Initial

Application Part I

Received 3/6/20

This application is placed in file for record. It MAY or MAY NOT have been reviewed to be determined Administratively Complete



March 4, 2020

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

Subject: Vista Disposal Solutions, LLC – Button Federal SWD #2 Application for Authorization to Inject

To Whom It May Concern,

On behalf of Vista Disposal Solutions, LLC (Vista), ALL Consulting, LLC (ALL) is submitting the enclosed Application for Authorization to Inject for the Button Federal SWD #2, a proposed salt water disposal well, in Lea County, NM.

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

Sincerely, ALL Consulting

Dan Arthur President/Chief Engineer

RECEIVED:	REVIEWER:	TYPE:	APP NO:	
	- Geolog 1220 South St. F	ABOVE THIS TABLE FOR OCD DW CO OIL CONSERVA ical & Engineering francis Drive, Santa	TION DIVISION Bureau – Fe, NM 87505	• CONTRACTOR DEFENSION
	CHECKLIST IS MANDATORY FOR	ALL ADMINISTRATIVE APPLICAT REQUIRE PROCESSING AT THE D	ONS FOR EXCEPTIONS TO IVISION LEVEL IN SANTA FE	
Well Name:			API:	ode:
1) TYPE OF APPL A. Location	ICATION: Check those n – Spacing Unit <u>–</u> Simu	INDICATED BELON which apply for [A] Itaneous Dedication	V	HE TYPE OF APPLICATION
B. Check c [1] Con [1] Inje	NSL INSP one only for [1] or [11] nmingling – Storage – N DHC CTB I ction – Disposal – Press WFX PMX S	Measurement PLC PC DL sure Increase – Enhar	S OLM	
A. Offse B. Roya C. Appl D. Notifi E. Notifi F. Surfa G. For a	N REQUIRED TO: Check t operators or lease ho lty, overriding royalty of cation requires publish cation and/or concur cation and/or concur ce owner Il of the above, proof o otice required	olders owners, revenue owr ned notice rent approval by SLC rent approval by BLN) 1	 Notice Complete Application Content Complete
	N: I hereby certify that approval is accurate			•

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.

Print or Type Name

Signature



Date

Phone Number

e-mail Address

Received by OCD: 3/6/2020 10:20:34 AM

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, New Mexico 87505 *Page 3 of 44* FORM C-108 Revised June 10, 2003

	APPLICATION FOR AUTHORIZATION TO INJECT
I.	PURPOSE: Secondary Recovery Pressure Maintenance XDisposal Storage Application qualifies for administrative approval? Yes No
II.	OPERATOR: _Vista Disposal Solutions, LLC
	ADDRESS: _12444 NM 10th St., Building G, Suite 202-512, Yukon, OK 73099
	CONTACT PARTY Nate Alleman PHONE: 918-382-7581
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?YesNo If yes, give the Division order number authorizing the project:No
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:
	 Proposed average and maximum daily rate and volume of fluids to be injected; Whether the system is open or closed; Proposed average and maximum injection pressure; Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and, 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.
	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: Dan Arthur, P.E., SPEC	45 DANIEL ARD	
SIGNATURE: Than and the	DATE:	03/04/2020
7	1. automat	
E-MAIL ADDRESS: darthur@all-llc.com	303/04/2020 5	

XV. If the information required under Sections VI, V ve has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: Side 2

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: Button Federal SWD #2

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

(1) General Well Information:

Operator: Vista Disposal Solutions, LLC (OGRID No. 329051) Lease Name & Well Number: Button Federal SWD #2 Location Footage Calls: 91' FEL & 2,630' FSL Legal Location: Unit Letter I, S14 T26S R34E Ground Elevation: 3,260' Proposed Injection Interval: 18,555' – 20,015' County: Lea

(2) Casing Information:

Туре	Hole Size	Casing Size	Casing Weight	Setting Depth	Sacks of Cement	Estimated TOC	Method Determined
Surface	24"	20"	133.0 lb/ft	1,065'	1,085	Surface	Circulation
Intermediate 1	14-3/4"	13-3/8"	68.0 lb/ft	5,375'	1,410	Surface	Circulation
Intermediate 2	12-1/4"	9-5/8"	53.5 lb/ft	14,410'	4,780	Surface	Circulation
Liner	8-1/2"	7-5/8"	39.0 lb/ft	18,555'	355	14,210'	CBL

Note: A DV Tool will be set at 5,000'.

(3) Tubing Information:

4.5" (composite weight string) of fiberglass-coated tubing with setting depth of 18,535'

(4) Packer Information: Baker SC-2 or equivalent packer set at 18,535'

Β.

- (1) Injection Formation Name: Devonian and Silurian formations
 Pool Name: SWD; DEVONIAN SILURIAN
 Pool Code: 97869
- (2) Injection Interval: Open-hole injection between 18,555' 20,015'
- (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.
 - Permian Delaware Mountain Group (5,375')
 - Bone Springs (9,495')
 - Wolfcamp (12,570')
 - Atoka (15,140')
 - Morrow (16,505')

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
- 2-mile Mineral Ownership Map
- 2-mile Surface Owernship Map
- 1.5-mile Deep SWD Map (Devonian/Silurian SWDs)
- 1-mile Well Detail List
- Potash Lease Map

VI – AOR Well List

There are no wells within the 1-mile AOR that 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: 40,000 bpd Proposed Average Injection Rate: 20,000 bpd
- (2) A closed system will be used.
- (3) Proposed Maximum Injection Pressure: 3,711 psi (based on 0.2 psi per foot) Proposed Average Injection Pressure: approximately 1,500 – 2,000 psi
- (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 formations which is a non-productive zone known to be compatible with formation water from the Wolfcamp and Bone Springs formations. Water analyses from the Devonian-Silurian formation in the area are included in *Attachment 4*.

VIII – Geologic Description

The proposed injection interval includes the Devonian and Silurian formations from 18,555 – 20,015 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 base of the deepest Underground Source of Drinking Water (USDW) is at a depth of approximately 1,040 feet. Surface casing will be set at a depth of 1,065 feet, which is 25 feet below the top of the Rustler formation, which isolates the USDW. Geophysical log assessment was conducted to accurately determine the top of the Rustler formation, and the top and the base of the Salado formation in this area. Water well depths in the area range from approximately 140 - 280 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

Geophysical 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, there are no groundwater well located within 1-mile of the proposed SWD location; therefore, no groundwater samples were collected in association with this application.

A water well map of the area is included in *Attachment 5*.

