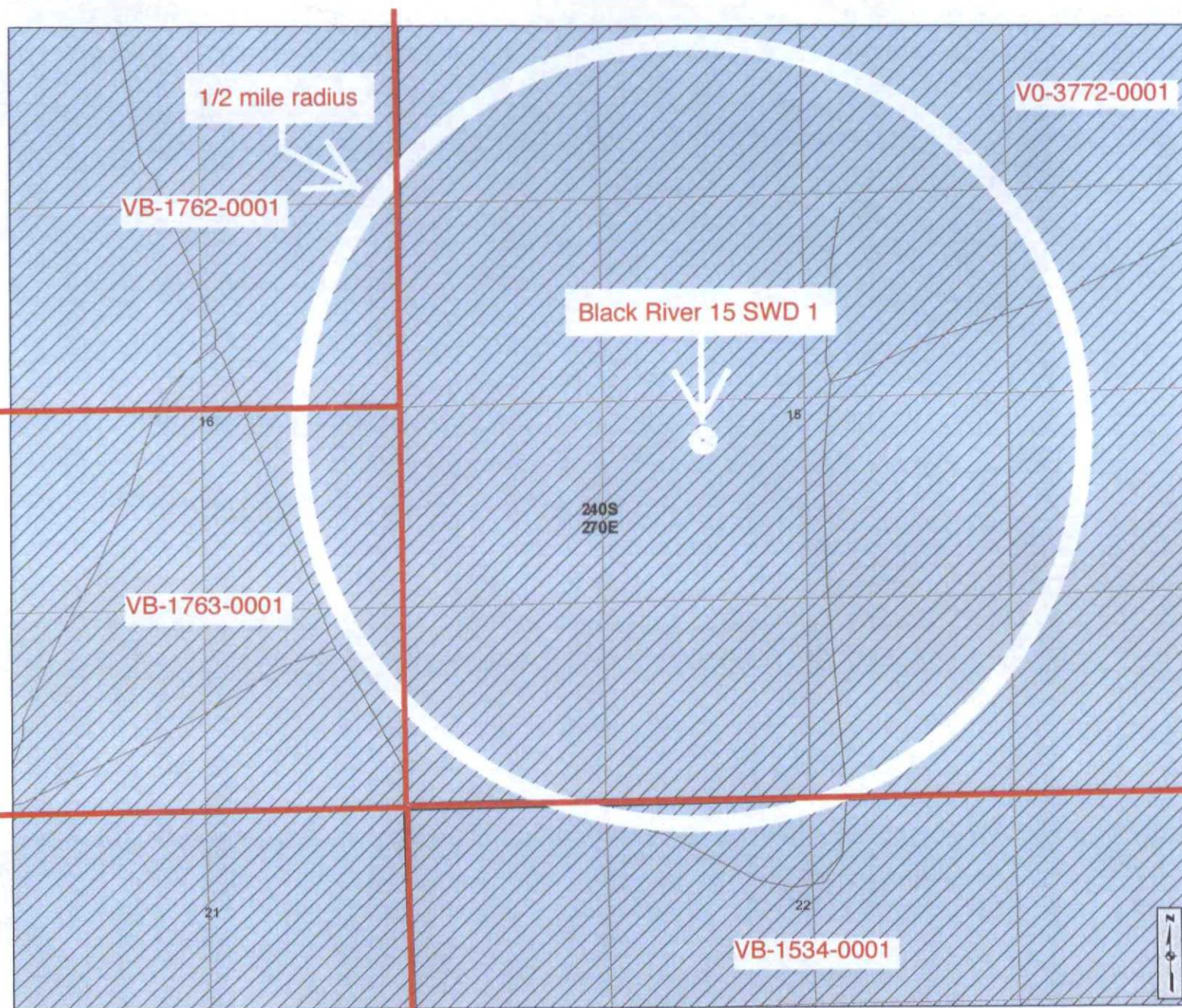




Quad: BOND DRAW  
Scale: 1 inch = 2,597 ft.

EXHIBIT C





### Cartographic Features

- County Boundaries
- County Seats
- City, Town or Village
- SLO District Offices
- SLO District Boundary
- Hwy Mileposts
- Interstate
- NM Hwy
- US Hwy
- Local Road
- Continental Divide

### Federal Minerals Ownership

- All Minerals
- Coal Only
- Oil and Gas Only
- Oil, Gas and Coal Only
- Other Minerals

### State Trust Lands

- Surface Estate
- Subsurface Estate
- Surface and Subsurface Estate

### State Leases

- Oil and Gas Leases
- Agricultural Leases
- Commercial Leases
- Minerals Leases
- Not Available for Oil and Gas Leasing
- Oil and Gas Leasing Influenced by Restriction

### Oil and Gas Related Features

- Oil and Gas Unit Boundary
- Participating Areas in Units
- Geologic Regions
- Volcanic Vents
- NMOCD Order R-111-P
- Potash Enclave Outline

### NMOCD Oil and Gas Wells

- CO<sub>2</sub>
- Injection
- Oil
- Water
- Gas
- Miscellaneous
- Salt Water Disposal
- DA or PA

## New Mexico State Land Office Oil, Gas and Minerals

0 0.03 0.06 0.12 0.18 0.24 Miles

Universal Transverse Mercator Projection, Zone 13  
1983 North American Datum

The New Mexico State Land Office assumes no responsibility or liability for, or in connection with, the accuracy, reliability or use of the information provided here, in State Land Office data layers or any other data layer.

Land Office Geographic Information Center  
logic@sls.state.nm.us

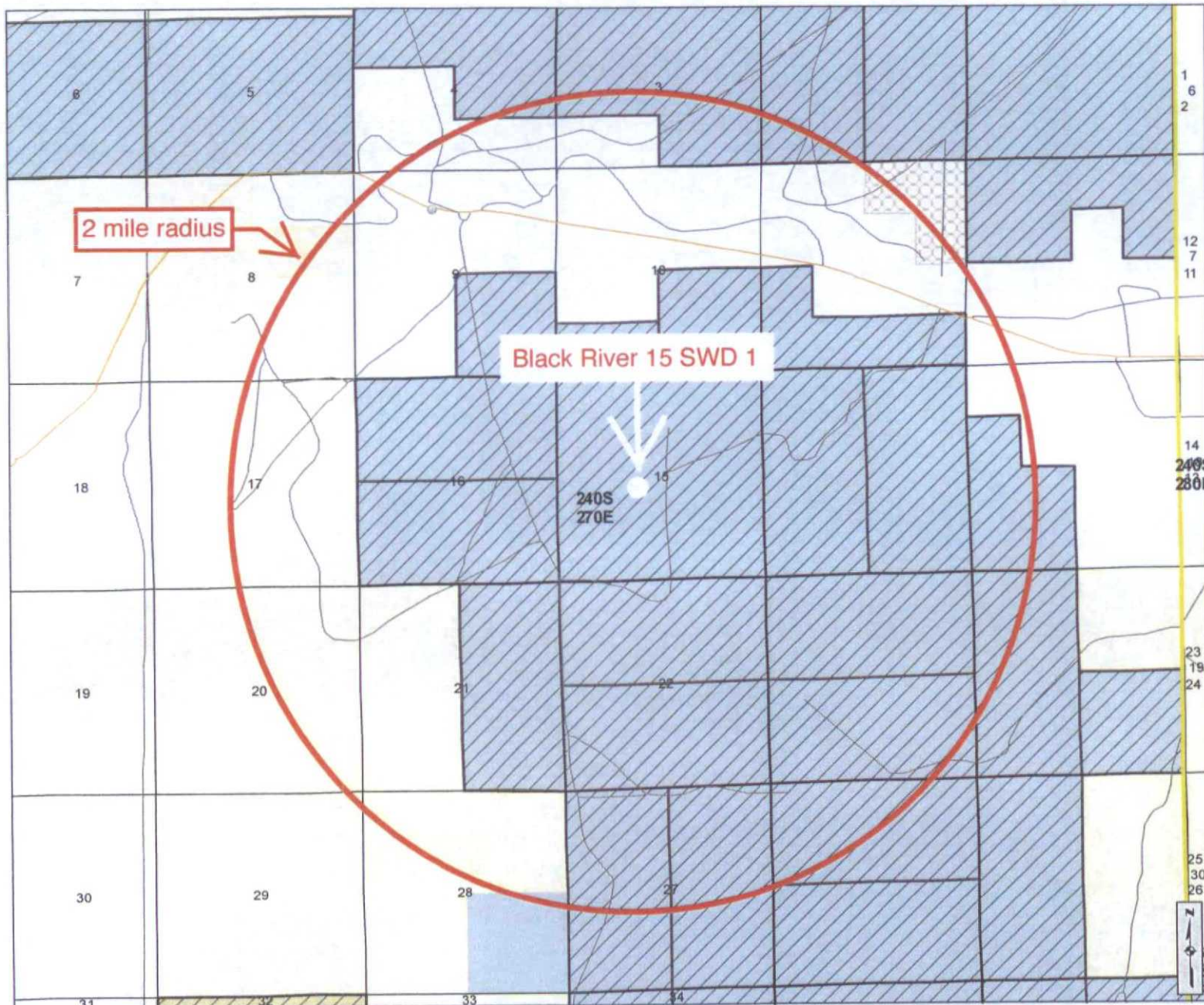
Created On: 4/23/2015 3:49:58 PM

EXHIBIT D



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### Cartographic Features

- County Boundaries
- County Seats
- City, Town or Village
- SLO District Offices
- SLO District Boundary
- Hwy Mileposts
- Interstate
- NM Hwy
- Continental Divide
- US Hwy
- Local Road

