

2/8/2019

NOV 30 2018 AM 11:45

DATE IN 11/30/18	SUSPENSE	ENGINEER	LOGGED IN <i>held due to signature not active</i>	TYPE SWD	APPRO. PRG 1903937727
------------------	----------	----------	---	----------	-----------------------

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 _____

[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

[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.

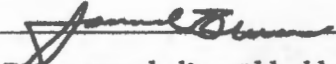
Nate Alleman
Print or Type Name

Nathan Alleman
Signature

Regulatory Specialist - ALL Consulting 11/28/2018
Title Date

nalleman@all-llc.com
Date e-mail Address

APPLICATION FOR AUTHORIZATION TO INJECT

- I. PURPOSE: Secondary Recovery Pressure Maintenance X Disposal Storage
Application qualifies for administrative approval? X Yes No
- II. OPERATOR: Blackbuck Resources LLC
ADDRESS: 2601 Westheimer Rd., Suite C210, Houston, TX 77098
CONTACT PARTY: Samuel Oliver PHONE: 1-855-432-1400
- 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 X 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:
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: Samuel Oliver TITLE: Chief Commercial Officer
SIGNATURE:  DATE: 28 November 2018
E-MAIL ADDRESS: samuel.oliver@blackbuckresources.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: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

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.

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.

Application for Authorization to Inject
Well Name: Cresta SWD Fed 1

III – Well Data *(The Wellbore Diagram is included as Attachment 1)*

A.

(1) General Well Information:

Operator: Blackbuck Resources LLC (OGRID No. 373619)
Lease Name & Well Number: Cresta SWD Fed 1
Location Footage Calls: 1,137' FNL & 688' FWL
Legal Location: Unit Letter D, S4 T24S R31E
Ground Elevation: 3,395'
Proposed Injection Interval: 15,850' – 17,420'
County: Eddy

(2) Casing Information:

Type	Hole Size	Casing Size	Casing Weight	Setting Depth	Sacks of Cement	Estimated TOC	Method Determined
Surface	24"	20"	133.0 lb/ft	945'	1,060	Surface	Circulation
Intermediate 1	14-3/4"	13-3/8"	68.0 lb/ft	4,570'	1,975	Surface	Circulation
Intermediate 2	12-1/4"	9-5/8"	53.5 lb/ft	13,615'	4,625	Surface	Circulation
Liner	8-1/2"	7-5/8"	39 lb/ft	15,850'	200	13,415'(TOL)	CBL

(3) Tubing Information:

4-1/2" (composite weight string) of fiberglass-coated tubing with setting depth of 15,830'

(4) Packer Information: Lok-set or equivalent packer set at 15,830'

B.

(1) Injection Formation Name: Devonian and Silurian-Fusselman formations

Pool Name: SWD; Devonian - Silurian

Pool Code: 97869

(2) Injection Interval: Open-hole injection between 15,850' – 17,240'

(3) Drilling Purpose: New Drill for Salt Water Disposal

(4) Other Perforated Intervals: No other perforated intervals exist.

(5) Overlying Oil and Gas Zones: Below are the approximate formation tops for known oil and gas producing zones in the area.

- Delaware (4,570')
- Bone Springs (8,420')
- Wolfcamp (11,745')
- Atoka (13,750')
- Morrow (14,525')

Underlying Oil and Gas Zones: No underlying oil and gas zones exist.

V – Well and Lease Maps

The following maps are included in **Attachment 2**:

- 2-mile Oil & Gas Well Map
- 2-mile Lease Map
- 1.5-mile Deep SWD Map (Devonian/Silurian SWDs)

VI – AOR Well List

No wells within the 1-mile AOR penetrate the proposed injection zone.

A list of the wells within the 1-mile AOR is included in **Attachment 2**.

VII – Proposed Operation

- (1) **Proposed Maximum Injection Rate:** 30,000 bpd
Proposed Average Injection Rate: 15,000 bpd
- (2) A closed system will be used.
- (3) **Proposed Maximum Injection Pressure:** 3,170 psi (surface)
Proposed Average Injection Pressure: approximately 1,500 – 2,000 psi (surface)
- (4) **Source Water Analysis:** It is expected that the injectate will consist of produced water from production wells completed in the Wolfcamp and Bone Springs formations. Analysis of water from these formations is included in **Attachment 3**.
- (5) **Injection Formation Water Analysis:** The proposed SWD will be injecting water into the Devonian and Silurian-Fusselman formations which are non-productive zones known to be compatible with formation water from the Wolfcamp and Bone Springs formations. Water analyses from Silurian-Fusselman could not be located; however, water analyses from the Devonian formation in the area are included in **Attachment 4**.

VIII – Geologic Description

The proposed Injection Interval includes the Devonian and Silurian-Fusselman formations from 15,850 – 17,240 feet. These formations consist of carbonates including light colored dolomite and chert intervals interspersed with some tight limestone intervals. Several thick sections of porous dolomite capable of taking water are present within the subject formations in the area. The freshwater formation is the Rustler at a depth of approximately 920 feet. Water well depths in the area range from approximately 275 – 708 feet below ground surface.

IX – Proposed Stimulation Program

A small cleanup acid job may be used to remove mud and drill cuttings from the formation. However, no other formation stimulation is currently planned.

X – Logging and Test Data

Logs will be submitted to the Division upon completion of the well.

XI – Fresh Groundwater Samples

Based on a review of data from the New Mexico Office of the State Engineer, 3 groundwater wells are located within 1-mile of the proposed SWD location; however, state water well data indicated that 1 of the groundwater wells was plugged in 2010, one ground water well is drilled into a saline water aquifer, and one water well was used as a temporary monitoring well. Therefore, no groundwater samples were collected in association with this application.

A water well map and details of water wells within 1-mile are included in **Attachment 5**.

XII – No Hydrologic Connection Statement

No faulting is present in the area that would provide a hydrologic connection between the injection interval and overlying USDWs. Additionally, the casing program has been designed to ensure there will be no hydrologic connection between the injection interval and overlying USDWs. A letter from a knowledgeable and qualified expert stating that there is a low risk of seismic activity from the proposed injection activities is included in **Attachment 6**.

XIII – Proof of Notice

A Public Notice was filed with the Carlsbad Current-Argus newspaper and an affidavit is included in **Attachment 7**.

A copy of the application was mailed to the OCD District Office, landowner, and leasehold operators within 1-mile of the proposed SWD location. A list of the recipients, as well as delivery confirmations, are included in **Attachment 7**.

Attachments

Attachment 1: Wellbore Diagram

Attachment 2: Area of Review Information:

- 2-mile Oil & Gas Well Map
- 2-mile Lease Map
- 1.5-mile Deep SWD Map (Devonian/Silurian SWDs)
- 1-mile Well Detail List

Attachment 3: Source Water Analyses

Attachment 4: Injection Formation Water Analyses

Attachment 5: Water Well Map and Well Data

Attachment 6: Induced Seismicity Assessment Letter

Attachment 7: Public Notice Affidavit and Notice of Application Confirmations

Attachment 1
Wellbore Diagram

WELL BORE DATA SHEET

A-3 and AL-2 LOK-SET Retrievable Casing Packers

Product Family No. H64630 and H64628

APPLICATION

The A-3™ LOK-SET™ packer combines advantages of a retrievable packer with the features of a permanent packer. An ability to lock down tubing forces makes the A-3 suitable for a broad range of applications, including production, injection, zone isolation, and remedial operations. The AL-2™ LOK-SET packer is similar to the A-3, and has a larger bore.