XII – No Hydrologic Connection Statement

ALL Consulting has examined available geologic and engineering data, and has found no evidence of faulting present in the area that would provide a hydrologic connection between the injection interval and overlying USDWs. Additionally, the casing and cementing program has been designed to further 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 Hobbs News - Sun 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:

- C-102
- Wellbore Diagram

Attachment 2: Area of Review Information:

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

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

- C-102
- Wellbore Diagram

Received by OCD: 3/6/2020 10:20:34 AM

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

14

26-S

34-E

Ι

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

Page 10 of 44

□ AMENDED REPORT

Lea

WELL LOCATION AND ACREAGE DEDICATION PLAT

	¹ API Numbe	r		² Poo	l Code			³ Pool Name			
			nian – Siluri	an							
⁴ Propert	y Code				⁵ Prop	erty Name			⁶ Well Number		
		B	2								
⁷ 0GRI			⁸ Operator Name								
329051		Vi	3260'								
	¹⁰ Surface Location										
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County		

South

91'

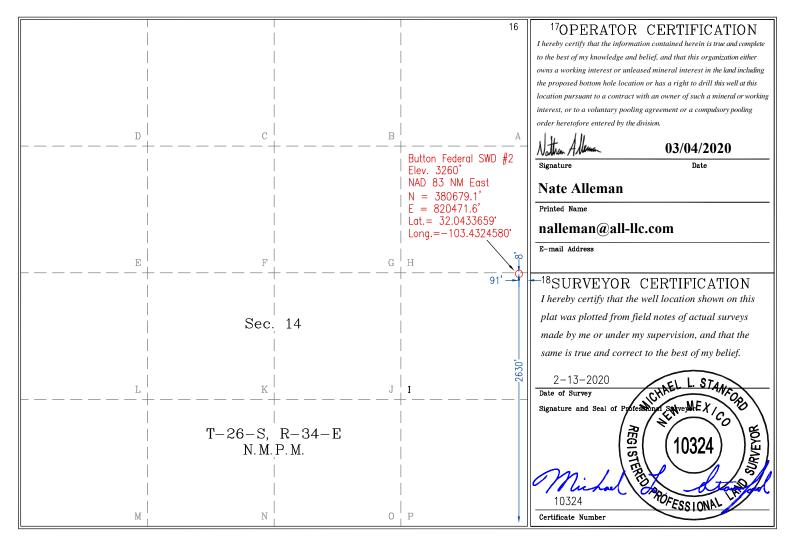
East

¹¹Bottom Hole Location If Different From Surface

2630'

						Differente i			
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
		-				'		/	· · ·
¹² Dedicated Acres	s ¹³ Joint o	r Infill 14	Consolidation C	ode ¹⁵ 0	rder 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.

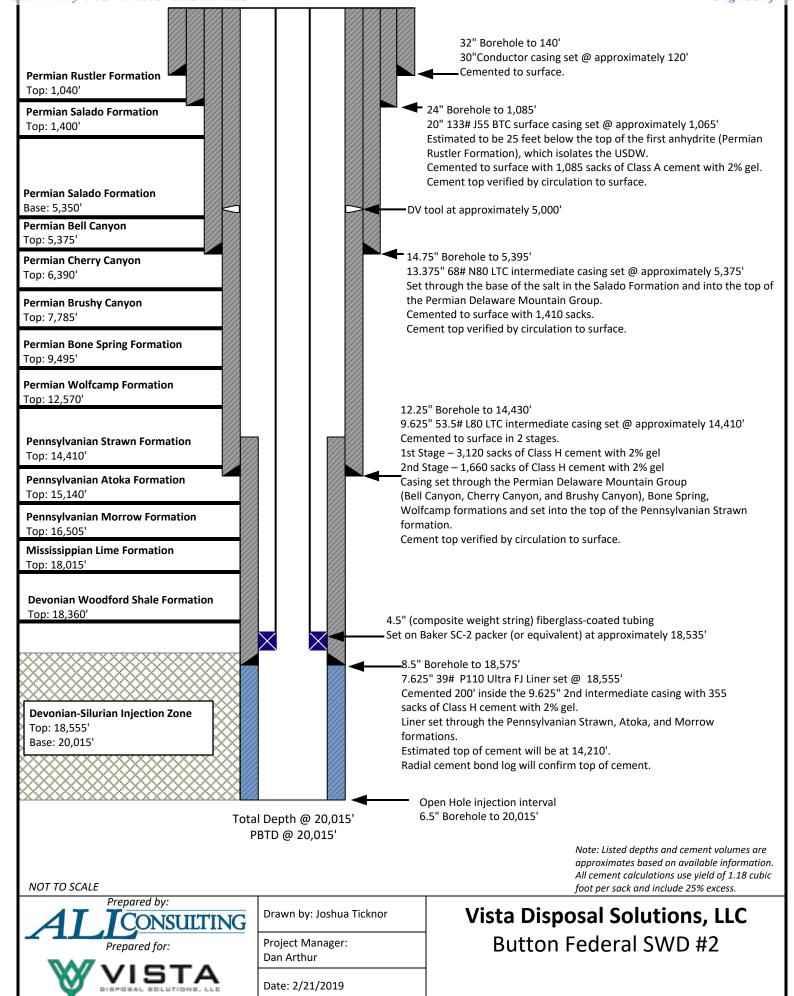


<u>15</u> Miles <u>W-SW</u> of _____

Jal

File No. 🔄

A-12983



SC-2 Packer

1 Introduction

The SC-2[™] packer is Baker Hughes, a GE company (BHGE)' primary packer for cased hole gravel pack and frac pack applications where a high performance retrievable packer is required.

2 Description

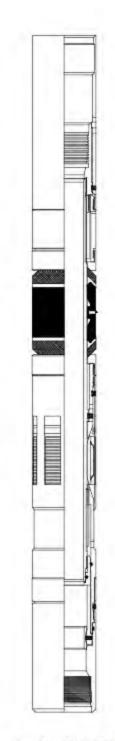
The SC-2 packer is a fully retrievable, highperformance retainer production packer. Although the packer was originally designed for premium gravel pack applications, it may also be used as a standard completion packer in wells where a premium retrievable production packer is required.

The SC-2 packer is fully compatible with standard BHGE sealing accessories, including retrievable and expendable plugs.

Refer to the specifications guide in the Packer Size/Model Availability Guide, Specification Guide, and Packer/Accessory Guide for SC[™] and HP[™] Packers (Product Family H48861), Unit 5750 under Sand Control Tools for packer/accessory size and packer size/model availability.

3 Application

The SC-2 packer is primarily used in gravel pack or frac pack applications where a higher differential pressure production rating, treating pressure rating and temperature are required. The SC-2 may also be used as a production packer.