### Federal Minerals Ownership

- All Minerals
- Coal Only
- Oil and Gas Only
- Oil, Gas and Coal Only
- Other Minerals

### State Trust Lands

- Surface Estate
- Subsurface Estate
- Surface and Subsurface Estate

### State Leases

- Oil and Gas Leases
- Agricultural Leases
- Commercial Leases
- Minerals Leases
- Not Available for Oil and Gas Leasing
- Oil and Gas Leasing Influenced by Restriction

### Oil and Gas Related Features

- Oil and Gas Unit Boundary
- Participating Areas in Units
- Geologic Regions
- Volcanic Vents
- NMOCD Order R-111-P
- Potash Enclave Outline

### NMOCD Oil and Gas Wells

- CO<sub>2</sub>
- Injection
- Oil
- Water
- Gas
- Miscellaneous
- Salt Water Disposal
- DA or PA

## New Mexico State Land Office Oil, Gas and Minerals

0 0.125 0.25 0.5 0.75 1 Miles

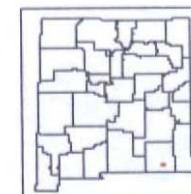
Universal Transverse Mercator Projection, Zone 13  
1983 North American Datum

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**EXHIBIT E**



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[illegible]

Bone Spring water  
from 30-015-38246  
(via 30-015-41401)

Bone Spring												
Lab Test #	Lease	Location	Salesman	Date Out	Sample Date	Specific Gravity	Ionic Strength	TDS	pH	conductivity	Ca (mg/L)	Mg (mg/L)
2012108003	Boyles	24 1H	William D Polk	4/16/2012	4/3/2012	1.13	3.41	206441.81	6.69		3700.86	841.87

EXHIBIT G

Rone Spring water

TH (CaCO3)	Na (mg/L)	K (mg/L)	Zn (mg/L)	Fe (mg/L)	Ba (mg/L)	Sr (mg/L)	Mn (mg/L)	Resistivity	HCO3 (mg/L)	CO3 (mg/L)	OH (mg/L)	SO4 (mg/L)	Cl (mg/L)	CO2 (mg/L)	H2S (mg/L)
13271.35	69386.15	1109.30	0.00	17.57	0.00	483.07	0.00		1403.00	0.00		700.00	128800.00	400.00	0.00

EXHIBIT G



SCB Unit 6 B appears to be  
South Culebra Bluff Unit 6  
30-015-23339  
analysis from Case 13313

North Permian Basin Region  
P.O. Box 740  
Sundown, TX 79372-0740  
(806) 229-8121  
Lab Team Leader - Sheila Hernandez  
(915) 495-7240

## Water Analysis Report by Baker Petrolite

Company:	RBO OPERATING INC	Sales RDT:	33517
Region:	PERMIAN BASIN	Account Manager:	CURRY FRUIT (505) 910-9388
Area:	LOVING, NM	Sample #:	35599
Lease/Platform:	SCB UNIT	Analysis ID #:	43324
Entity (or well #):	6 B	Analysis Cost:	\$40,00
Formation:	UNKNOWN - BRUSHY CANYON		
Sample Point:	WATER TANK		

Summary		Analysis of Sample 35599 @ 75 °F					
Sampling Date:	5/20/04	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	5/21/04	Chloride:	187000.0	5274.68	Sodium:	78232.3	3402.91
Analyst:	CURRY FRUIT	Bicarbonate:	368.0	8.0	Magnesium:	4958.0	389.84
TDS (mg/l or g/m3):	300090.3	Carbonate:	0.0	0.0	Calcium:	29604.0	1477.25
Density (g/cm3, tonne/m3):	1.2	Sulfate:	5.0	0.1	Strontium:		
Anion/Cation Ratio:	1	Phosphate:			Barium:		
		Borate:			Iron:	25.0	0.9
		Silicate:			Potassium:		
Carbon Dioxide:	275 PPM	Hydrogen Sulfide:		<5 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		5.8	Chromium:		
Comments:		pH at time of analysis:			Copper:		
		pH used in Calculation:		5.5	Lead:		
					Manganese:		
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		CO <sub>2</sub> Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	0.30	19.88	-2.00	0.00	-1.93	0.00	0.00	0.00	0.00	0.00	5.01
100	0	0.38	24.97	-2.09	0.00	-1.95	0.00	0.00	0.00	0.80	0.00	5.81
120	0	0.46	29.70	-2.16	0.00	-1.94	0.00	0.00	0.00	0.00	0.00	6.54
140	0	0.55	34.43	-2.22	0.00	-1.91	0.00	0.00	0.00	0.00	0.00	7.17

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO<sub>2</sub> pressure is actually the calculated CO<sub>2</sub> fugacity. It is usually nearly the same as the CO<sub>2</sub> partial pressure.



SCB Unit 23 #2 appears to be  
South Culebra Bluff 23 #2  
30-015-26213  
analysis from Case 13313

North Permian Basin Region  
P.O. Box 740  
Sundown, TX 79372-0740  
(808) 229-8121  
Lab Team Leader - Sheila Hernandez  
(915) 488-7240

## Water Analysis Report by Baker Petrolite

Company:	RBO OPERATING INC	Sales RDT:	33517
Region:	PERMIAN BASIN	Account Manager:	CURRY PRUIT (505) 910-9388
Area:	LOVING, NM	Sample #:	35800
Lease/Platform:	SCB UNIT	Analysis ID #:	43325
Entity (or well #):	23 #2	Analysis Cost:	\$40.00
Formation:	UNKNOWN - <i>Brushy Canyon</i>		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 35800 @ 75 °F					
Sampling Date:	5/20/04	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	5/21/04	Chloride:	161000.0	4541.22	Sodium:	67889.3	2957.37
Analyst:	CURRY PRUIT	Bicarbonate:	37.0	0.61	Magnesium:	4250.0	349.82
TDS (mg/l or g/m3):	258058.3	Carbonate:			Calcium:	24720.8	1233.53
Density (g/cm3, tonne/m3):	1.2	Sulfate:	18.0	0.31	Strontium:		
Anion/Cation Ratio:	1	Phosphate:			Barium:		
		Borate:			Iron:	45.0	1.63
		Silicate:			Potassium:		
Carbon Dioxide:	600 PPM	Hydrogen Sulfide:		<5 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		5.5	Chromium:		
Comments:		pH at time of analysis:			Copper:		
		pH used in Calculation:		5.5	Lead:		
					Manganese:		
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO <sub>3</sub>		Gypsum CaSO <sub>4</sub> ·2H <sub>2</sub> O		Anhydrite CaSO <sub>4</sub>		Celestite SrSO <sub>4</sub>		Barite BaSO <sub>4</sub>		CO <sub>2</sub> Press
°F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	-0.88	0.00	-1.84	0.00	-1.58	0.00	0.00	0.00	0.00	0.00	0.56
100	0	-0.78	0.00	-1.71	0.00	-1.60	0.00	0.00	0.00	0.00	0.00	0.66
120	0	-0.70	0.00	-1.77	0.00	-1.58	0.00	0.00	0.00	0.00	0.00	0.76
140	0	-0.62	0.00	-1.82	0.00	-1.54	0.00	0.00	0.00	0.00	0.00	0.85

Note 1: When assessing the severity of the scale problem, both the saturation index (SI) and amount of scale must be considered.

Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO<sub>2</sub> pressure is actually the calculated CO<sub>2</sub> fugacity. It is usually nearly the same as the CO<sub>2</sub> partial pressure.