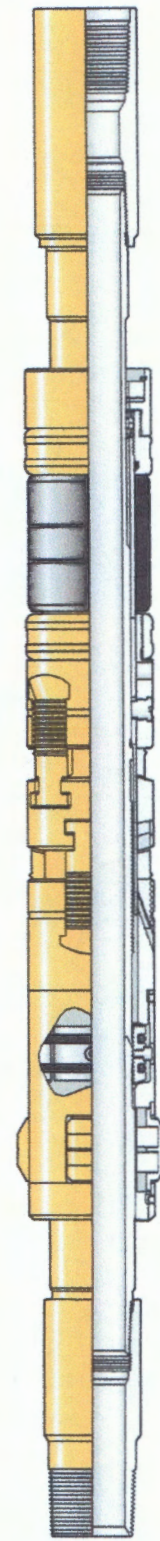
Advantages

- Holds pressure from above and below, without relying on set-down weight, tubing tension, or hydraulic hold down
- Provides tubing anchoring with tension applied, suitable for pumping wells or injection, controlling tubing forces related to change fluid temperatures
- Opposed, non-transferring, dovetail slips prevent packer movement associated with changing differential pressures, while allowing the landing of the tubing in tension, neutral or compression
- Right-hand tubing rotation controls setting and releasing
- Packing element compression locks in by ratcheting action of lock segments, which restricts rotation to one direction

Accessories

To provide a simple and reliable injection system for retrieving an injection string without having to unseat the packer:

L-10 or L-316 on-off sealing connectors, Product Family Nos. H68420 and H68422. Baker Hughes blanking plug can be used in the seating nipple profile of the on-off sealing connector to provide a means of plugging the lower zone while the tubing is being pulled.



A-3 LOK-SET
Retrievable Casing Packer
Product Family No. H64630

Retrievable Packer Systems

SPECIFICATION GUIDES

A-3™ LOK-SET Retrievable Casing Packer, Product Family No. H64630

Casing			Packer				
OD		Weight *	Size	Nom ID		Max Gage Ring OD	
in.	mm	lb/ft		in.	mm	in.	mm
4	101.6	9.5-12.9	41A2	1.500	38.1	3.244	82.4
4-1/2	144.3	21.6-23.6	41A2	1.500	38.1	3.244	82.4
4	101.6	9.5	41A4	1.500	38.1	3.423	112.4
4-1/2	114.3	18.8	41A4	1.500	38.1	3.423	112.4
		13.5-17.7	41B			3.578	90.9
		11.6-13.5	43A2	1.978	50.2	3.786	96.2
		9.5-10.5	43A4			3.786	96.2
5	127.0	15-18	43B	1.978	50.2	4.140	105.2
		11.5-15	43C			4.265	108.3
5-1/2	139.7	26	43C	1.978	50.2	4.265	108.3
		20-23	45A2			4.515	114.7
		15.5-20	45A4			4.656	118.3
		13-15.5	45B			4.796	121.8
6	152.4	26	45B	1.978	50.2	4.796	121.8
		20-23	45C			5.078	129.0
		15-18	45D			5.171	131.3
6-5/8	168.3	34	45E	1.978	50.2	5.421	137.7
		24-32	45F			5.499	139.7
		24	47A2	2.441	62.0	5.671	144.0
		17-24	45G	1.978	50.2	5.796	147.2
7	177.8	17-20	47A4	2.441	62.0	5.827	148.0
		38	47A2	2.441	62.0	5.671	144.0
		32-35	47A4			5.827	148.0
		26-29	47B2			5.983	152.0
		23-26	47B4			6.083	154.8
7-5/8	193.7	17-20	47C2	2.441	62.0	6.281	159.5
		33.7-39	47C4			6.468	164.3
		24-29.7	47D2			6.687	169.9
8-5/8	219.1	20-24	47D4	3.500	88.9	6.827	173.4
		44-49	49A2			7.327	186.1
		32-40	49A4			7.546	191.7
9-5/8	244.5	20-28	49B	3.500	88.9	7.796	198.0
		47-53.5	51A2			8.234	209.1
		40-47	51A4			8.452	214.7
		29.3-36	51B			8.608	218.6

AL-2™ Large Bore LOK-SET Retrievable Casing Packer Product Family No. H64628

Casing			Packer					
OD		Weight *	Size	Nom ID		Max Gage Ring OD		Max Diameter of Compressed Drag Block
in.	mm	lb/ft		in.	mm	in.	mm	
5-1/2	139.7	20	45A2 x 2-3/8	2.375	60.3	4.562	115.9	4.592
		15.5-17	45A4 x 2-3/8			4.656	118.3	4.750
		13	45B x 2-3/8			4.796	121.8	4.902
6	152.4	26	45B x 2-3/8	2.375	60.3	4.796	121.8	4.902

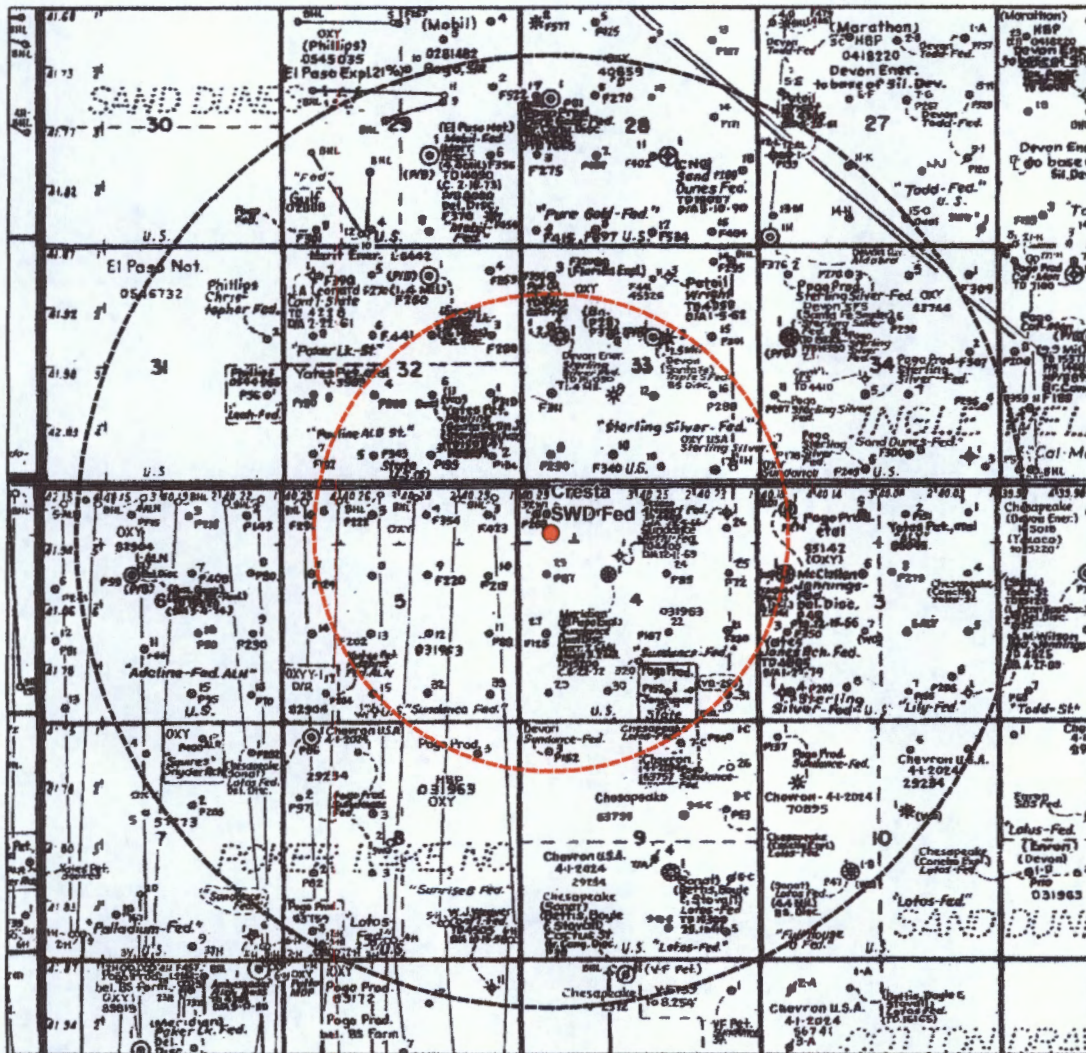
* When selecting a packer for a casing weight common to two weight ranges (same OD), choose the packer size shown for the lighter of the two weight ranges. Example: for 7-in. (177.8 mm) OD 26 lb/ft casing use packer size 47B4. Under certain circumstances the other packer size may be run, such as when running in mixed casing strings.