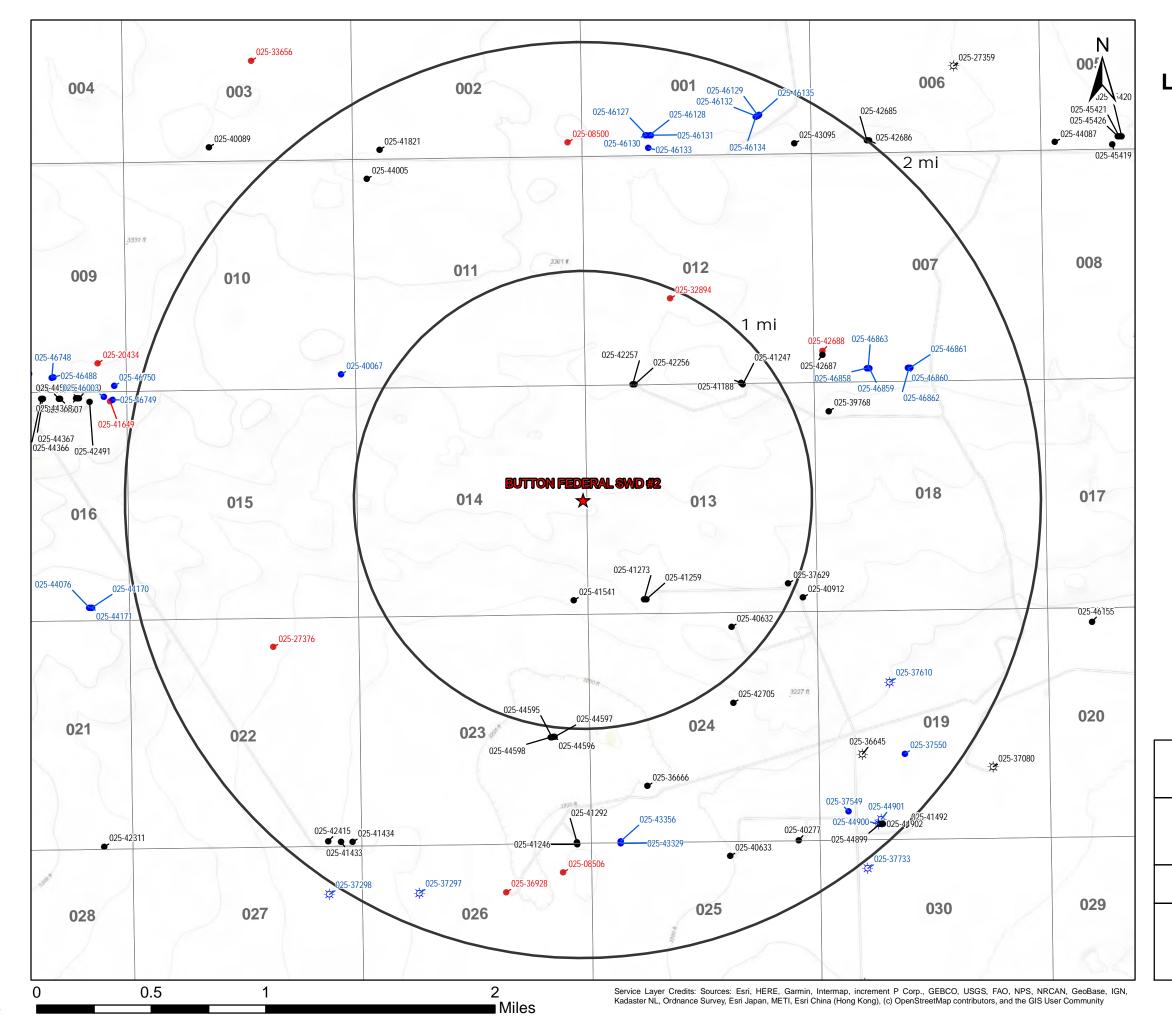


.

Attachment 2

Area of Review Information:

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



Page 14 of 44

Legend

- ★ Proposed SWD
- ₽ Gas, Active
- Gas, New ₽
- Oil, Active •
- Oil, New •
- Oil, Plugged

Source Info: NMOCD O&G Wells updated 2/13/2020 (http://www.emnrd.state.nm.us/OCD/ocdgis.html)

O&G Wells Area of Review

BUTTON FEDERAL SWD #2 Lea County, New Mexico

Proj Mgr: Dan Arthur

Prepared for: WVISTA

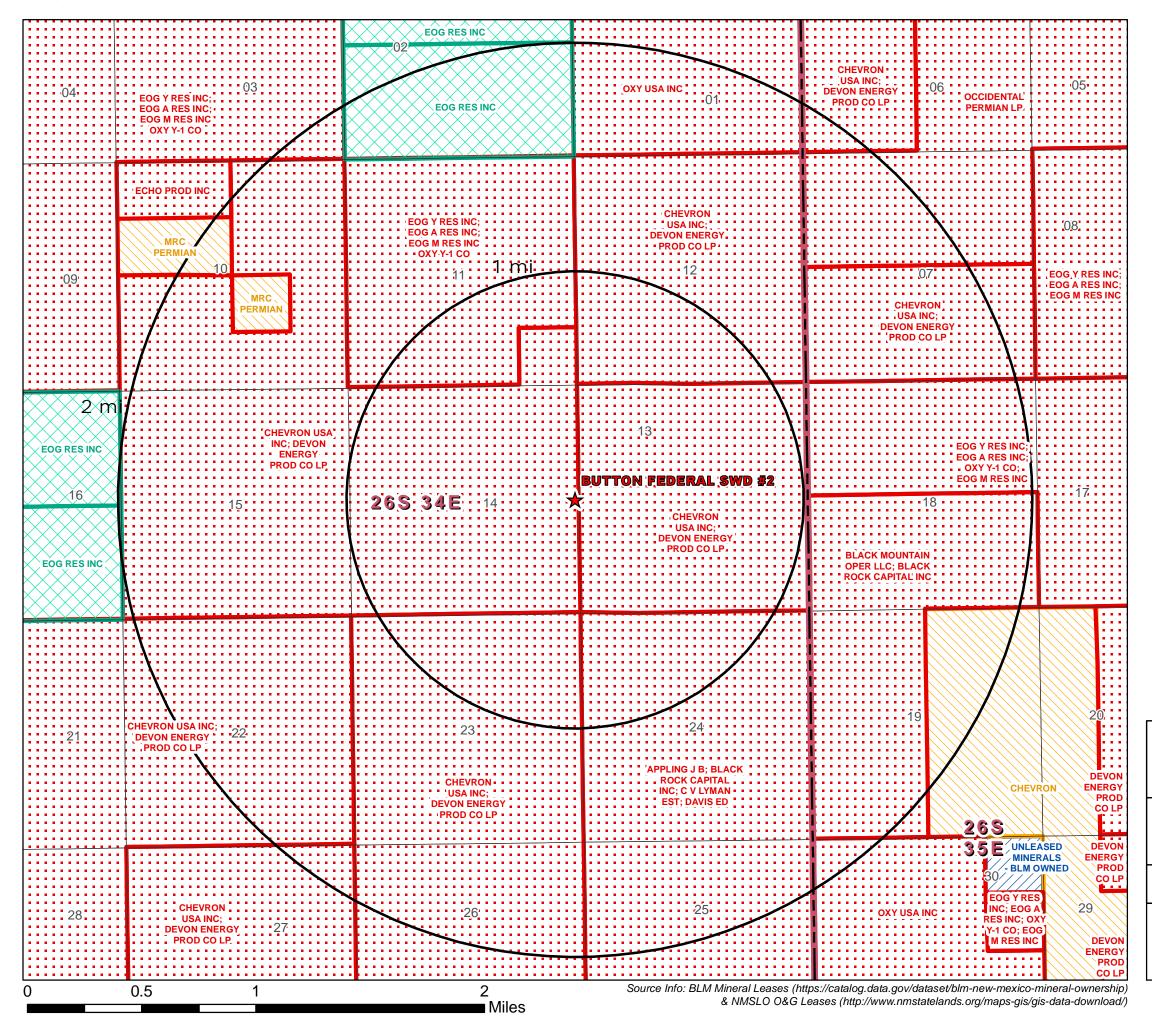
February 23, 2020

Ben Bockelmann

Mapped by:

Prepared by:

ALICONSULTING



Legend

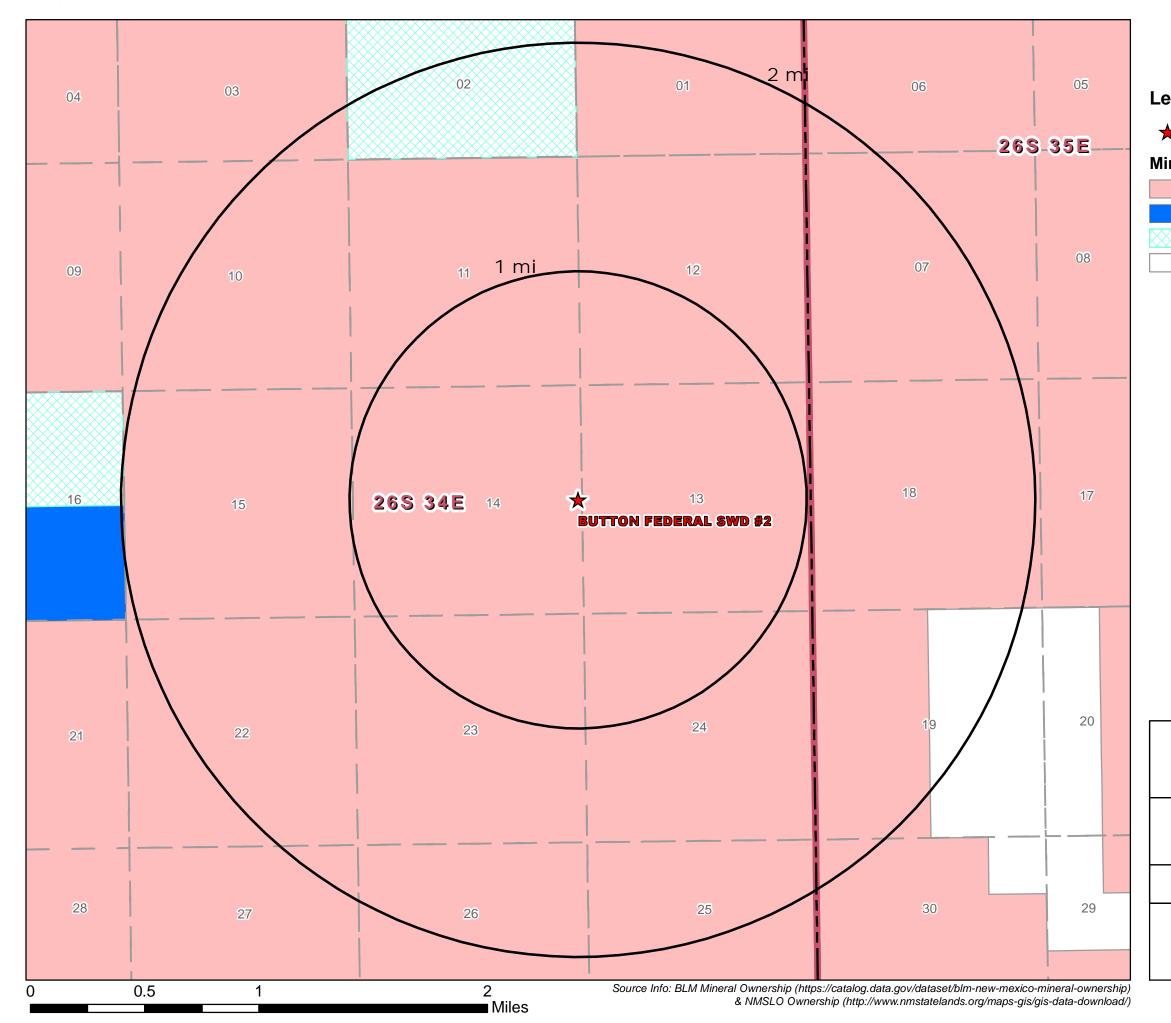


★ Proposed SWD

NMSLO Mineral Leases BLM Mineral Leases Private Mineral Leases Unleased Minerals - Private Owned Unleased Minerals - BLM Owned