PRODUCT WARRANTY, DISCLAIMER AND LIMITATION OF LIABILITY ARE FOUND ON THE BACK OF THIS SHEET

EXHIBIT G





Water Analysis Report Cherry Canyon water  
from 30-015-23759  
(via 30-015-40496)

Analysis Number : 000003105

Company.....: Bk Exploration  
Location.....: Pogo's NEL #2  
Field.....: Cherry Canyon  
Lease.....: Wellhead  
Sample Source.....: Wellhead

Date of Sampling.....: 09/15/94  
Date of Analysis.....: 09/15/94  
Baker Representative.: Steven Stroud  
Well#.....: Williams  
Analysis by.....: Williams

DISSOLVED SOLIDS

CATIONS:	mg/l	me/l
Ca++	19200.00	960.00
Mg++	4636.00	380.00
Fe+++	10.00	0.54
Ba++	0.00	0.00
Na+	34488.27	1499.49
Mn++	0.00	0.00

ANIONS:	mg/l	me/l
Cl-	100000.00	2816.90
SO4--	870.00	18.13
HCO3-	61.00	1.00
CO3--	120.00	4.00
OH-	0.00	0.00
S-	0.00	0.00

TOTAL HARDNESS.....: 1340.00  
TOTAL SOLIDS (quantitative).....: 159385.30  
RESIDUAL HYDROCARBONS(ppm).....: 0.00

# = not determined

DISSOLVED GASES

Hydrogen Sulfide, H2S.....:	0.0
Carbon Dioxide, CO2.....:	0.0
Oxygen, O2.....:	0.0

PHYSICAL PROPERTIES

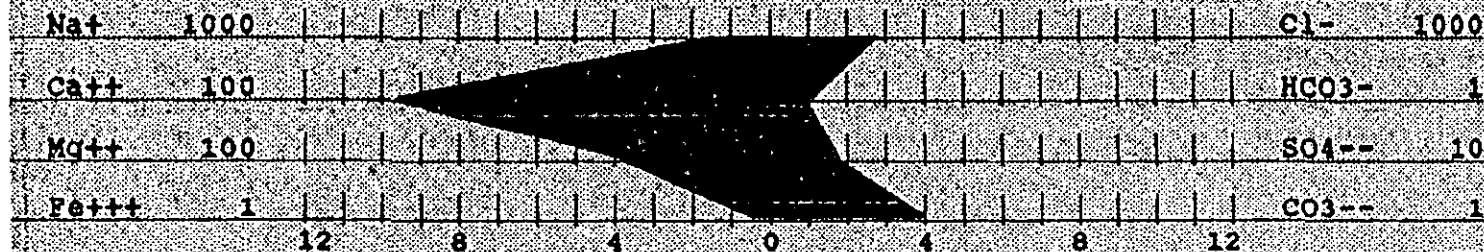
pH.....:	7.2
Specific Gravity.....:	1.025
TDS (calculated) ppm.....:	159385.3
TIS (calculated).....:	3.5

SCALE STABILITIES

Temp.	°C	°F	CaCO3	CaSO4	BaSO4
	20	68	0.97	1108	1
	30	86	1.19	1207	1
	40	104	1.45	1463	1
Max entity, (calculated):			1295	0	

WATER ANALYSIS PATTERN

(number beside ion symbol indicates me/l scale unit)



NOTES:

@20°C...CALCIUM SULFATE SCALING IS LIKELY.  
@20°C...MODERATE CARBONATE SCALING.

EXHIBIT G





# Laboratory Services, Inc.

4016 Fleeta Drive  
Hobbs, New Mexico 88240  
Telephone: (505) 397-3713

P. 02

Wolfcamp water  
from 30-025-34580

## Water Analysis

COMPANY Santa Fe Snyder

SAMPLE Thistle #5

SAMPLED BY R. Hicks-Pro Well

DATE TAKEN 2/23/00 7:00 am

### REMARKS

Barium as Ba	0
Carbonate alkalinity PPM	0
Bicarbonate alkalinity PPM	704
pH at Lab	6.7
Specific Gravity @ 60°F	1.09
Magnesium as Mg	14,500
Total Hardness as CaCO <sub>3</sub>	25,000
Chlorides as Cl	78,366
Sulfate as SO <sub>4</sub>	1,350
Iron as Fe	212.5
Potassium	43.8
Hydrogen Sulfide	0
Rw	0.092 @ 34° C
Total Dissolved Solids	105,950
Calcium as Ca	10,500
Nitrate	187

Results reported as Parts per Million unless stated

Langlier Saturation Index 1.58

Analysis by: Vickie Walker

Date: 2/23/00

EXHIBIT G



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,  
O=orphaned,  
C=the file is closed)

(quarters are 1=NW 2=NE 3=SW 4=SE)

(quarters are smallest to largest)

(NAD83 UTM in meters)

60'-70' Conglomerate Rock  
70'-95' Congl./met shale  
(In feet)

POD											Depth			Water		
Sub-											Well	Water	Column			
Q Q Q																
POD Number	Code	basin	County	64	16	4	Sec	Tws	Rng	X	Y	Distance	Well	Water	Column	
C 01452	1 mile =	C	ED				22	24S	27E	577435	3563175*	1562	95	70	25	
C 00850	1610 meters	C	ED	2	3	09	24S	27E	575595	3566223*	2186	2186	108	35	73	
C 00821		C	ED	3	2	09	24S	27E	575996	3566635*	2254	2254	97	50	47	
C 00364		C	C	ED	1	2	09	24S	27E	575997	3567043*	2609	2270			
C 03147		C	ED	3	3	3	12	24S	27E	579885	3565715	2883	140			
C 01366			ED		4	08	24S	27E	574590	3566003*	2891	2891	60	35	25	
C 00347			ED	1	1	13	24S	27E	580010	3565479*	2930	2930	60	30	30	
C 00631		C	ED	3	3	4	08	24S	27E	574288	3565701*	3054	50	24	26	
C 03260 POD1		C	ED	3	3	3	12	24S	27E	579995	3565935	3066	80	56	24	
C 01943		C	ED		1	13	24S	27E	580221	3565275*	3091	3091	30	25	5	
C 00516			ED	1	3	4	08	24S	27E	574288	3565901*	3124	105	36	69	
C 00516 CLW201016		O	ED	1	3	4	08	24S	27E	574288	3565901*	3124	62			
C 00516 CLW308590		O	ED	1	3	4	08	24S	27E	574288	3565901*	3124	105	36	69	
C 00516 S		C	ED	1	3	4	08	24S	27E	574288	3565901	3124	50	17	33	
C 03260 POD2		O	C	ED	1	3	3	12	24S	27E	580100	3565984	3183	80	56	24

Average Depth to Water: 39 feet

Minimum Depth: 17 feet

Maximum Depth: 70 feet

Record Count: 15

UTMNAD83 Radius Search (in meters):

Easting (X): 577180

Northing (Y): 3564717

Radius: 3220

\*UTM location was derived from PLSS - see Help

EXHIBIT H

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

3/24/15 8:04 AM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER



# New Mexico Office of the State Engineer

## Active & Inactive Points of Diversion









(with Ownership Information)