Repair kits, including such items as packing elements, seal rings, etc., are available for redressing Baker Retrievable Packers. Contact your Baker Hughes representative. Use only Baker Hughes repair parts.

Attachment 2

Area of Review Information:

- **2-mile Oil & Gas Well Map**
- **2-mile Lease Map**
- **1.5-mile Deep SWD Map (Devonian/Silurian SWDs)**
- **1-mile Well Detail List**



Prepared for:
**BLACKBUCK
RESOURCES**



Legend

- Proposed SWD
- 1 - mile Radius
- 2 - mile Radius

**Cresta SWD Fed 1
Offset Leases
Eddy County, NM**

Proj Mgr:
JDA

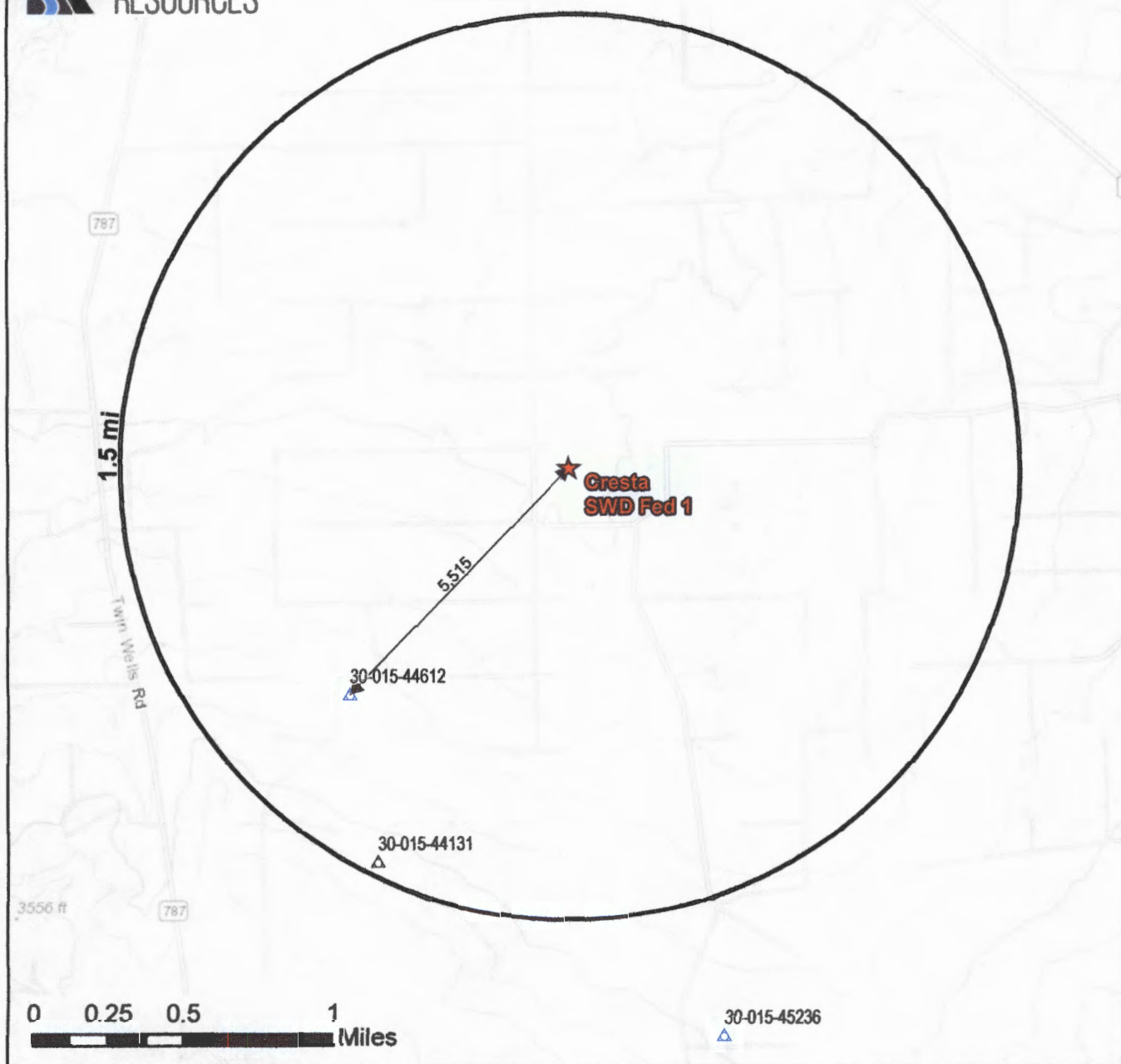
October 29, 2018

Mapped by:
BJB

Prepared by:

ALLCONSULTING

Map 1 of 1



**Cresta SWD Fed 1
Devonian/Silurian SWDs AOR**

Proj Mgr:
Dan Arthur

Nov 15, 2018

Mapped by:
Ben Bockelmann

Prepared by:

ALLCONSULTING

Legend

-  **Proposed SWD Devonian/Silurian SWDs**
-  **Distances**
-  **Salt Water Injection, Active (1)**
-  **Salt Water Injection, New (2)**

1-Mile AOR Tabulation for Cresta SWD Fed 1 (Top of Injection Interval: 15,850')