Legend

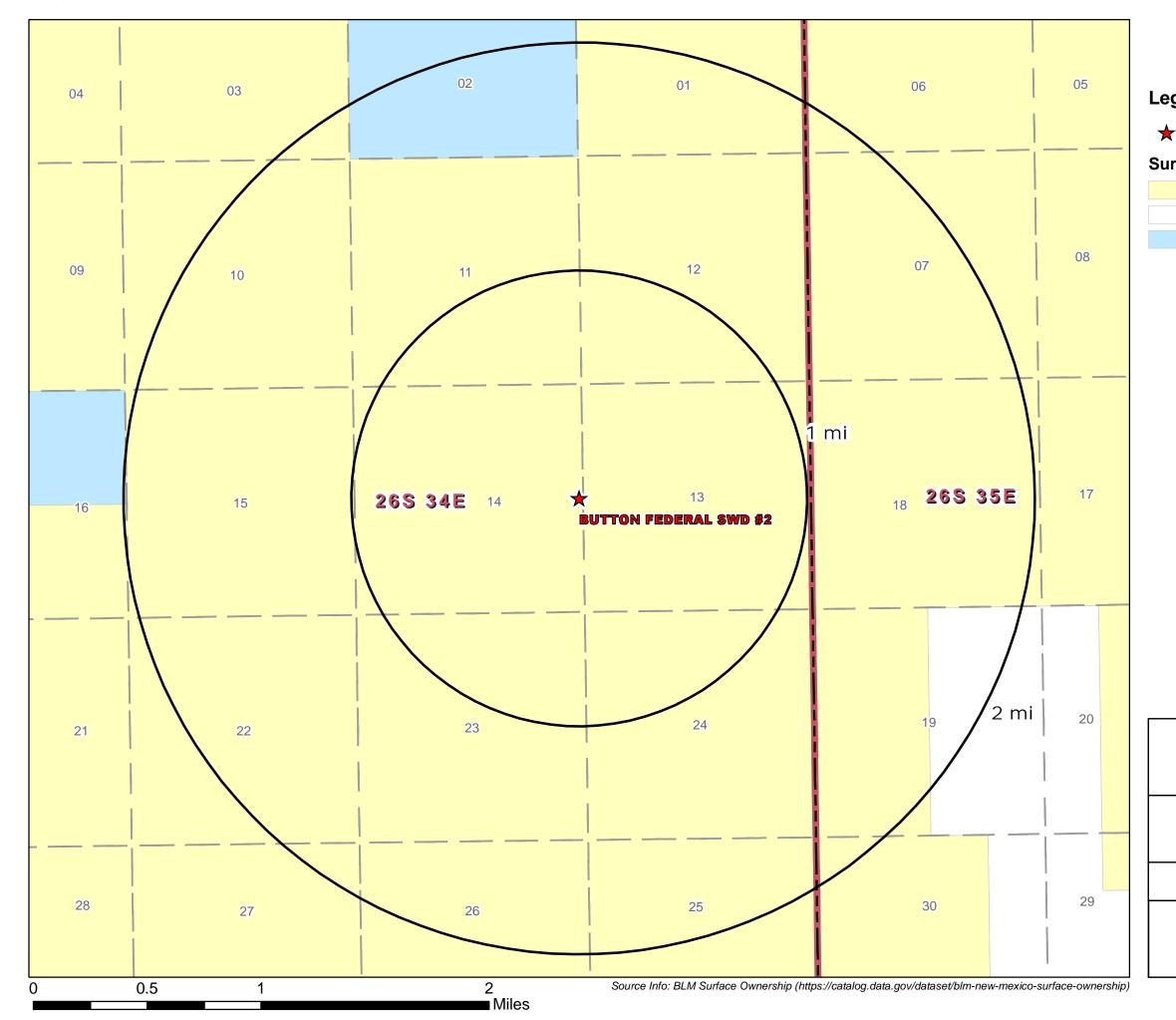
★ Proposed SWD

Mineral Ownership

- All minerals are owned by U.S. (BLM)
- Subsurface minerals (NMSLO)
- Surface and Subsurface minerals (NMSLO)
- Private minerals



Received by OCD: 3/6/2020 10:20:34 AM





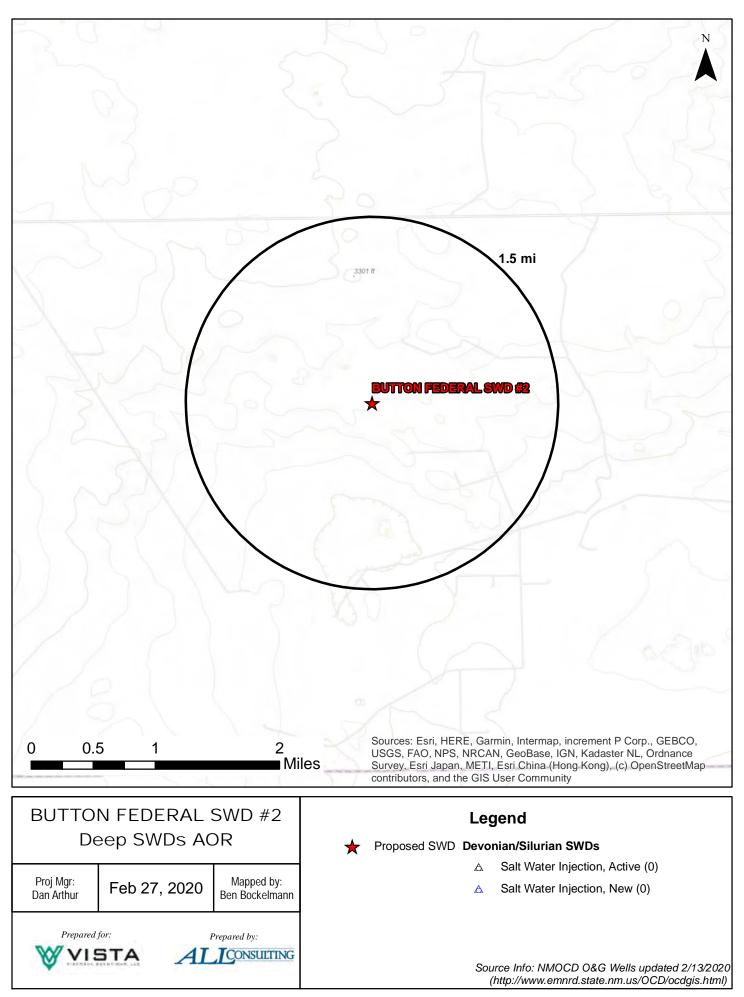
Legend

★ Proposed SWD

Surface Ownership

- BLM
- Private
- State





.

.

	AOR Tabulation for Button Federal SWD #2 (Top of Injection Interval: 18,555')												
Well Name	API#	Well Type	Operator	Spud Date	Location (Sec., Tn., Rng.)	Total Vertical Depth (feet)	Penetrate Inj. Zone?						
MADERA 24 FEDERAL #003H	30-025-40632	0	MARATHON OIL PERMIAN LLC	2/7/2013	B-24-26S-34E	9062	No						
RAGIN CAJUN 13 FEDERAL #001H	30-025-41259	0	DEVON ENERGY PRODUCTION COMPANY, LP	4/2/2014	N-13-26S-34E	9072	No						
RAGIN CAJUN 14 FEDERAL #001H	30-025-41541	0	DEVON ENERGY PRODUCTION COMPANY, LP	2/24/2015	P-14-26S-34E	9096	No						
RAGIN CAJUN 12 FEDERAL #001H	30-025-41188	0	DEVON ENERGY PRODUCTION COMPANY, LP	12/28/2013	O-12-26S-34E	9018	No						
MADERA 12 FEDERAL SWD #001	30-025-32894	Plugged	DEVON ENERGY PRODUCTION COMPANY, LP	3/13/1995	K-12-26S-34E	Plugged (12950)	No						
RAGIN CAJUN 12 FEDERAL #002H	30-025-42256	0	DEVON ENERGY PRODUCTION COMPANY, LP	4/1/2015	M-12-26S-34E	9212	No						
RATTLESNAKE 13 FEDERAL #002H	30-025-41247	0	DEVON ENERGY PRODUCTION COMPANY, LP	11/21/2013	B-13-26S-34E	9023	No						
RAGIN CAJUN 12 FEDERAL #003H	30-025-42257	0	DEVON ENERGY PRODUCTION COMPANY, LP	4/29/2015	M-12-26S-34E	9240	No						
RAGIN CAJUN 13 FEDERAL #002H	30-025-41273	0	DEVON ENERGY PRODUCTION COMPANY, LP	3/4/2014	M-13-26S-34E	9118	No						
RATTLESNAKE FEDERAL UNIT #006	30-025-37629	0	DEVON ENERGY PRODUCTION COMPANY, LP	12/26/2006	P-13-26S-34E	9600	No						
Notes: No wells within the 1-mile AO	R penetrate the i	njection inter	val.										