(acre ft per annum)							(R=POD has been replaced and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE) C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)										
WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Code Grant	Source	q q q	6416 4	Sec	Tws	Rng	X	Y	Distance	
C 01452	C	STK		3 WILLIAM DIESCHER	ED	C 01452	1 mile = 1610 meters	Shallow			22	24S	27E	577435	3563175*	1562	
C 00850	C	PRO		0 UNION OIL CO. OF CALIFORNIA	ED	C 00850		Shallow	2	3	09	24S	27E	575595	3566223*	2186	
SD 00431		IRR		840 POLLED ANGUS CATTLE COMPANY OF CARLSBAD	ED	SD 00431					2	10	24S	27E	577807	3566860*	2232
C 00821	C	PRO		0 UNION OIL CO. OF CALIFORNIA	ED	C 00821		Shallow	3	2	09	24S	27E	575996	3566635*	2254	
RA 00873		IRR		0 LINDA A SCHULTZ	CH	RA 00873			1	2	1	10	24S	27E	577104	3567159*	2443
C 00364	C	CLS		0 A.J. CRAWFORD	ED	C 00364	C			1	2	09	24S	27E	575997	3567043*	2609
C 02942	C	PRO		0 SAMSON	ED	C 02942			3	4	3	23	24S	27E	578748	3562516*	2702
C 03147	C	MUL		3 GEORGE BRANTLEY	ED	C 03147			3	3	3	12	24S	27E	579884	3565715	2883
C 03333	C	PRO		0 OGX RESOURCES LLC	ED	C 03147			3	3	3	12	24S	27E	579884	3565715	2883
C 03352	C	PRO		0 NOVA MUD	ED	C 03147			3	3	3	12	24S	27E	579884	3565715	2883
C 01366		EXP		0 HARLEY DAVIS	ED	C 01366		Shallow		4	08	24S	27E	574590	3566003*	2891	
C 00347		EXP		0 BRANTLEY GEORGE	ED	C 00347		Shallow	1	1	13	24S	27E	580010	3565479*	2930	
C 01836		IRR		0 GEORGE BRANTLEY	ED	C 01836				1	1	13	24S	27E	580010	3565479*	2930
C 00631	C	SAN		3 GIRL SCOUTS OF AMERICA	ED	C 00631		Shallow	3	3	4	08	24S	27E	574288	3565701*	3054
C 03260	C	STK		3 CLARAMAI R HAYHURST	ED	C 03260 POD1		Shallow	3	3	3	12	24S	27E	579994	3565935	3066
C 03837	C	PRO		0 DEVON ENERGY CO	ED	C 03260 POD1		Shallow	3	3	3	12	24S	27E	579994	3565935	3066
C 03838	C	PRO		0 DEVON ENERGY CO	ED	C 03260 POD1		Shallow	3	3	3	12	24S	27E	579994	3565935	3066
C 03839	C	PRO		0 DEVON ENERGY CO	ED	C 03260 POD1		Shallow	3	3	3	12	24S	27E	579994	3565935	3066

\*UTM location was derived from PLSS - see Help

EXHIBIT H

(R=POD has been replaced  
and no longer serves this file, (quarters are 1=NW 2=NE 3=SW 4=SE)  
C=the file is closed) (quarters are smallest to largest) (NAD83 UTM in meters)

(acre ft per annum)					C=the file is closed)		(quarters are smallest to largest)					(NAD83 UTM in meters)						
WR File Nbr	Sub basin	Use	Diversion	Owner	County	POD Number	Code Grant	Source	q q q				X	Y	Distance			
									6416	4	Sec	Tws				Rng		
<u>C 01646</u>		IRR		0 GEORGE BRANTLEY	ED	<u>C 01646 X 3</u>			3	13	24S	27E	580239	3564464*		3069		
					ED	<u>C 01646 X</u>			1	13	24S	27E	580221	3565275*		3091		
<u>C 01943</u>	C	STK		3 GARY THOMPSON	ED	<u>C 01943</u>			1	13	24S	27E	580221	3565275*		3091		
<u>C 00516</u>	C	IRR		72.4 JAMES S DAVIS	ED	<u>C 00516</u>		Shallow	1	3	4	08	24S	27E	574288	3565901*		3124
					ED	<u>C 00516 POD3</u>			1	3	4	08	24S	27E	574288	3565901*		3124
					ED	<u>C 00516 S</u>		Shallow	1	3	4	08	24S	27E	574288	3565901		3124
<u>C 03708</u>	C	PRO		0 BARBARA DAVIS	ED	<u>C 00516 S</u>		Shallow	1	3	4	08	24S	27E	574288	3565901		3124
<u>C 00516</u>	C	IRR		72.4 JAMES S DAVIS	ED	<u>C 00516 POD5</u>			1	3	4	08	24S	27E	574286	3565921		3134

Record Count: 26

**UTMNAD83 Radius Search (in meters):**

**Easting (X):** 577180

**Northing (Y):** 3564717

**Radius:** 3220

3220 meters  
x 3.28 feet/meter  
10,562 feet = 2.00 miles

**Sorted by:** Distance

\*UTM location was derived from PLSS - see Help

EXHIBIT H

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3/24/15 8:03 AM

Page 2 of 2

ACTIVE & INACTIVE POINTS OF DIVERSION

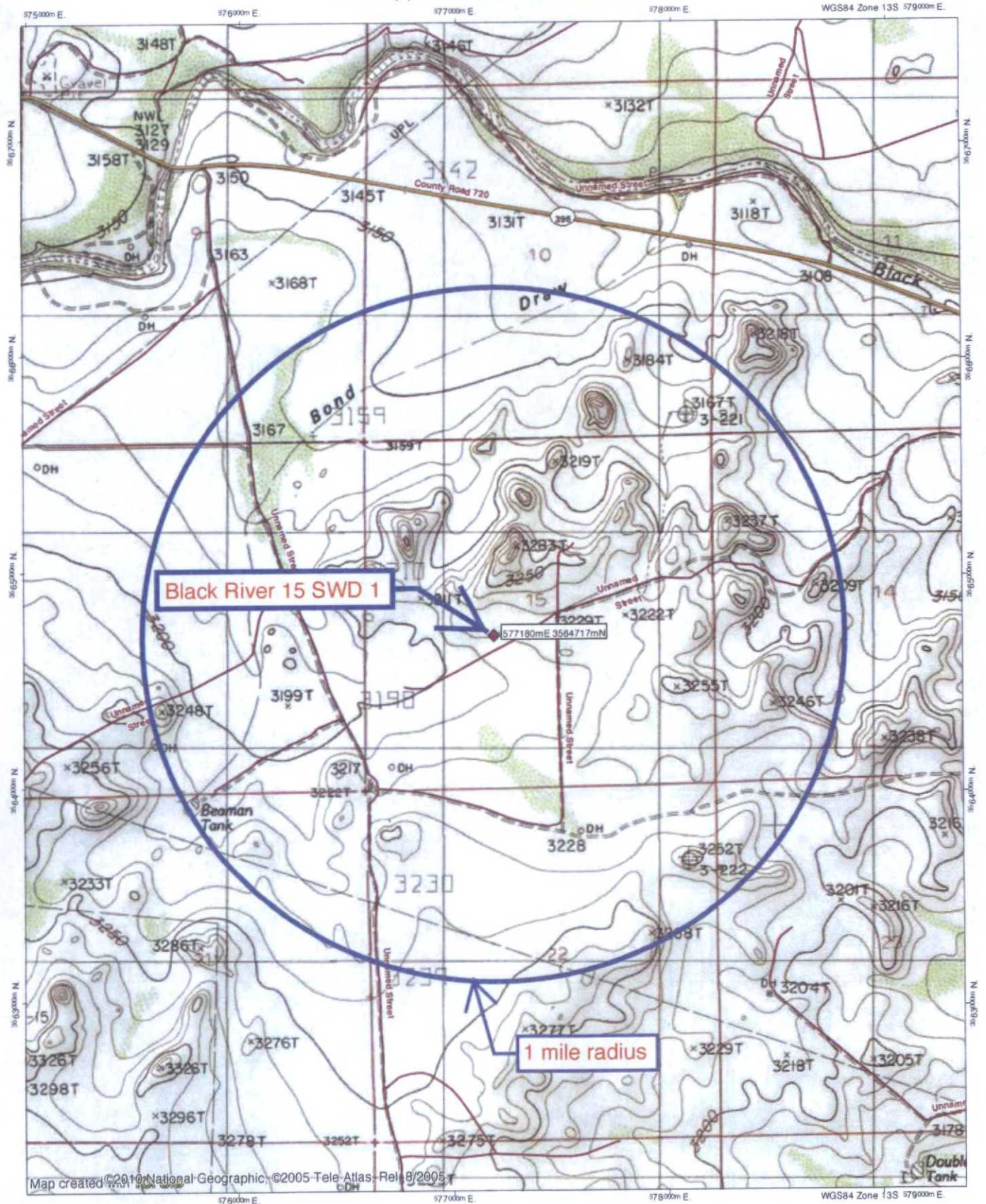
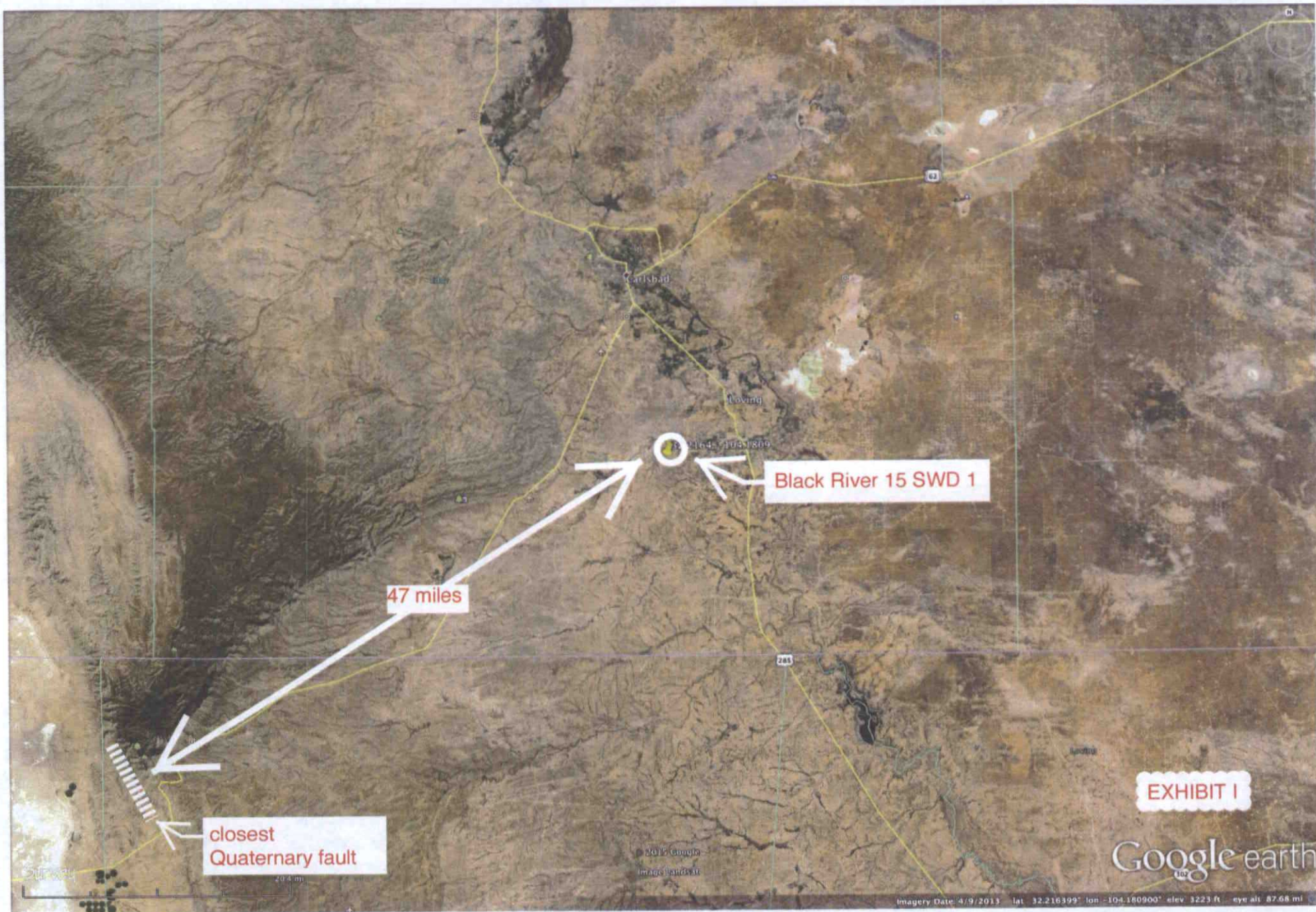