Well Name	AP#	Well Type	Operator	Spud Date	Location (Sec., Tn., Rng.)	Total Depth	Penetrate Inj. Zone?
STERLING SILVER 33 FEDERAL #001	30-015-25639	G	DEVON ENERGY PRODUCTION COMPANY, LP	7/28/1986	E-33-23S-31E	15050	No
STERLING SILVER 33 FEDERAL #001H	30-015-39831	O	OXY USA INC	4/7/2012	P-33-23S-31E	9992	No
SUNDANCE FEDERAL #001	30-015-20538	G	OXY USA INC	11/30/1971	F-04-24S-31E	15500	No
POKER LAKE 32 STATE #003	30-015-27095	O	OXY USA INC	1/6/1993	H-32-23S-31E	8050	No
STERLING SILVER 33 FEDERAL #004	30-015-27519	O	OXY USA INC	7/19/1993	E-33-23S-31E	Plugged (8130)	No
SUNDANCE FEDERAL #010	30-015-27577	O	OXY USA INC	8/13/1993	H-05-24S-31E	8160	No
SUNDANCE FEDERAL #013	30-015-27580	O	OXY USA INC	10/30/1993	K-05-24S-31E	8171	No
SUNDANCE 9 FEDERAL #003	30-015-27232	O	OXY USA INC	1/2/1994	D-09-24S-31E	8300	No
POKER LAKE 32 STATE #002	30-015-27094	O	OXY USA INC	10/27/1992	G-32-23S-31E	8050	No
SUNDANCE FEDERAL #004	30-015-27390	O	OXY USA INC	6/17/1993	2-05-24S-31E	8135	No
SUNDANCE FEDERAL #031	30-015-33674	O	OXY USA INC	10/29/2004	P-04-24S-31E	8339	No
STERLING SILVER 33 FEDERAL #002	30-015-25696	G	OXY USA INC	12/22/1986	G-33-23S-31E	15132	No
SUNDANCE FEDERAL #009	30-015-27492	O	OXY USA INC	7/15/1993	G-05-24S-31E	8160	No
SUNDANCE FEDERAL #008	30-015-27547	O	OXY USA INC	7/29/1993	F-05-24S-31E	8150	No
STERLING SILVER 33 FEDERAL #010	30-015-27550	O	OXY USA INC	11/24/1993	N-33-23S-31E	8150	No
SUNDANCE FEDERAL #012	30-015-27579	O	OXY USA INC	9/5/1993	J-05-24S-31E	8180	No
SUNDANCE FEDERAL #002	30-015-27491	O	OXY USA INC	9/24/1993	4-04-24S-31E	8150	No
SUNDANCE FEDERAL #011	30-015-27578	O	OXY USA INC	1/12/1994	I-05-24S-31E	8200	No
SUNRISE 8 FEDERAL #003	30-015-34900	O	OXY USA INC	8/3/2006	A-08-24S-31E	8250	No
SUNDANCE FEDERAL #005	30-015-27395	O	OXY USA INC	4/4/1993	3-05-24S-31E	8120	No
SUNDANCE FEDERAL #003	30-015-27389	O	OXY USA INC	7/2/1993	1-05-24S-31E	8129	No
STERLING SILVER 33 FEDERAL #008	30-015-27601	O	OXY USA INC	8/16/1993	M-33-23S-31E	8110	No
STERLING SILVER 33 FEDERAL #007	30-015-27588	O	OXY USA INC	8/3/1993	L-33-23S-31E	8125	No
STERLING SILVER 33 FEDERAL #006	30-015-27812	O	OXY USA INC	9/1/1994	F-33-23S-31E	8170	No
SUNDANCE FEDERAL #021	30-015-29120	O	OXY USA INC	11/16/2006	I-04-24S-31E	8260	No
TRIPLE S 33 FEDERAL #001	30-015-25769	O	OXY USA INC	7/19/1987	G-33-23S-31E	9655	No
SUNDANCE FEDERAL #025	30-015-33396	O	OXY USA INC	4/7/2004	H-04-24S-31E	8370	No
SUNDANCE FEDERAL #023	30-015-33384	O	OXY USA INC	4/23/2004	E-04-24S-31E	8200	No
SUNDANCE 4 FEDERAL #032	30-015-38393	S	OXY USA INC	2/24/2011	4-04-24S-31E	Plugged (495)	No
SUNDANCE FEDERAL #030	30-015-33673	O	OXY USA INC	11/9/2004	N-04-24S-31E	8350	No
STERLING SILVER 33 DEEP FEDERAL #009	30-015-33975	O	OXY USA INC	6/30/2005	K-33-23S-31E	15100	No
SUNDANCE 4 STATE #001	30-015-32281	O	OXY USA INC	5/29/2002	O-04-24S-31E	8300	No
STERLING SILVER 33 FEDERAL #016	30-015-31091	O	OXY USA INC	5/24/2000	I-33-23S-31E	8200	No
SUNDANCE FEDERAL #024	30-015-33385	O	OXY USA INC	5/10/2004	G-04-24S-31E	8250	No
SUNDANCE FEDERAL #022	30-015-29074	O	OXY USA INC	7/11/1997	J-04-24S-31E	8250	No
SUNDANCE FEDERAL #033	30-015-33676	O	OXY USA INC	3/1/2005	P-05-24S-31E	8300	No
SUNDANCE FEDERAL #029	30-015-33709	O	OXY USA INC	12/19/2004	M-04-24S-31E	8330	No
SUNDANCE FEDERAL #026	30-015-33724	O	OXY USA INC	11/20/2004	1-04-24S-31E	8350	No
SUNDANCE FEDERAL #032	30-015-33675	O	OXY USA INC	12/8/2004	O-05-24S-31E	8220	No
SUNDANCE 4 FEDERAL #032Y	30-015-38527	S	OXY USA INC	3/5/2011	4-04-24S-31E	6330	No
STERLING SILVER 33 FEDERAL #017	30-015-33892	O	OXY USA INC	12/5/2005	P-33-23S-31E	8280	No
STERLING SILVER 33 FEDERAL #018	30-015-32767	O	OXY USA INC	10/11/2003	O-33-23S-31E	8180	No
SUNDANCE FEDERAL #028Q	30-015-34786	O	OXY USA INC	12/31/9999	K-04-24S-31E	Not Drilled	No
STERLING SILVER 33 FEDERAL #012	30-015-34943	O	OXY USA INC	7/9/2006	J-33-23S-31E	8180	No
SUNDANCE FEDERAL #027Q	30-015-34787	O	OXY USA INC	5/18/2006	L-04-24S-31E	8200	No
PAULINE ALB STATE #001	30-015-27016	O	EOG Y RESOURCES, INC.	11/30/1992	I-32-23S-31E	8160	No
PAULINE ALB STATE #004	30-015-27019	O	EOG Y RESOURCES, INC.	10/8/1992	K-32-23S-31E	8110	No
PAULINE ALB STATE #006	30-015-25866	O	EOG Y RESOURCES, INC.	3/11/1988	J-32-23S-31E	15034	No
PAULINE ALB STATE #003	30-015-27018	O	EOG Y RESOURCES, INC.	12/29/1992	O-32-23S-31E	8140	No
PAULINE ALB STATE #002	30-015-27017	O	EOG Y RESOURCES, INC.	1/29/1993	P-32-23S-31E	8070	No
PAULINE ALB STATE #005	30-015-27020	O	EOG Y RESOURCES, INC.	11/15/1992	N-32-23S-31E	8150	No
PRE-ONGARD WELL #001	30-015-20269	O	PRE-ONGARD WELL OPERATOR	11/30/1969	F-04-24S-31E	Plugged (6100)	No
PRE-ONGARD WELL #013	30-015-27551	O	PRE-ONGARD WELL OPERATOR	11/25/1995	O-33-23S-31E	5010	No
PRE-ONGARD WELL #002	30-015-05845	O	PRE-ONGARD WELL OPERATOR	8/25/1961	E-33-23S-31E	Plugged (4299)	No
PRE-ONGARD WELL #001	30-015-10884	O	PRE-ONGARD WELL OPERATOR	11/25/1966	A-04-24S-31E	Plugged (566)	No

Notes: No wells within the 1-mile AOR penetrate the injection interval.

Attachment 3
Source Water Analyses

Wolfcamp



Water Analysis

Date: 23-Aug-11

2708 West County Road, Hobbs NM 88240

Phone (575) 392-5556 Fax (575) 392-7307

Analyzed For

Brackish Draw L#1

Company	Well Name	County	State
	BD	Lea	New Mexico

Sample Source

Swab Sample

Sample #

Eddy 1-265-295
1

Formation

Depth

Specific Gravity	1.170	SG @ 60 °F	1.172
pH	6.30	Sulfides	Absent
Temperature (°F)	70	Reducing Agents	

Cations

Sodium (Calc)	in Mg/L	77,952	in PPM	66,520
Calcium	in Mg/L	4,000	in PPM	3,413
Magnesium	in Mg/L	1,200	in PPM	1,024
Soluble Iron (FE2)	in Mg/L	10.0	in PPM	9

Anions

Chlorides	in Mg/L	130,000	in PPM	110,822
Sulfates	in Mg/L	250	in PPM	213
Bicarbonates	in Mg/L	127	in PPM	108
Total Hardness (as CaCO3)	in Mg/L	15,000	in PPM	12,790
Total Dissolved Solids (Calc)	in Mg/L	213,549	in PPM	182,209
Equivalent NaCl Concentration	in Mg/L	182,668	in PPM	158,031

Scaling Tendencies

*Calcium Carbonate Index 507,520

Below 500,000 Remote / 500,000 - 1,000,000 Possible / Above 1,000,000 Probable

*Calcium Sulfate (Gyp) Index 1,000,000

Below 500,000 Remote / 500,000 - 10,000,000 Possible / Above 10,000,000 Probable

*This Calculation is only an approximation and is only valid before treatment of a well or several weeks after treatment.