10 10 10 10 </th <th>005</th> <th>020</th> <th>029</th> <th>028</th> <th>027</th> <th>026</th> <th>025</th> <th>030</th> <th>029</th> <th>028</th> <th>027</th> <th>026</th> <th>025</th> <th>030</th> <th>029</th> <th>028</th> <th>027</th> <th>026</th> <th>025</th> <th>030</th> <th>029</th> <th>028</th> <th>027 dz</th> <th>26 0</th> <th>25(</th> <th>30 0</th> <th>29 02</th> <th>8 - 02</th> <th>27</th> <th>026</th> <th>025</th> <th>030</th> <th>02</th> <th>9 028</th> <th>3 027 02</th> <th>26 (</th>	005	020	029	028	027	026	025	030	029	028	027	026	025	030	029	028	027	026	025	030	029	028	027 dz	26 0	25(30 0	29 02	8 - 02	27	026	025	030	02	9 028	3 027 02	26 (
Image:	020	030													032	033	034	035		031	032			035		031	032		034 R 36 F	035	036	031		033 R 37 E	034	Ñ⁵ (
at at <th< th=""><th>036</th><th>031</th><th>032</th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>1</th><th>24S</th><th>R 3 4 E</th><th></th><th>001</th><th>006</th><th>Т</th><th>2 4 S I</th><th>R 3 5 E</th><th></th><th>001</th><th>006</th><th></th><th>24S</th><th>R 3 6 E</th><th></th><th>001</th><th></th><th> T</th><th>2 4 S R</th><th>37E</th><th>12</th></th<>	036	031	032												1	24S	R 3 4 E		001	006	Т	2 4 S I	R 3 5 E		001	006		24S	R 3 6 E		001		T	2 4 S R	37E	12
and work	001	006	005				001	006	005	004		002	001	006	005										012	007				011	012	007	008	009	010	
Control On	012 Ш		008	009	010	011	ш	л Ш Ш	008	009	010		ш		008	009	010	011	4 Ш	ш—					5 E	<u>ш</u> ₀₁₈				014	ш	040	017	016	015	014
Transmit Distribution Distrestribution Distrestrestribution	3 8	2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3	017	016	015	014	013 😭	ლ ⁰¹⁸		016	015	014				016	015	014	⁰¹³ ແ ທ	R 3		016	015		טייז א ארייט ארייט	5 R 3					<u>~</u>	6				(
6 m	4 4	S 019	020	021	022	023		4		021	022	023	024 4	4	020	021	022	023		4 013	020	021	022	023		4 019	020	021	022	023	N	8				
and and by and	025		029	028	027	026	025	030	029	028	027	026	025	030	029	028		026	025	030	029			026	025	030	029			026	025	030			027	
Image: Normal system Image: Normal system <th< th=""><th>036</th><th>031</th><th>032</th><th></th><th></th><th></th><th>036</th><th>031</th><th>032</th><th></th><th></th><th>035</th><th>036</th><th>031</th><th>032</th><th></th><th></th><th>035</th><th>036</th><th>031</th><th>032</th><th>T 2 4 S</th><th>R 3 5 E</th><th></th><th>036</th><th>031</th><th></th><th>24S</th><th>R 3 6 E</th><th>=</th><th>036</th><th>031</th><th>T 2 4 S</th><th>S R 3 7</th><th>E</th><th></th></th<>	036	031	032				036	031	032			035	036	031	032			035	036	031	032	T 2 4 S	R 3 5 E		036	031		24S	R 3 6 E	=	036	031	T 2 4 S	S R 3 7	E	
var v	001	006	005	T 2 5	S R 3 2	Ė	001	006	005			E 002	001	006	₀₀₅ T			002	001	006	005			002	001	006	005	004		002	001	006	005			
13 10 <th< td=""><th>2 2 ></th><td></td><td>008</td><td></td><td></td><td>011</td><td>012</td><td>007</td><td>008</td><td>009</td><td>010</td><td>011</td><td></td><td>007</td><td>008</td><td>009</td><td>010</td><td>011</td><td>012</td><td>007</td><td>008</td><td>009</td><td>010</td><td>011</td><td>012</td><td>007</td><td>008</td><td>009</td><td>010</td><td>011</td><td>012</td><td>007</td><td>008</td><td>009</td><td>010</td><td>011</td></th<>	2 2 >		008			011	012	007	008	009	010	011		007	008	009	010	011	012	007	008	009	010	011	012	007	008	009	010	011	012	007	008	009	010	011
13 10 <th< td=""><th>Ddd</th><td></td><td></td><td>016</td><td>015</td><td>014</td><td>- · · · C</td><td>N M</td><td></td><td>016</td><td>015</td><td>014</td><td>013 C</td><td></td><td>017</td><td>016</td><td>015</td><td>014</td><td>013 ~</td><td>35</td><td></td><td>016</td><td>015</td><td>014</td><td>013 0</td><td>က 018</td><td>017</td><td>016</td><td>015</td><td>014</td><td>013 ෆ</td><td>L C 018</td><td>017</td><td>016</td><td>015</td><td>014</td></th<>	D dd			016	015	014	- · · · C	N M		016	015	014	013 C		017	016	015	014	013 ~	35		016	015	014	013 0	က 018	017	016	015	014	013 ෆ	L C 018	017	016	015	014
Image: construction Image: cons Image: construction	013 Ш	ш 019	9				0				022		024 S	ແ ທີ່ 019	020	021	022	023	U24 U	8 019 8 019	020	021	022	023		S 019 S 2 S		021	022	023	024 0	5 S	020	021	022	023
virther	4 2	L 03	2				024 c	× ⊢ -						12		028	027	026	÷	- F	029	028	027	026	F		029	028	027	026	025	030	029	028	027	026
as 0.1 0.2 T25SR32E 0.6 0.1 0.2 T25SR32E 0.1 0.2 T25SR32E 0.1 0.2 T25SR32E 0.1 0.2 0.2 0.2 0.1 0.2 0.2 0.1 0.2 T25SR3E 0.1 0.2 0.2 0.2 0.1 0.2 0.2 0.2 0.1 0.2 0.2 0.2 0.1 0.2 0.2 0.2 0.1 0.2 0.2 0.2 0.1 0.2 0.2 0.2 0.2 0.1 0.2 0.2 0.2 0.1 0.2 <th0.2< th=""> 0.2 0.2 <t< td=""><th>T 2 5</th><td>ŝ</td><td>029</td><td></td><td></td><td>026</td><td>025</td><td>030</td><td>029</td><td></td><td></td><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td><td>034</td><td>035</td><td>036</td><td>031</td><td>032</td><td></td><td></td><td>035</td><td>036</td><td>031</td><td></td><td></td><td>034</td><td>035</td></t<></th0.2<>	T 2 5	ŝ	029			026	025	030	029					-							-		034	035	036	031	032			035	036	031			034	035
Ore or	036	031				E	036	031		T 2 5		E	000	-				E		+	-	026	SR35	Ę		-	Т	026	S R 3 6		02 001		-	T 0 2 6 S	SR 37	E 00
112 007 008 009 010 011 012 007 008 009 010 011 012 007 008 009 010 011 012 007 008 009 010 011 012 007 008 009 010 011 012 007 016 015 014 013 0 00 010 017 016 015 014 013 0 00 010 017 016 015 014 013 0 00 010 017 016 015 014 013 0 00 010 017 016 015 014 013 0 00 010 017 016 015 014 013 0 00 010 017 016 015 014 013 0 00 010 017 016 015 014 013 0 00 010 017 016 015 014 013 0 00 010 017 016 015 014 013 0 00 010 017 016 015 014 013 0 00 010 017 016 015 014 013 0 00 010 017 016 015 014 013 0 00 010 017 016 015 014 013 0 00 010 010 017 016 015 014 013 0 00 010 010 017 016 015 014 013 0 00 010 010 017 016 015 014 013 0 00 010 010 010 017 016 015 014 013 0 00 010 010 010 017 016 015 014 013 0 00 010 010 010 017 016 015 014 013 0 00 010 010 010 010 010 010 010 01	001		005			2 E 00:	2 001		005				001	006	005	004	003			\mathbf{N}						-		-		011		007	008			011
1 016 015 014 013 2 015 014 013 015 014 015 014 013 015 014 013 015 014 013 015 014 015 014 015 014 015 014 015 014 015 014 015 014 015 014 015 016 016 016 016<		ш	008	009	010	011		<u> </u>	008	009	010	011	ш	<u> </u>	008	009		011					 Ral-) #2	018	008				<u>ц</u> с	N 018	8			-
Control of the control of th	3 2	801 201 201	8 017	016	015	014	013	° 🖁 🖸		016	015	014	013 «	2 018 2 018		016	015	014	X 01	Ц ю	1		015	014	- 4	6 01		016	015		013 Q	S				
for the second	24 9 7 8	01 <mark>0</mark> ℃		02	022	023	024	26		021	022	023	6	9 01 9 01	020	021	022	023		N N N	2-mi—	021	022	023	024 🖸	2 22	020	021	022	023	024	2	020	021		023
<u>a a a a a a a a a a a a a a a a a a a </u>	► 025	1 — 030	029	028	027	026		FIF.	029	028	027	026			029	028	027	020	025		020				-	6	029				_					
Loving	036	031	032	03	034	035	036	6 031	032	033	034				032	033	034	035	036	031	032	033	034	035	036		032	033	034							
																	٦	ſex	as					-	Loving Minkler											