EXHIBIT H

TN/MN  
7.5°  
03/24/15





# Affidavit of Publication

State of New Mexico,  
County of Eddy, ss.

Rynni Henderson, being first duly  
sworn, on oath says:

That she is the Publisher of the  
Carlsbad Current-Argus, a  
newspaper published daily at the  
City of Carlsbad, in said county of  
Eddy, state of New Mexico and of  
general paid circulation in said  
county; that the same is a duly  
qualified newspaper under the laws  
of the State wherein legal notices  
and advertisements may be  
published; that the printed notice  
attached hereto was published in the  
regular and entire edition of said  
newspaper and not in supplement  
thereof on the date as follows, to wit:

April 2, 2015  
BC Operating, Inc. will  
apply to drill the Black  
River, 15 State SWD, #1  
well, as a saltwater  
disposal well. The well  
will be at 2334 FSL &  
1914 FWL, Sec. 15, T.  
24N, R. 27E, Eddy,  
County and is 6 miles  
west of Malaga, NM.  
Disposal will be into  
the Cherry Canyon  
from 3115 to 4290.  
Maximum injection  
pressure will be 623  
psi. Maximum dispos-  
al rate will be 10,000  
bwpd. Interested par-  
ties must file objec-  
tions or requests for  
hearing with the NM  
Oil Conservation Divi-  
sion, 1220 South Saint  
Francis Dr., Santa Fe,  
NM 87505, within 15  
days. Additional infor-  
mation can be ob-  
tained by contacting  
Brian Wood, Permits  
West, Inc., 37 Verano  
Loop, Santa Fe, NM  
87508. Phone number  
is (505) 466-8120.

April 2 2015

That the cost of publication is \$50.09  
and that payment thereof has been  
made and will be assessed as court  
costs.

*Rynni Henderson*

Subscribed and sworn to before me  
this 2nd day of April  
2015

*Shirley Maxwell*

My commission Expires

May 18, 2015

Notary Public

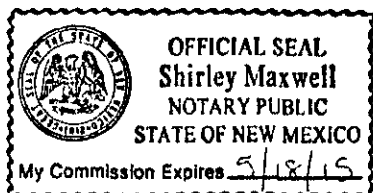


EXHIBIT J

May 1, 2015

COG Operating, LLC  
COG Production, LLC  
600 W. Illinois Ave.  
Midland TX 79701

BC Operating, Inc. is applying (see attached application) to drill its Black River 15 State SWD 1 well as a saltwater disposal well. As required by NM Oil Conservation Division (NMOCD) Rules, I am notifying you of the following proposed saltwater disposal well in Eddy County, NM. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Black River 15 SWD 1 (State lease) ID = 4,400'  
Proposed Disposal Zone: Cherry Canyon (3,115' - 4,290')  
Location: 2334' FSL & 1914' FWL Sec. 15, T. 24 S., R. 27 E.  
Approximate Location: 6 air miles west of Malaga, NM  
Applicant Name: BC Operating, Inc. (432) 684-9696, Ext. 762  
Applicant's Address: P. O. Box 50820, Midland TX 79710

Submittal Information: Application for a saltwater disposal well will be filed with the NMOCD. If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr. Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

*Brian Wood*

Brian Wood

U.S. Postal Service™ <i>BC Black River</i>	
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OFFICIAL USE	
Postage	\$ 1.61
Certified Fee	3.30
Return Receipt Fee (Endorsement Required)	2.70
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$7.61
Sent To <i>COG</i>	
Street & Apt. No., or PO Box No.	
City, State, ZIP+4 <i>MIDLAND</i>	

May 1, 2015

Nick Jaramillo  
NM State Land Office  
P. O. Box 1148  
Santa Fe NM 87504

Dear Nick,

BC Operating, Inc. is applying (see attached application) to drill its Black River 15 State SWD 1 well as a saltwater disposal well. As required by NM Oil Conservation Division (NMOCD) Rules, I am notifying you of the following proposed saltwater disposal well in Eddy County, NM. This letter is a notice only. No action is needed unless you have questions or objections.

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Proposed Disposal Zone: Cherry Canyon (3,115' - 4,290')  
Location: 2334' FSL & 1914' FWL Sec. 15, T. 24 S., R. 27 E.  
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Applicant Name: BC Operating, Inc. (432) 684-9696, Ext. 762  
Applicant's Address: P. O. Box 50820, Midland TX 79710

Submittal Information: Application for a saltwater disposal well will be filed with the NMOCD. If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr. Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

*Brian Wood*

Brian Wood

U.S. Postal Service™ <i>BC Black River</i>	
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OFFICIAL USE	
Postage	\$ 1.61
Certified Fee	3.30
Return Receipt Fee (Endorsement Required)	2.70
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$7.61
Sent To <i>NM SWD</i>	
Street & Apt. No., or PO Box No.	
City, State, ZIP+4 <i>S.F.</i>	

EXHIBIT K

7014 2870 0001 8950 7694

7014 2870 0001 8950 7694



May 1, 2015

Oxy USA Inc.  
P. O. Box 27570  
Houston TX 77227-7570

BC Operating, Inc. is applying (see attached application) to drill its Black River 15 State SWD 1 well as a saltwater disposal well. As required by NM Oil Conservation Division (NMOCD) Rules, I am notifying you of the following proposed saltwater disposal well in Eddy County, NM. This letter is a notice only. No action is needed unless you have questions or objections.