Remarks RW=.048@70F

Report # 3188

Sec 22, T25S, R28E

North Permian Basin Region

P.O. Box 740

Sundown, TX 79372-0740

(806) 228-6121

Lab Team Leader - Sheila Hernandez

(432) 495-7240

Bone Spring

Water Analysis Report by Baker Petrolite

Company:		Sales RDT:	33514.1
Region:	PERMAN BASIN	Account Manager:	TONY HERNANDEZ (575) 910-7135
Area:	ARTESIA, NM	Sample #:	534665
Lease/Platform:	PINOCHLE 'BPN' STATE COM	Analysis ID #:	105795
Entity (or well #):	2 H	Analysis Cost:	\$80.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary		Analysis of Sample 534665 @ 75 F					
Sampling Date:	03/10/11	Anions	mg/l	meq/l	Cations	mg/l	meq/l
Analysis Date:	03/18/11	Chloride:	108618.8	3881.92	Sodium:	78276.7	3458.82
Analyst:	SANDRA GOMEZ	Bicarbonate:	2135.0	34.99	Magnesium:	195.0	15.84
TDS (mg/l or g/m ³):	184811.1	Carbonate:	0.0	0.	Calcium:	844.0	42.12
Density (g/cm ³ , tonne/m ³):	1.113	Sulfate:	747.0	15.55	Strontium:	229.0	5.62
Anion/Cation Ratio:	1	Phosphate:			Barium:	0.0	0.01
		Borate:			Iron:	6.5	0.23
		Silicate:			Potassium:	889.0	22.22
Carbon Dioxide:	0.50 PPM	Hydrogen Sulfide:		0 PPM	Aluminum:		
Oxygen:		pH at time of sampling:		7	Chromium:		
Comments:		pH at time of analysis:			Copper:		
		pH used in Calculation:		7	Lead:		
					Manganese:	0.100	0.
					Nickel:		

Conditions		Values Calculated at the Given Conditions - Amounts of Scale in lb/1000 bbl										
Temp	Gauge Press.	Calcite CaCO ₃		Gypsum CaSO ₄ ·2H ₂ O		Anhydrite CaSO ₄		Celestite SrSO ₄		Barite BaSO ₄		CO ₂ Press
F	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	1.08	186.62	-1.20	0.00	-1.18	0.00	-0.11	0.00	0.68	0.29	1.72
100	0	1.10	208.05	-1.29	0.00	-1.20	0.00	-0.15	0.00	0.35	0.29	2.36
120	0	1.12	234.17	-1.36	0.00	-1.19	0.00	-0.17	0.00	0.16	0.00	3.17
140	0	1.13	243.17	-1.42	0.00	-1.18	0.00	-0.18	0.00	0.00	0.00	4.21

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

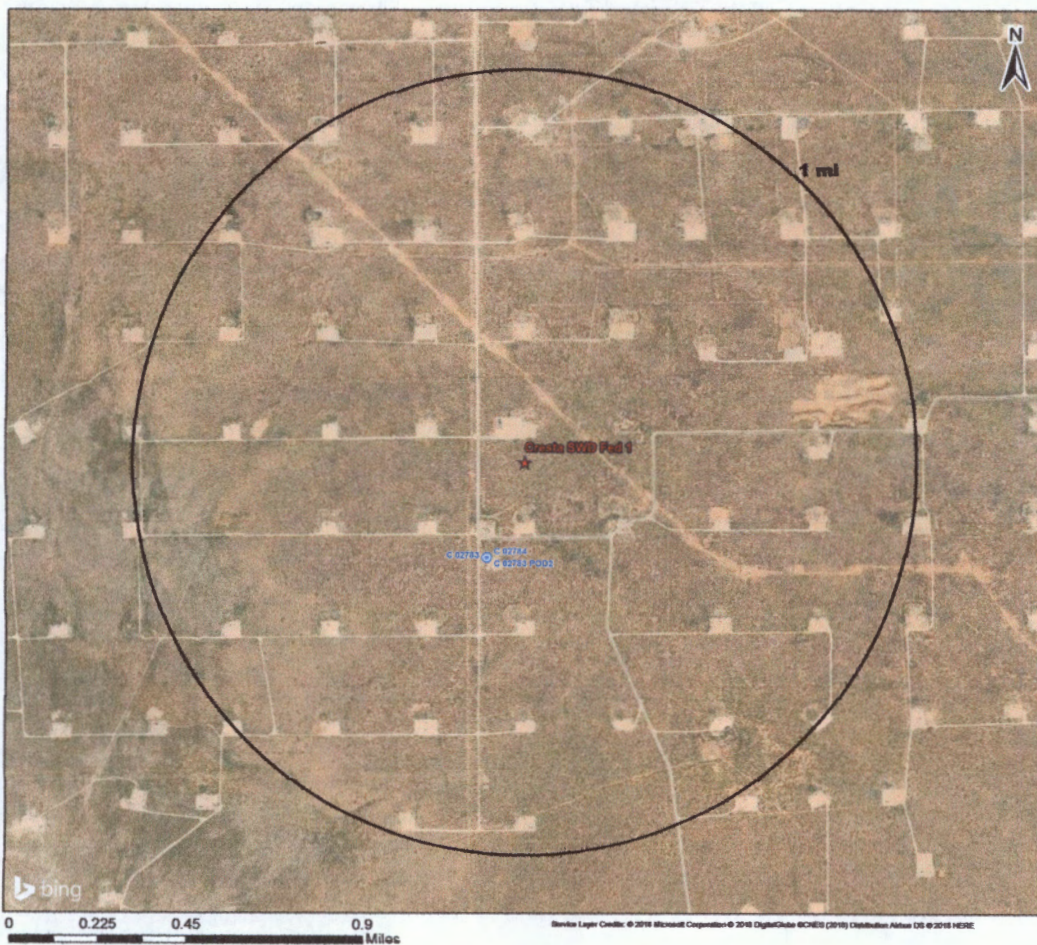
Note 2: Precipitation of each scale is considered separately. Total scale will be less than the sum of the amounts of the five scales.

Note 3: The reported CO₂ pressure is actually the calculated CO₂ fugacity. It is usually nearly the same as the CO₂ partial pressure.

Attachment 4

Injection Formation Water Analyses

Attachment 5
Water Well Map and Well Data



Legend

- ★ Proposed SWD
- Water Well (WATERS)
- Proposed SWD 1-mile AOR



Water Wells Area of Review

Cresta SWD Fed 1 Eddy County, New Mexico

Proj Mgr:
Dan Arthur

October 25, 2018

Mapped by:
Ben Sockelmann

Prepared by:

ALICONSULTING

Service Layer Credits: © 2018 Microsoft Corporation © 2018 DigitalGlobe © 2018 (2018) Contributor Address DB © 2018 HERE

Water Well Sampling Rationale				
Cresta SWD Fed 1				
Water Wells	Owner	Available Contact Information	Use	Notes
C 02783	U.S. Dept of Energy - WIPP	Contact: Anderson Ward, (575)-234-7018	Plugged 2010	
C 02783 POD2	U.S. Dept of Energy - WIPP	Contact: Anderson Ward, (575)-234-7019	Temporary Observation Well	Water well owner stated that this well was a temporary observation well that is not actively producing.
C 02784	U.S. Dept of Energy - WIPP	Contact: Anderson Ward, (575)-234-7020	Saline Aquifer Monitoring Well	Water well owner stated that the well is a monitoring well into a saline (non-fresh) water aquifer.

Note: No water well samples were collected.

Attachment 6

Induced Seismicity Assessment Letter

November 28, 2018

Mr. Phillip Goetze, P.G.
NM EMNRD – Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Subject: Induced Seismicity Potential Statement for the Cresta SWD Fed 1

Dear Mr. Goetze,

This letter provides information regarding the seismic potential associated with injection operations associated with Blackbuck Resources LLC's (Blackbuck) proposed Cresta SWD Fed 1, hereinafter referred to as the "Subject Well".

As outlined herein, based on my experience as an expert on the issue of induced seismicity, it is my opinion that the potential for the proposed injection well to cause injection-induced seismicity is expected to be minimal, at best. This conclusion is based on (1) the lack of historic seismic activity and faulting in the area, (2) the low fault slip potential (FSP) of Precambrian faults in the area, (3) the presence of confining layers, and (4) the overall vertical distance between the proposed injection zone and basement rock.

The Subject Well, is located 1,137' FNL & 688' FWL of Section 4, in T24-S and R31-E of Eddy County, New Mexico. Historically, the Eddy County area has experienced very limited recorded seismic activity (per the U.S. Geological Survey [USGS] earthquake catalog database). There have been two known seismic events located within a 25-mile radius of the proposed subject well. The closest recorded seismic event was a M3.1 that occurred on March 18, 2012, and was located approximately 6.4 miles northwest of the subject well (See Exhibit 1). The closest Class IID well injecting into the same formations (Devonian-Silurian) of the Subject Well is approximately 1.1 miles to the southwest (See Exhibit 1).

Blackbuck does not own either 2D or 3D seismic reflection data in the area of the Subject Well. Fault data from USGS indicates that the closest known fault is approximately 13.3 miles southwest of the Subject Well (See Exhibit 1).