Page 20 of 44

Legend

★ Proposed SWD

Ore Type - Measured

Ore Type - Indicated

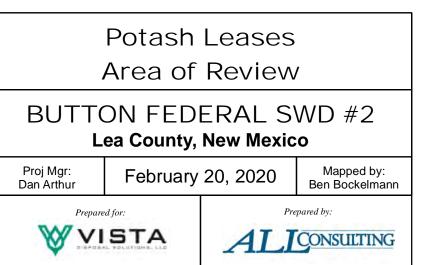
KPLA

SOPA

Drill Islands

Status

Nominated



-

•

Attachment 3

Source Water Analyses

Received by OCD: 3/6/2020 10:20:34 AM

....



2708 West County Road, Hobbs NM 88240

Water Analysis

Date: 23-Aug-11

0			Draw 1#		C4-4-
 Company 		Well Name		ounty	State
		BD			New Mexico 1-265-29
Sample Source	Swab Sa	imple	Sample #	~	1
Formation			Depth		
Specific Gravity	1.170		SG @	60 °F	1.172
рН	6.30		Su	llides	Absent
Temperature (*F)	70		Reducing A	gents	
Cations					
Sodium (Calc)	ana aman na mara ya da kata kata da ana da ang sa pagata	in Mg/L	77,962	in PPM	66,520
Calcium		in Mg/L	4,000	in PPM	3,413
Vagnesium		in Mg/L	1,200	in PPM	1,024
Soluable fron (FE2)		in Mg/L	10.0	in PPM	9
Anions					
Chlorides		in Mg/L	130,000	in PPM	110,922
Suttates		in Mg/L	250	in PPM	213
Bicarbonates		in Mg/L	127	in PPM	108
otal Hardness (as CaCO)3)	in Mg/L	15,000	in PPM	12,799
otal Dissolved Solids (C	alc)	in Mg/L	213,549	in PPM	182,209
Equivalent NaCi Concent	ration	in Mg/L	182,868	in PPM	156,031
caling Tendencies					
Calcium Carbonate Index Below 500,00		000 - 1,000,000	Possble / Above 1,	000,000 Probabil	507,520 •
Calcium Sulfate (Gyp) Inc	iex				1,000,000
Below 500,00) Remote / 500,0	000 - 10,000,00	Possible / Above 10	000,000 Probeb	le i

Remarks RW=.048@70F

Report # 3188

;

Sec 22, T25, S, R28E

Bone Spring

North Permian Basin Region P.O. Box 740 Sundown, TX 79372-0740 (806) 229-8121 Lab Team Leader - Shella Hernandez (432) 495-7240

Water Analysis Report by Baker Petrolite

Company:		Sales RDT:	33514.1
Region:	PERMIAN BASIN	Account Manager:	TONY HERNANDEZ (575) 910-7135
Area:	ARTESIA, NM	Sample #:	534665
Lease/Platform:	PINOCHLE 'BPN' STATE COM	Analysis ID #:	106795
Entity (or weli #):	2 H	Analysis Cost:	\$90.00
Formation:	UNKNOWN		
Sample Point:	WELLHEAD		

Summary		A	nalysis of Sar	mple 534665 @ 75	F	
Sempling Date: 03/10/11	Anions	mg/l	i\pem	Cations	mg/l	ñpem
Analysis Date: 03/18/11 Analyst: SANDRA GOMEZ	Chloride: 1 Bicarbonate:	09618.0 2135.0	3091.92 34.99	Sodium: Magnesium:	70275.7 195.0	3056.82 16.04
TDS (mg/l or g/m3): 184911.1 Density (g/cm3, tonne/m3): 1.113 Anion/Cation Ratio: 1	Carbonate: Sulfate: Phosphale: Borate: Silicale:	0.0 747.0	0. 15.55	Calcium: Strontium: Barlum: Iron: Polassium:	844.0 220.0 0.8 6.5 889.0	42.12 5.02 0.01 0.23 22.22
Carbon Dioxide: 0 50 PPM Oxygen: Comments:	Hydrogen Sulfide: pH at time of sampling: pH at time of analysis: pH used in Calculation:		0 PPM 7 7	Aluminum: Chromlum: Copper: Lead: Manganese: Nickel:	0.100	0.