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Approximate Location: 6 air miles west of Malaga, NM  
Applicant Name: BC Operating, Inc. (432) 684-9696, Ext. 762  
Applicant's Address: P. O. Box 50820, Midland TX 79710

Submittal Information: Application for a saltwater disposal well will be filed with the NMOCD. If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr. Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

*Brian Wood*

Brian Wood

EXHIBIT K

May 1, 2015

Devon Energy Production Company, LP  
333 W. Sheridan Ave.  
Oklahoma City OK 73102

BC Operating, Inc. is applying (see attached application) to drill its Black River 15 State SWD 1 well as a saltwater disposal well. As required by NM Oil Conservation Division (NMOCD) Rules, I am notifying you of the following proposed saltwater disposal well in Eddy County, NM. This letter is a notice only. No action is needed unless you have questions or objections.

Well Name: Black River 15 SWD 1 (State lease) TD = 4,400'  
Proposed Disposal Zone: Cherry Canyon (3,115' - 4,290')  
Location: 2334' FSL & 1914' FWL Sec. 15, T. 24 S., R. 27 E.  
Approximate Location: 6 air miles west of Malaga, NM  
Applicant Name: BC Operating, Inc. (432) 684-9696, Ext. 762  
Applicant's Address: P. O. Box 50820, Midland TX 79710

Submittal Information: Application for a saltwater disposal well will be filed with the NMOCD. If you have an objection, or wish to request a hearing, then it must be filed with the NMOCD within 15 days of receipt of this letter. The New Mexico Oil Conservation Division address is 1220 South St. Francis Dr. Santa Fe, NM 87505. Their phone number is (505) 476-3440.

Please call me if you have any questions.

Sincerely,

*Brian Wood*

Brian Wood

7014 2870 0001 8950 7670

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Certified Fee	3.30
Return Receipt Fee (Endorsement Required)	2.70
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.61

QUICK SERVICE  
SANTA FE, NM  
MAY 1 2015  
Postmark Here  
USPS

Sent To **OXY USA**  
Street & Apt. No.,  
or PO Box No.  
City, State, ZIP+4  
**HOUSTON**

7014 2870 0001 8950 7687

U.S. Postal Service™ <b>CERTIFIED MAIL® RECEIPT</b> Domestic Mail Only	
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Postage	\$ 1.61
Certified Fee	3.30
Return Receipt Fee (Endorsement Required)	2.70
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$ 7.61

QUICK SERVICE  
SANTA FE, NM  
MAY 1 2015  
Postmark Here  
USPS

Sent To **DEVON**  
Street & Apt. No.,  
or PO Box No.  
City, State, ZIP+4  
**OK, OK**



## C-108 Review Checklist:

Received 05/04/15

Add. Request:

Reply Date:

Suspended:

[Ver 16]

ORDER TYPE: WFX / PMX / SWD

Number: 1597

Order Date: 11/12/15

Legacy Permits/Orders:

OXY withdrew  
protest 8/24/15  
with no added  
restrictions

Well No. 1

Well Name(s): Black River 15 State SWD

API: 30-0 15 - 43096

Spud Date: TBD

New or Old: New

(UIC Class II Primacy 03/07/1982)

Footages 2334 FSL / 1914 FWL

Lot -

or Unit K

Sec 15

Tsp 248

Rge 27E

County Eddy

General Location: 6 1/2 miles SW of Loving, NM

Pool:

SWD; Cherry Canyon

Pool No.: 97003

BLM 100K Map: Carlsbad

Operator:

BC operating, Inc.

OGRID:

160825

Contact:

Brian Wood /

Permits West

COMPLIANCE RULE 5.9: Total Wells: 74

Inactive: 2

Fincl Assur: Yes

Compl. Order? No.

IS 5.9 OK? Yes

Date: 11/12/15

WELL FILE REVIEWED



Current Status: APD issued for well

WELL DIAGRAMS: NEW: Proposed



or RE-ENTER: Before Conv.



After Conv.



Logs in Imaging:

CND &amp; GR

Planned Rehab Work to Well:

NA - new well

Well Construction Details		Sizes (in) Borehole / Pipe	Setting Depths (ft)	Stage Tool	Cement Sx or Cf	Cement Top and Determination Method
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Surface		16 / 13 3/8	0 to 550		550	Cir. to surface
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Interm/Prod		12 1/4 / 9 5/8	0 to 1100	None	1100	Cir. to surface
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> Interm/Prod		8 3/4 / 7	0 to 4200 TD	None	595	Cir. to surface
Planned <input type="checkbox"/> or Existing <input type="checkbox"/> Prod/Liner						
Planned <input type="checkbox"/> or Existing <input type="checkbox"/> Liner						
Planned <input checked="" type="checkbox"/> or Existing <input type="checkbox"/> OH / PERF		8 3/4 / 7	3115 to 4200	In Length 4000	885	

Injection Lithostratigraphic Units:		Depths (ft)	Injection of Confining Units	Tops	Completion/Operation Details:	
Adjacent Unit: Litho. Struc. Por.			Delaware / Lamar	2220	Drilled TD	PBTD
Confining Unit: Litho. Struc. Por.		± 95	Delaware / Bell	2280	NEW TD	NEW PBTD
Proposed Inj Interval TOP:		3115	Cherry Canyon	3620	NEW Open Hole <input type="checkbox"/> or NEW Perfs <input checked="" type="checkbox"/>	
Proposed Inj Interval BOTTOM:		4200			Tubing Size 4 1/2 in. Inter Coated? Yes	
Confining Unit: Litho. Struc. Por.		± 110	Brushy Canyon	4110	Proposed Packer Depth 3065 ft	
Adjacent Unit: Litho. Struc. Por.			Bone Spring		Min. Packer Depth 3015 (100-ft limit)	
					Proposed Max. Surface Press. 500/623 psi	
					Admin. Inj. Press. 623 (0.2 psi per ft)	

**AOR: Hydrologic and Geologic Information**

POTASH: R-111-P No Noticed? NA BLM Sec Ord No WIPP No Noticed? NA Salt/Salado T: 1430 B: 1990 NW: Cliff House fm

FRESH WATER: Aquifer Shallow Alluvial / Dackman Max Depth 100 / < HYDRO AFFIRM STATEMENT By Qualified Person ☒

NMOSE Basin: Carlsbad CAPITAN REEF: thru adj NA ☒ No: GW Wells in 1-Mile Radius? 1 FW Analysis? 16

Disposal Fluid: Formation Source(s) Bone Spring / Brushy / WC Analysis? Yes On Lease ☐ Operator Only ☐ or Commercial ☒

Disposal Interval: Inject Rate (Avg/Max BWPD): 7500 / 10000 Protectable Waters? No Source: historical System: Closed ☐ or Open ☒

HC Potential: Producing Interval? Formerly Producing? No Method: Logs/DS/P&A/Other 2-Mile Radius Pool Map ☒

AOR Wells: 1/2-M Radius Map? Yes Well List? Yes Total No. Wells Penetrating Interval: 1 Horizontals? 0

Penetrating Wells: No: Active Wells 1 Num Repairs? 0 on which well(s)? Diagrams? No

Penetrating Wells: No: P&A Wells 0 Num Repairs? 0 on which well(s)? Diagrams? No

NOTICE: Newspaper Date 04/02/2015 Mineral Owner SLO Surface Owner SLO N. Date 5/4/15

RULE 26.7(A): Identified Tracts? Yes Affected Persons: COG / OXY USA / Devon N. Date 5/4/15