In a recent paper written by Snee and Zoback (2018) entitled "State of Stress in the Permian Basin, Texas and New Mexico: Implications for Induced Seismicity," the authors found that large groups of mostly north-south striking Precambrian basement faults, predominantly located along the Central Basin Platform, the western Delaware Basin, and large parts of the Northwest Shelf (which includes Eddy and Lea counties, New Mexico) have low FSP at the modeled fluid-pressure

perturbation. The map in Exhibit 2 depicts the low probability risk of FSP for the Delaware Basin and Northwest Shelf areas (Snee and Zoback 2018).

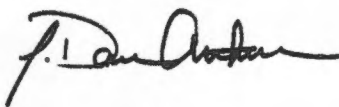
Geologic analysis indicates that the proposed Devonian-Silurian injection zone is overlain by approximately 200 to 400 feet of Woodford Shale, which is the upper confining zone and will serve as a barrier for upward injection fluid migration. Additionally, the Simpson Group that lies directly below the Montoya Formation will act as a lower confining zone to prohibit fluids from migrating downward into the underlying Ellenburger Formation and Precambrian basement rock. See the stratigraphic column for the Delaware Basin included in Exhibit 3.

In the Eddy and Lea Counties area of New Mexico, the Simpson Group is comprised of a series of Middle to Upper Ordovician carbonates, several sandstones, and sandy shales that range from approximately 350 to 650 feet thick (Jones 2008). This group of rocks is capped by the limestones of the Bromide Formation, which is approximately 200 feet thick in this area (Jones 2008). The closest deep well drilled into the Precambrian basement was completed by the Skelly Oil Company in 1975. This well is located in Section 17, Range 36E, Township 25S of Lea County (API No.30-025-25046) and encountered 602 feet of Ellenburger Formation before reaching the top of the Precambrian granite at a depth of 18,920 feet. Based on the estimated thickness of the Simpson Group and Ellenburger Formation in this area, the Precambrian basement should be approximately 1,000 to 1,200 feet below the bottom of the proposed injection zones in the Subject Well.

Conclusion

As an expert on the issue of induced seismicity, it is my opinion that the potential for the proposed injection well to cause injection-induced seismicity is expected to be minimal, at best. This conclusion is based on (1) the lack of historic seismic activity and faulting in the area, (2) the low FSP of Precambrian faults in the area, (3) the presence of confining layers, and (4) the overall vertical distance between the proposed injection zone and basement rock.

Sincerely,
ALL Consulting

A handwritten signature in black ink, appearing to read "J. Daniel Arthur".

J. Daniel Arthur, P.E., SPEC
President and Chief Engineer

Enclosures
References
Exhibits

References

Ball, Mahlon M. 1995. "Permian Basin Province (044)." In *National Assessment of United States Oil and Gas Resources—Results, Methodology, and Supporting Data*. U.S. Geological Survey. <https://certmapper.cr.usgs.gov/data/noga95/prov44/text/prov44.pdf> (accessed June 18, 2018).

Green, G.N., and G.E. Jones. 1997. "The Digital Geologic Map of New Mexico in ARC/INFO Format." U.S. Geological Survey Open-File Report 97-0052. <https://mrdata.usgs.gov/geology/state/state.php?state=NM> (accessed June 14, 2018).

Jones, Rebecca H. 2008. "The Middle-Upper Ordovician Simpson Group of the Permian Basin: Deposition, Diagenesis, and Reservoir Development." http://www.beg.utexas.edu/resprog/permianbasin/PBGSP_members/writ_synth/Simpson.pdf (accessed June 19, 2018).

Snee, Jens-Erik Lund, and Mark D. Zoback. 2018. "State of Stress in the Permian Basin, Texas and New Mexico: Implications for Induced Seismicity." *The Leading Edge* 37, no. 2 (February 2018): 127-34.

U.S. Geological Survey (USGS). No date. Earthquakes Hazard Program: Earthquake Catalog. <https://earthquake.usgs.gov/earthquakes/search/> (accessed June 14, 2018).

Induced Seismicity Potential Statement for the Cresta SWD Fed 1
November 28, 2018

Exhibits

Induced Seismicity Potential Statement for the Cresta SWD Fed 1
November 28, 2018

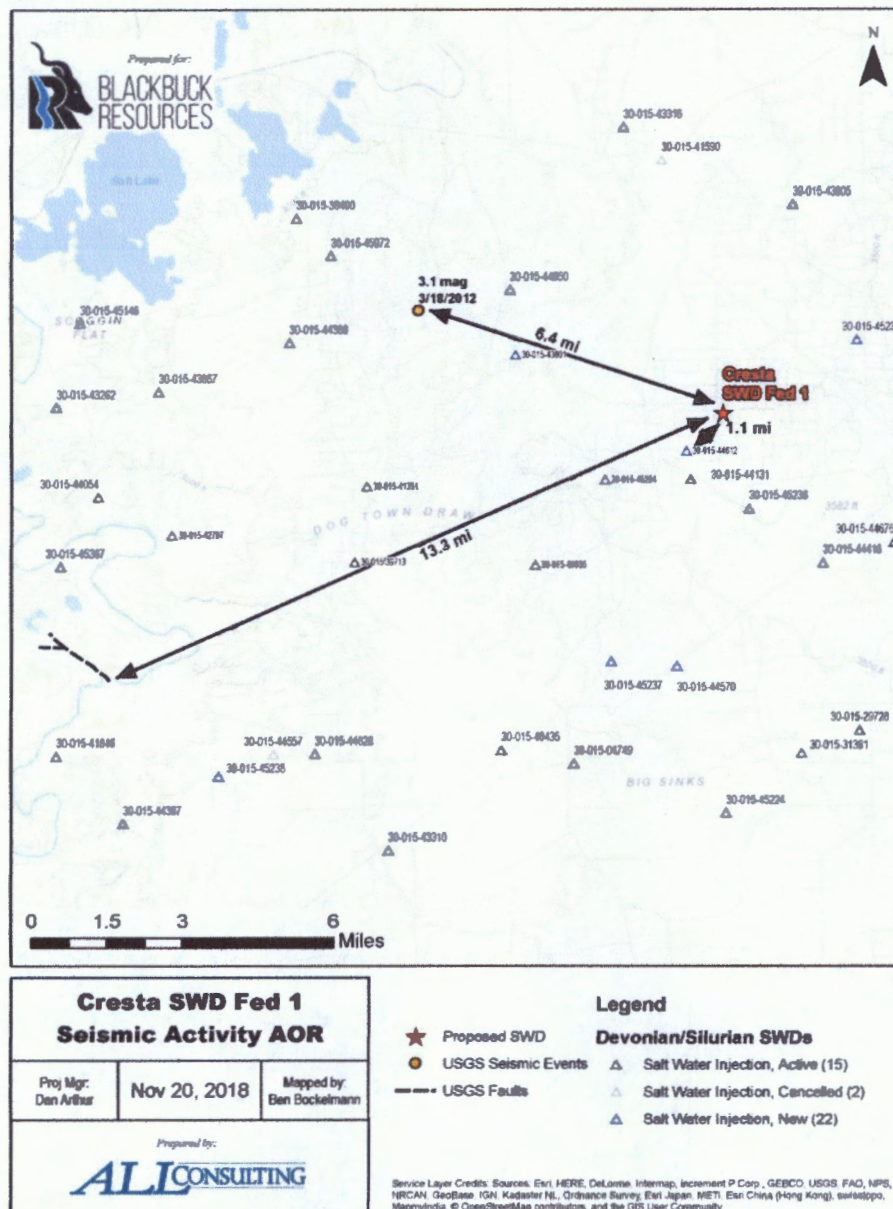


Exhibit 1. Map Showing the Distances from Known and Inferred Faults, Seismic Event, and Closest Deep Injection Well