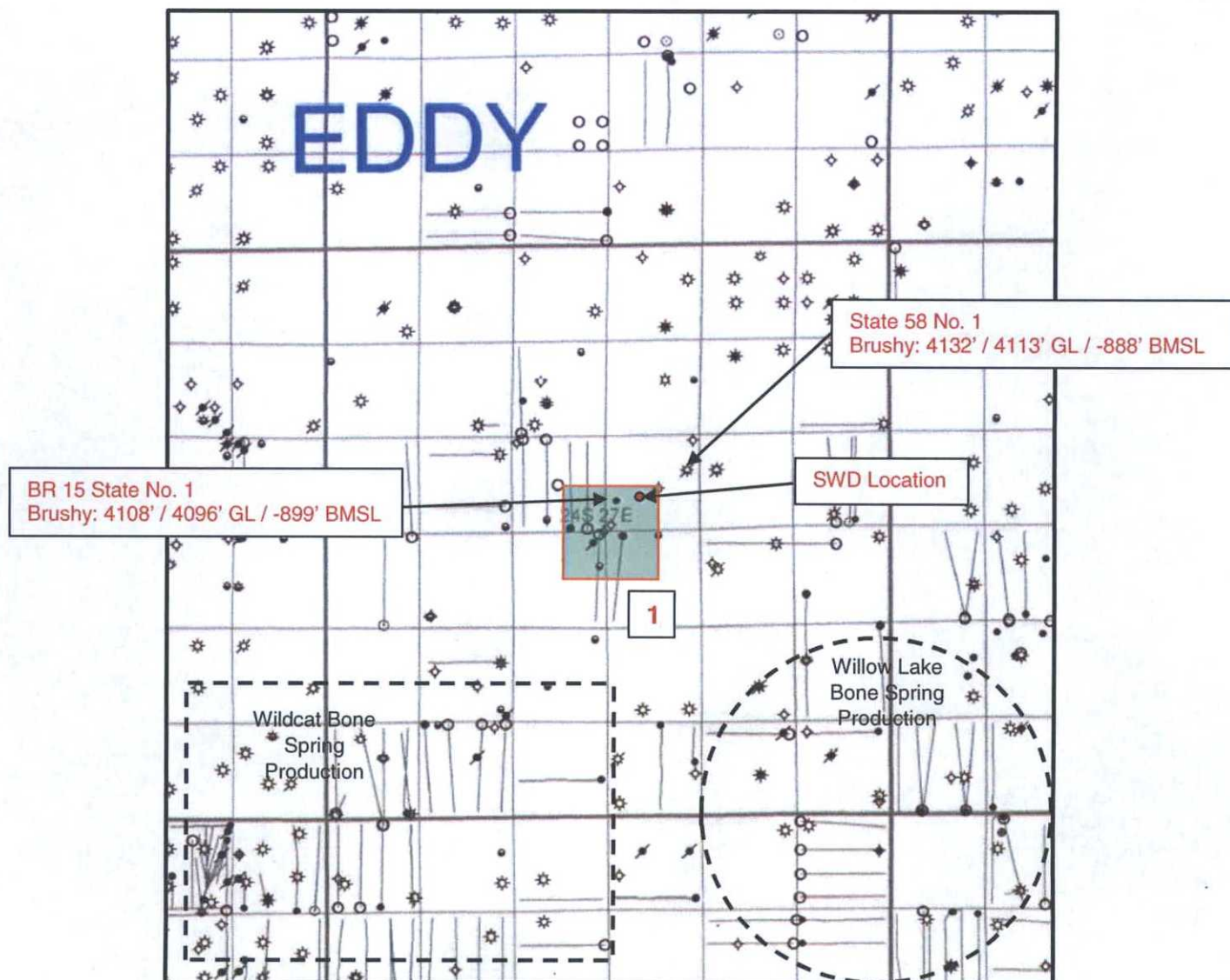
Order Conditions: Issues:

HC potential; bottom TD not consistent with Brushy pick

Add Order Cond:

Run mudlog / do salinity calc. / shallower TD for injection interval to 4000'

BC Operating Inc. C-108 Application  
 Black River 15 State SWD No. 1  
 UL K; Sec 15, T24S, R27E, NMPM



Delaware Pools:

1. **Malaga; Delaware, West (Pool code: 43130)**

Only production in pool:

**BR 15 State No. 1** (30-015-27100) L-15-24S-27E

OCD formation tops:

Rustler: 165'

Salado/Top: 830'

Salado/Bottom: 1995'

Lamar: 2210'

Bell Canyon: 2290'

Cherry Canyon: 2950'

Manzanita: 3136'

Brushy Canyon: 4108'

Bone Spring: NDE; TVD: 5975'

**Perfs: 2290' to 2302'**

Last reported production (8/2015): 1 BO; 0 Mcf; 700 BW for 5 days prod.

## Goetze, Phillip, EMNRD

---

**From:** Goetze, Phillip, EMNRD  
**Sent:** Monday, August 24, 2015 8:43 AM  
**To:** Jeremy\_Murphrey@oxy.com  
**Cc:** Dawson, Scott, EMNRD; Jones, William V, EMNRD; McMillan, Michael, EMNRD; chopson@bcoperating.com; brian@permitswest.com  
**Subject:** RE: Protest of Application to Inject - Black River 15 State SWD No. 1

Thanks. PRG

Phillip R. Goetze, P.G.  
Engineering and Geological Services Bureau, Oil Conservation Division  
1220 South St. Francis Drive, Santa Fe, NM 87505  
O: 505.476.3466 F: 505.476.3462  
[phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)



---

**From:** Jeremy\_Murphrey@oxy.com [mailto:Jeremy\_Murphrey@oxy.com]  
**Sent:** Monday, August 24, 2015 8:42 AM  
**To:** Goetze, Phillip, EMNRD  
**Cc:** Dawson, Scott, EMNRD; Jones, William V, EMNRD; McMillan, Michael, EMNRD; chopson@bcoperating.com; brian@permitswest.com  
**Subject:** RE: Protest of Application to Inject - Black River 15 State SWD No. 1

Mr. Goetze,

Our withdraw is not subject to an additional restrictions or modifications to the application.

---

**From:** Goetze, Phillip, EMNRD [mailto:Phillip.Goetze@state.nm.us]  
**Sent:** Monday, August 24, 2015 9:30 AM  
**To:** Murphrey, Jeremy D  
**Cc:** Dawson, Scott, EMNRD; Jones, William V, EMNRD; McMillan, Michael, EMNRD; [chopson@bcoperating.com](mailto:chopson@bcoperating.com); Brian Wood ([brian@permitswest.com](mailto:brian@permitswest.com))  
**Subject:** RE: Protest of Application to Inject - Black River 15 State SWD No. 1

Mr. Murphrey:

Thank you for notifying OCD of OXY's withdrawal of its protest for this application. One last detail is necessary before the application is returned to the administrative review process: does the resolution of the protest include any restrictions or modifications to the application? Examples of such restrictions or modifications would be specifying a maximum injection rate or a reduction in the proposed injection interval that was negotiated between the two parties. Please provide OCD with a response at your convenience or call/e-mail with any questions regarding this request. PRG



Phillip R. Goetze, P.G.

Engineering and Geological Services Bureau, Oil Conservation Division

1220 South St. Francis Drive, Santa Fe, NM 87505

O: 505.476.3466 F: 505.476.3462

[phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)



---

**From:** [Jeremy Murphrey@oxy.com](mailto:Jeremy_Murphrey@oxy.com) [[mailto:Jeremy\\_Murphrey@oxy.com](mailto:Jeremy_Murphrey@oxy.com)]

**Sent:** Monday, August 24, 2015 8:04 AM

**To:** Goetze, Phillip, EMNRD; [chopson@bcoperating.com](mailto:chopson@bcoperating.com)

**Cc:** Dawson, Scott, EMNRD; Jones, William V, EMNRD; McMillan, Michael, EMNRD

**Subject:** RE: Protest of Application to Inject - Black River 15 State SWD No. 1

Mr. Goetze,

In reference to the application to inject by BC Operating Inc. for the Black River 15 State SWD No. 1, OXY withdraws its protest. Please call or email if you have any questions.

Jeremy D. Murphrey, CPL

Land Negotiator Sr.

**Occidental Oil and Gas Corporation**

5 Greenway Plaza, Suite 110

Houston, TX 77046

Tel 713-350-4816

Cell 832-696-2491

Fax 713-985-4942

mailto: [jeremy\\_murphrey@oxy.com](mailto:jeremy_murphrey@oxy.com)

---

**From:** Goetze, Phillip, EMNRD [<mailto:Phillip.Goetze@state.nm.us>]

**Sent:** Tuesday, May 26, 2015 3:57 PM

**To:** Brian Wood ([brian@permitswest.com](mailto:brian@permitswest.com))

**Cc:** Dawson, Scott, EMNRD; Jones, William V, EMNRD; McMillan, Michael, EMNRD; Murphrey, Jeremy D

**Subject:** Protest of Application to Inject - Black River 15 State SWD No. 1

RE: Black River 15 State SWD No. 1 (API 30-015-Pending) Sec 15, T. 24 S., R. 27 E., NMPM, Eddy County.

Mr. Wood:

OCD was notified that OXY USA, Inc. is protesting this application (within the 15-day period) for approval of a salt water disposal well. This party is identified as an affected person for the location being considered in the application and states that the proposed injection will impact development of OXY's adjacent acreage. Therefore, you are being notified that if BC Operating, Inc. wishes for this application to be considered, it must either go to hearing or may be reviewed administratively if the protest is withdrawn as a result of a negotiated resolution with this party. The application will be retained by OCD, but suspended from further administrative review. Please contact OCD once you have made a decision

regarding the application within the next 30 days. If the protest remains after 30 days, OCD will initiate the process for the application to be reviewed at hearing. Please call/e-mail me with any questions regarding this matter. PRG

Contact Information:

Jeremy D. Murphrey, CPL  
Land Negotiator Sr.  
Occidental Oil and Gas Corporation  
5 Greenway Plaza, Suite 110  
Houston, TX 77046  
Tel 713-350-4816  
Cell 832-696-2491  
Fax 713-985-4942  
e-mail: [jeremy\\_murphrey@oxy.com](mailto:jeremy_murphrey@oxy.com)

Phillip R. Goetze, P.G.

Engineering and Geological Services Bureau, Oil Conservation Division  
1220 South St. Francis Drive, Santa Fe, NM 87505  
O: 505.476.3466 F: 505.476.3462  
[phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)



MONTGOMERY  
& ANDREWS  
LAW FIRM

J. SCOTT HALL  
Office: (505) 986-2646  
Email: shall@montand.com  
Reply To: Santa Fe Office  
[www.montand.com](http://www.montand.com)

RECEIVED OCD

2015 AUG 26 P 2:12

August 26, 2015

Mr. David Catanach, Director  
NM Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87501

**Hand-Delivered**

**Re: NMOCD Case No. 15358: Application of BC Operating, Inc. for  
Authorization to Conduct Injection Operations, Eddy County, New Mexico**

Dear Mr. Catanach:

Please be advised that Oxy USA, Inc. has withdrawn its objection to the referenced matter. Accordingly, the Application may be dismissed and the matter referred back for administrative review and approval.

Very truly yours,

J. Scott Hall

JSH:js  
cc: Caleb Hopson, BC Operating, Inc.  
Phillip Goetze, NMOCD

325 Paseo de Peralta  
Santa Fe, New Mexico 87501

T: 505.982.3873

F: 505.982.4289

P.O. Box 2307  
Santa Fe, New Mexico 87504-2307

## Goetze, Phillip, EMNRD

---

**From:** Goetze, Phillip, EMNRD  
**Sent:** Tuesday, May 26, 2015 2:57 PM  
**To:** Brian Wood (brian@permitswest.com)  
**Cc:** Dawson, Scott, EMNRD; Jones, William V, EMNRD; McMillan, Michael, EMNRD; Jeremy\_Murphrey@oxy.com  
**Subject:** Protest of Application to Inject - Black River 15 State SWD No. 1

RE: Black River 15 State SWD No. 1 (API 30-015-Pending) Sec 15, T. 24 S., R. 27 E., NMPPM, Eddy County.

Mr. Wood:

OCD was notified that OXY USA, Inc. is protesting this application (within the 15-day period) for approval of a salt water disposal well. This party is identified as an affected person for the location being considered in the application and states that the proposed injection will impact development of OXY's adjacent acreage. Therefore, you are being notified that if BC Operating, Inc. wishes for this application to be considered, it must either go to hearing or may be reviewed administratively if the protest is withdrawn as a result of a negotiated resolution with this party. The application will be retained by OCD, but suspended from further administrative review. Please contact OCD once you have made a decision regarding the application within the next 30 days. If the protest remains after 30 days, OCD will initiate the process for the application to be reviewed at hearing. Please call/e-mail me with any questions regarding this matter. PRG

Contact Information:

Jeremy D. Murphrey, CPL  
Land Negotiator Sr.  
Occidental Oil and Gas Corporation  
5 Greenway Plaza, Suite 110  
Houston, TX 77046  
Tel 713-350-4816  
Cell 832-696-2491  
Fax 713-985-4942  
e-mail: [jeremy\\_murphrey@oxy.com](mailto:jeremy_murphrey@oxy.com)

Phillip R. Goetze, P.G.

Engineering and Geological Services Bureau, Oil Conservation Division  
1220 South St. Francis Drive, Santa Fe, NM 87505  
O: 505.476.3466 F: 505.476.3462  
[phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)



## Goetze, Phillip, EMNRD

---

**From:** Jeremy\_Murphrey@oxy.com  
**Sent:** Tuesday, May 26, 2015 12:59 PM  
**To:** Goetze, Phillip, EMNRD  
**Subject:** Re: Protest C-108 Application Notice -Black River State SWD #1- SEC 15, T24S-R27E

Phillip,

Our mail room signed the receipt in May 11th.

Sent from my iPhone

> On May 26, 2015, at 1:34 PM, Goetze, Phillip, EMNRD <[Phillip.Goetze@state.nm.us](mailto:Phillip.Goetze@state.nm.us)> wrote:

>

> Mr. Murphrey

>

> OCD is in receipt of OXY's protest and requests one point of clarification: what was the date OXY received the application (the date the return receipt was signed)? Thanks. PRG

>

> Phillip R. Goetze, P.G.

> Engineering and Geological Services Bureau, Oil Conservation Division

> 1220 South St. Francis Drive, Santa Fe, NM 87505

> O: 505.476.3466 F: 505.476.3462

> [phillip.goetze@state.nm.us](mailto:phillip.goetze@state.nm.us)

>

> -----Original Message-----

> From: [Jeremy\\_Murphrey@oxy.com](mailto:Jeremy_Murphrey@oxy.com) [[mailto:Jeremy\\_Murphrey@oxy.com](mailto:Jeremy_Murphrey@oxy.com)]

> Sent: Tuesday, May 26, 2015 11:53 AM

> To: Goetze, Phillip, EMNRD

> Subject: Re: Protest C-108 Application Notice -Black River State SWD #1- SEC 15, T24S-R27E

>

> Mr. Goetze,

>

> I wanted verify you received my email. The original letter will be mailed today. Please call or email if you have any questions.

>

> Sent from my iPhone

>

> On May 25, 2015, at 8:30 AM, Murphrey, Jeremy D

<[Jeremy\\_Murphrey@oxy.com](mailto:Jeremy_Murphrey@oxy.com)<[mailto:Jeremy\\_Murphrey@oxy.com](mailto:Jeremy_Murphrey@oxy.com)>> wrote:

>

> Mr. Goetze,

>

> OXY USA Inc. (hereinafter "OXY"), submits this protest of the Black River State SWD #1 application offered by BC Operating, Inc. located in the above described lands. Based on a review of the application, OXY has determined injection to the depths of 3,115' to 4,290' would cause water influx and hole instability resulting in drilling complications and hazards when drilling through the injected formation. As a result, OXY's future development of formations on New Mexico State lease VO 3772 0001 would be negatively impacted.

>

> Please note our protest of the subject application. For your records please find attached a copy of the letter mailed via Fedex to Director David Catanach's attention. If you have any questions or require further information, please contact me as shown below. Thank you

>

>

>

>

> Jeremy D. Murphrey, CPL

> Land Negotiator Sr.

> Occidental Oil and Gas Corporation

> 5 Greenway Plaza, Suite 110

> Houston, TX 77046

> Tel 713-350-4816

> Cell 832-696-2491

> Fax 713-985-4942

> [mailto:jeremy\\_murphrey@oxy.com](mailto:jeremy_murphrey@oxy.com)<[mailto:jeremy\\_murphrey@oxy.com](mailto:jeremy_murphrey@oxy.com)>

>

>

>

> <C-108 Protest \_ BCO\_BR 15 SWD.pdf>



**OXY USA Inc.**

A subsidiary of Occidental Petroleum Corporation

RECEIVED OCD

5 Greenway Plaza, Suite 110, Houston, Texas 77046-0521

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2015 MAY 29 A 11: 03

May 25, 2015

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

New Mexico Oil Conservation Division  
Attention: David Catanach  
1220 South St. Francis Drive  
Santa Fe, NM 87505

Re: **Protest of C-108 Application**  
Black River 15 SWD #1  
Section 15-24S-27E  
Eddy County, New Mexico

Dear Director Catanach:

OXY USA Inc. (hereinafter "OXY"), submits this protest of the Black River State SWD #1 application offered by BC Operating, Inc. located in the above described lands. Based on a review of the application, OXY has determined injection to the depths of 3,115' to 4,290' would cause water influx and hole instability resulting in drilling complications and hazards when drilling through the injected formation. As a result, OXY's future development of formations on New Mexico State lease VO 3772 0001 would be negatively impacted.

Please note our protest of the subject application. If you have any questions, please don't hesitate to contact me at (713)350-4816 or e-mail at [Jeremy\\_Murphrey@oxy.com](mailto:Jeremy_Murphrey@oxy.com).

Respectfully,

Jeremy Murphrey, CPL  
Land Negotiator, Sr.  
OXY USA Inc.

Enclosures