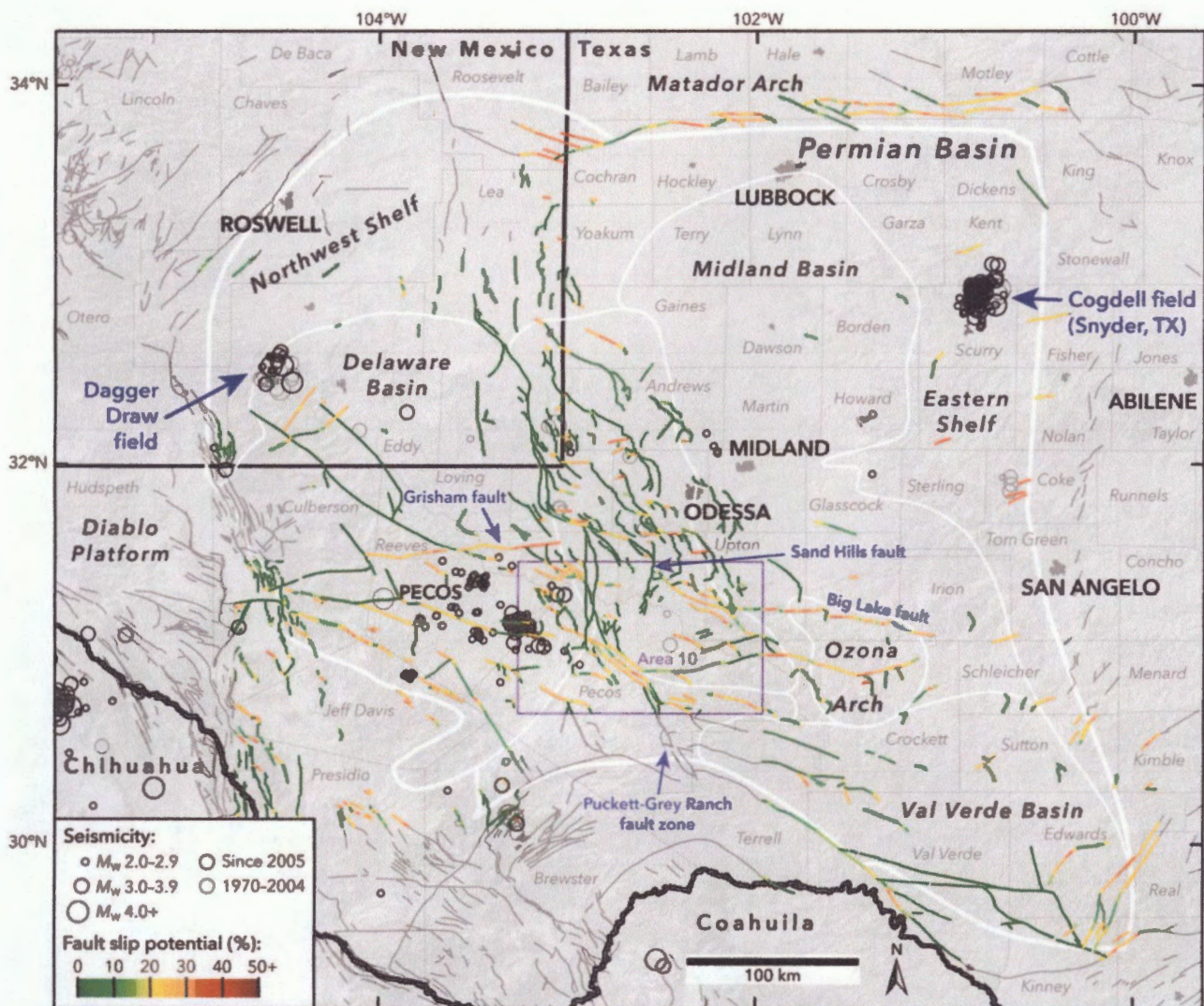


Exhibit 2. Results of the Snee and Zoback (2018) Probabilistic FSP Analysis Across the Permian Basin

Induced Seismicity Potential Statement for the Cresta SWD Fed 1
November 28, 2018

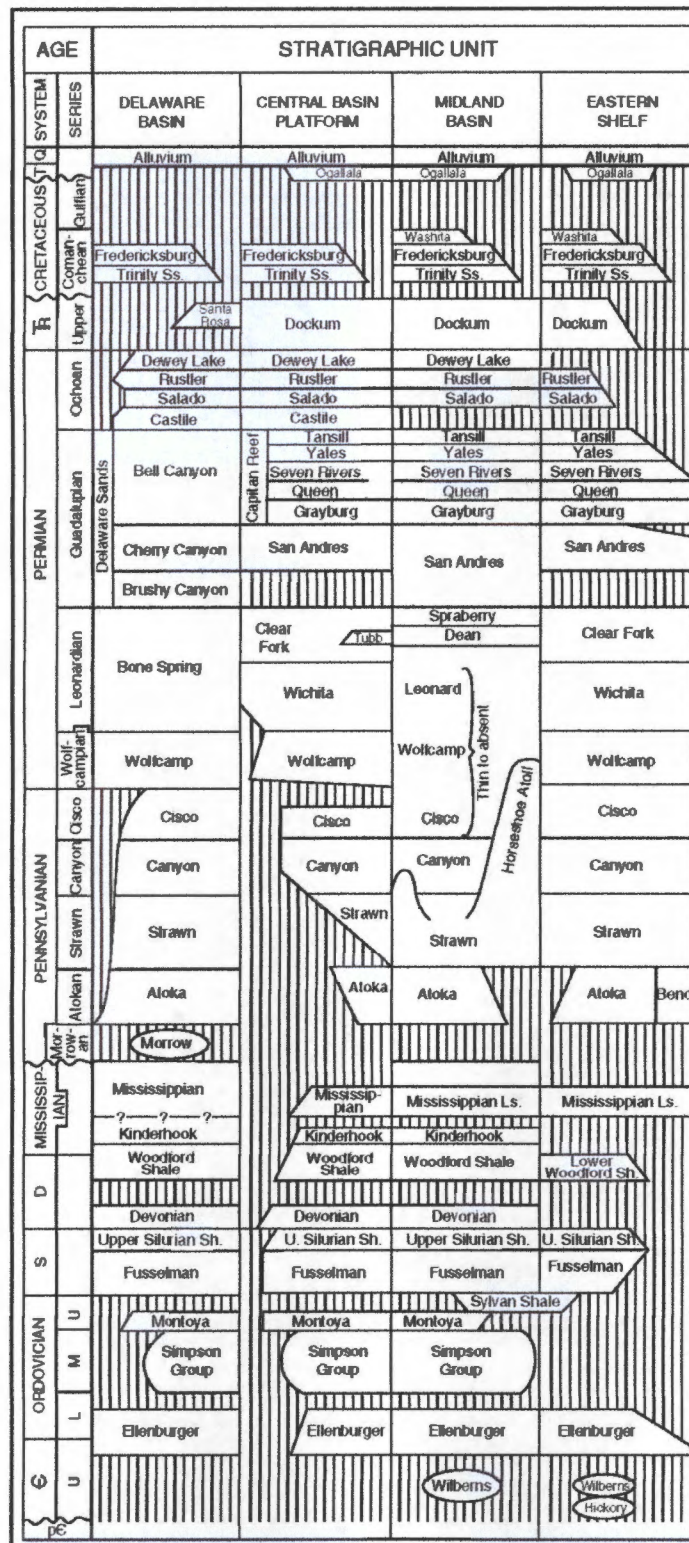


Exhibit 3. Delaware Basin Stratigraphic Chart (Ball 1995)

Attachment 7

Public Notice Affidavit and Notice of Application Confirmations

CARLSBAD CURRENT-ARGUS

AFFIDAVIT OF PUBLICATION

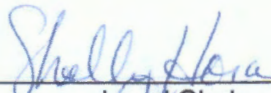
Ad No.
0001268213

ALL CONSULTING- CARLSBAD
1718 SOUTH CHEYENNE AVENUE

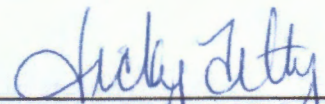
TULSA OK 74119

I, a legal clerk 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:

11/13/18


Legal Clerk

Subscribed and sworn before me this
13th of November 2018.


State of WI, County of Brown
NOTARY PUBLIC

9-19-21

My Commission Expires

APPLICATION FOR AUTHORIZATION TO INJECT

NOTICE IS HEREBY GIVEN: That Blackbuck Resources LLC, 2601 Westheimer Rd., Suite C210, Houston, TX 77098, is requesting that the New Mexico Oil Conservation Division administratively approve the APPLICATION FOR AUTHORIZATION TO INJECT as follows:

PURPOSE: The intended purpose of the injection well is to dispose of salt water produced from permitted oil and gas wells.

WELL NAME AND LOCATION: Cresta SWD Fed 1
NW ¼ NW ¼, Section 4, Township 24S, Range 31E
1,137' FNL & 688' FWL
Eddy County, NM

NAME AND DEPTH OF DISPOSAL ZONE:
Devonian-Silurian (15,850' - 17,240')
EXPECTED MAXIMUM INJECTION RATE:
30,000 Bbls/day
EXPECTED MAXIMUM INJECTION PRESSURE:
3,170 psi (surface)

Objections or requests for hearing must be filed with the New Mexico Oil Conservation Division within fifteen (15) days. Any objection or request for hearing should be mailed to the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505.

Additional information may be obtained by contacting Samuel Oliver (Blackbuck - Chief Commercial Officer) at 855-432-1400.
Pub: November 13, 2018 #1268213



Cresta SWD Fed 1 SWD Notice of Application Recipients				
Entity	Address	City	State	Zip Code
Landowner				
New Mexico BLM	620 E. Greene St.	Carlsbad	NM	88220
OCD District				
NMOCD District 2	811 S. First St.	Artesia	NM	88210
Leasehold Operators				
Chesapeake Operating, Inc.	P.O. Box 18496	Oklahoma City	OK	73154-0496
Devon Energy Production Co.	333 W. Sheridan Ave.	Oklahoma City	OK	73102
El Paso Exploration Co.	P.O. Box 1492	El Paso	TX	79948
Enron Oil & Gas Inc.	P.O. Box 1188	Houston	TX	77251
EOG Y Resources, Inc.	104 S. 4th Street	Artesia	NM	88210
Florida Exploration Co.	P.O. Box 2267	Midland	TX	79702
Meridian Oil Inc.	P.O. Box 51810	Midland	TX	79710
Merit Energy Company, LLC	13727 Noel Road, Suite 500	Dallas	TX	75240
OXY USA Inc.	P.O. Box 27570	Houston	TX	77227-7757
Pogo Production Company, LLC	300 N Marienfeld St, Suite 600	Midland	TX	79701
Sterling Production and Development Corporation, LTD., Co.	P.O. Box 1119	Aztec	NM	87410
Sundance Oil Co.	1776 N Lincoln Street	Denver	CO	80203
Texaco Inc.	P.O. Box 2100	Denver	CO	80201
Thomas E. Jennings	P.O. Box 1797	Roswell	NM	88202
Triple S Development Corporation	3110 El Pinon St SW	Albuquerque	NM	87105
William P. Wright Jr.	P.O. Box 1	Santa Fe	NM	87504
Yates Petroleum Corporation	105 South Fourth Street	Artesia	NM	88210
Note: Yates Petroleum has been acquired by EOG. For the purposes of consistency, both parties have been notified of this application.				

Place label at top of the center of the envelope and fold at dotted line.

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018

stamps.com

062S000663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL™
CERTIFIED MAIL™



9414 8118 9956 0224 1567 11

William P Wright Jr.
P.O. Box 1
Santa Fe NM 87504-0001

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018

stamps.com

062S000663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL™
CERTIFIED MAIL™



9414 8118 9956 0224 1567 04

Thomas E Jennings
P.O. Box 1797
Roswell NM 88202-1797

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018

stamps.com

062S000663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL™
CERTIFIED MAIL™



9414 8118 9956 0224 1567 42

Chesapeake Operating, Inc.
P.O. Box 18496
Oklahoma City OK 73154-0496

Certified Mail® Labels

⬆ Top of the page

Print postage using Stamps.com Template SDC-3610

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S000863991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®



9414 8118 9956 0224 1569 57

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S000863991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®



9414 8118 9956 0224 1569 40

Devon Energy Production Company, LP
333 W. Sheridan Ave.
Oklahoma City OK 73102-5010

El Paso Exploration Co.
P.O. Box 1492
El Paso TX 79948

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S000863991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®



9414 8118 9956 0224 1566 50

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S000863991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®



9414 8118 9956 0224 1566 98

Enron Oil & Gas Inc.
P.O. Box 1188
Houston TX 77251-1188

EOG Y Resources, Inc.
104 S. 4th Street
Artesia NM 88210-2123

Certified Mail® Labels↑ **Top of the page**Print postage using Stamps.com Template **SDC-3610**

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S000663991

Place label at top of the center of the
envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®



9414 8118 9956 0224 1561 62

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S000663991

Place label at top of the center of the
envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®



9414 8118 9956 0224 1561 00

Florida Exploration Co.
P.O. Box 2267
Midland TX 79702-2267

Meridian Oil Inc.
P.O. Box 51810
Midland TX 79710-1810

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S000663991

Place label at top of the center of the
envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®



9414 8118 9956 0224 1561 86

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S000663991

Place label at top of the center of the
envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®



9414 8118 9956 0224 1563 08

Merit Energy Company, LLC
13727 Noel Road, Suite 500
Dallas TX 75240-7312

New Mexico BLM
620 E. Greene St.
Carlsbad NM 88220-6292

Certified Mail® Labels

↑ Top of the page

Print postage using Stamps.com Template SDC-3610

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S000863991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®



9414 8118 9956 0224 1563 46

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S000863991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®



9414 8118 9956 0224 1563 77

NMOCD District 2
811 S. First St.
Artesia NM 88210-2834

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

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S000863991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®



9414 8118 9956 0224 1560 63

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S000863991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®



9414 8118 9956 0224 1560 49

Pogo Production Company, LLC
3000 Marienfeld Suite 600
Midland TX 79701

Sterling Production and Development
P.O. Box 1119
Aztec NM 87410-1119

Certified Mail® Labels

↑ Top of the page

Print postage using Stamps.com Template SDC-3610

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S0008663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®



9414 8118 9956 0224 1560 70

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S0008663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®



9414 8118 9956 0224 1564 21

Sundance Oil Co.
1776 N Lincoln Street
Denver CO 80203-1022

Texaco Inc.
P.O. Box 2100
Denver CO 80201-2100

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S0008663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®



9414 8118 9956 0224 1564 38

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018
stamps.com

062S0008663991

Place label at top of the center of the envelope and fold at dotted line.

CERTIFIED MAIL®
CERTIFIED MAIL®



9414 8118 9956 0224 1565 06

Triple S Development Corporation
3110 El Pinon St SW
Albuquerque NM 87105-4984

Yates Petroleum Corporation
105 S. Fourth Street
Artesia NM 88210-2177

Place label at top of the center of the envelope and fold at dotted line.

Place label at top of the center of the envelope and fold at dotted line.

Place label at top of the center of the envelope and fold at dotted line.

Place label at top of the center of the envelope and fold at dotted line.

ALL Consulting
1718 S. Cheyenne Ave.
Tulsa, OK 74119

\$5.420
US POSTAGE
FIRST-CLASS
FROM 74119
NOV 20 2018

stamps.com



CERTIFIED MAIL®



9414 8118 9956 0224 4402 85

Pogo Production Company, LLC
300 N Marienfeld St Suite 600
Midland TX 79701-4321

NOV 30 2018 AM 11:45



November 29, 2018

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Subject: Blackbuck Resources LLC – Cresta SWD Fed 1
Application for Authorization to Inject

To Whom It May Concern,

On behalf of Blackbuck Resources LLC (Blackbuck), ALL Consulting, LLC (ALL) is submitting the enclosed Application for Authorization to Inject for the Cresta SWD Fed 1, a proposed salt water disposal well, in Eddy County, NM.

Should you have any questions regarding the enclosed application, please contact Nate Alleman at (918) 382-7581 or nalleman@all-llc.com.

Sincerely,
ALL Consulting

Nate Alleman
Sr. Regulatory Specialist