Cond	tions		Values C	alculated	at the Give	n Conditi	ons - Amo	unts of Sc	ale in Ib/10	60 bbl		
Temp	Gauge Press.	- CO					ydrite aSO ₄		estite rSO ₄	Ba Ba	CO ₂ Press	
Ŧ	psi	Index	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Amount	psi
80	0	1.08	188.52	-1.20	0.00	-1.18	0.00	-0.11	0.00	0.58	0.29	1.72
100	0	1.10	206.05	-1.29	0.00	-1.20	0.00	-0.15	0.00	0.35	0.29	2.35
120	0	1.12	224.17	-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

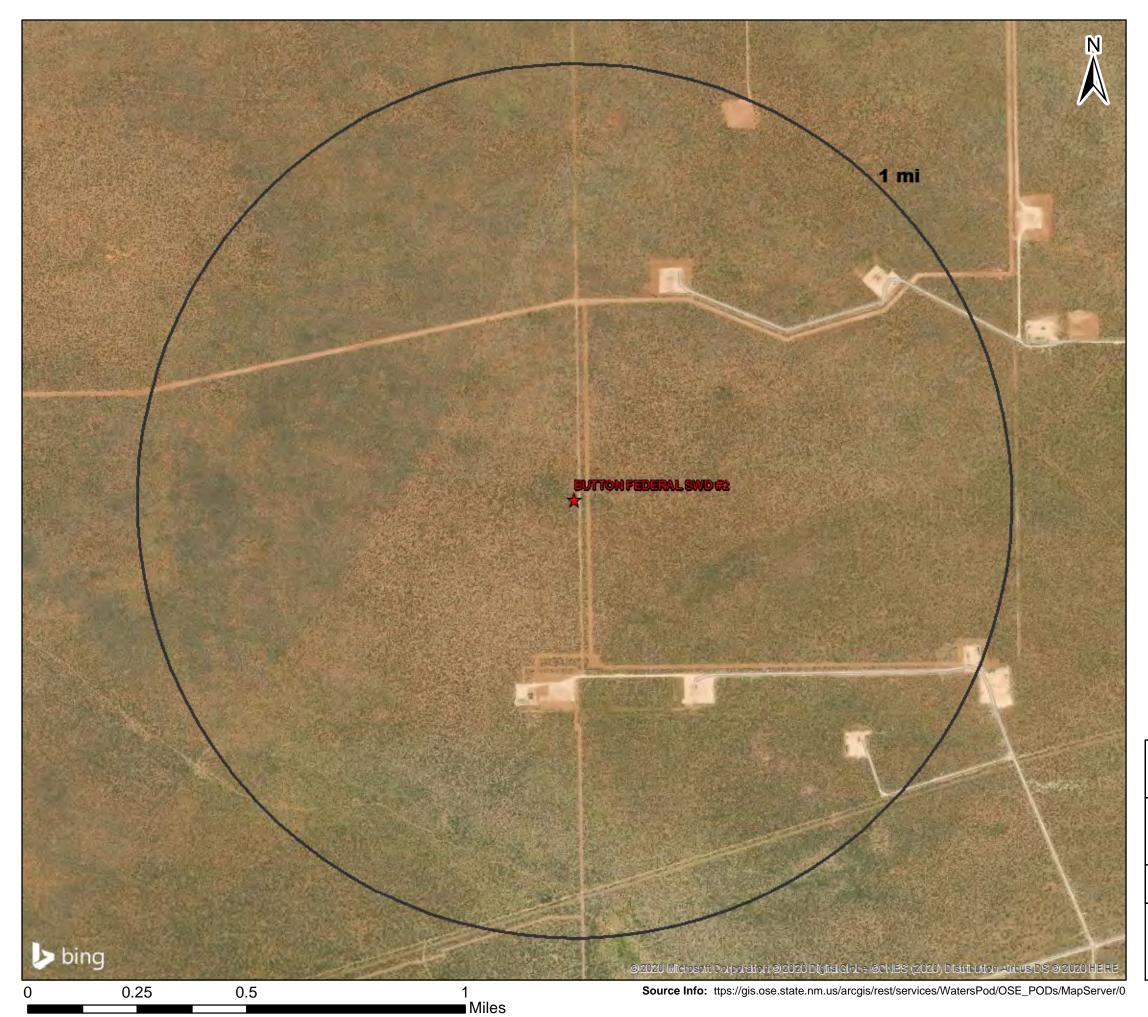
Injection Formation Water Analysis																	
Vista Disposal Solutions, LLC - Devonian and Silurian-Fusselman Formations																	
Wellname	API	Latitude	Longitude	Section Townshi	p Range	Unit	Ftgns	Ftgew	County	State	Company	Field	Formation	Tds_mgL	Chloride_mgL	Bicarbonate_mgL	Sulfate_mgL
STATE B COM #001	3002509716	32.179405	-103.2212524	36 24S	36E	С	600N	1880W	LEA	NM		CUSTER	DEVONIAN	176234	107400	128	1004
FARNSWORTH FEDERAL #006	3002511950	32.077725	-103.162468	4 26S	37E	А	660N	990E	LEA	NM		CROSBY	DEVONIAN	31931	20450	302	591
ARNOTT RAMSAY NCT-B #003	3002511863	32.092228	-103.1784439	32 25S	37E	A	660N	660E	LEA	NM		CROSBY	DEVONIAN		100382	476	
ARNOTT RAMSAY NCT-B #003	3002511863	32.092228	-103.1784439	32 255	37E	A	660N	660E	LEA	NM		CROSBY	DEVONIAN	158761			
COPPER #001	3002511818	32.099484	-103.1656723	28 25S	37E	J	1980S	1981E	LEA	NM		CROSBY	DEVONIAN	27506	15270	1089	1079
STATE NJ A #001	3002511398	32.164749	-103.1273346	2 25S	37E	A	663N	660E	LEA	NM		JUSTIS NORTH	DEVONIAN	105350	59300	660	4950
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1 25S	37E	E	1980N	330W	LEA	NM		JUSTIS NORTH	FUSSELMAN	80880	46200	340	3050
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1 25S	37E	E	1980N	330W	LEA	NM		JUSTIS NORTH	FUSSELMAN	84900	48600	840	2650
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1 25S	37E	E	1980N	330W	LEA	NM		JUSTIS NORTH	FUSSELMAN	72200	41000	370	2960
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1 25S	37E	E	1980N	330W	LEA	NM		JUSTIS NORTH	FUSSELMAN	80900	46200	340	3050
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1 25S	37E	E	1980N	330W	LEA	NM		JUSTIS NORTH	FUSSELMAN	77600	44000	550	3240
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1 25S	37E	E	1980N	330W	LEA	NM		JUSTIS NORTH	FUSSELMAN	135000	77000	650	5810
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1 25S	37E	E	1980N	330W	LEA	NM		JUSTIS NORTH	FUSSELMAN	114000	65000	280	5110
WESTATES FEDERAL #004	3002511389	32.161129	-103.1241226	1 255	37E	E	1980N	330W	LEA	NM		JUSTIS NORTH	FUSSELMAN	135000	77000	500	5320
WESTATES FEDERAL #008	3002511393	32.162121	-103.1241226	1 25S	37E	E	1620N	330W	LEA	NM		JUSTIS NORTH	FUSSELMAN	91058	51020	376	4783
WESTATES FEDERAL #008	3002511393	32.162121	-103.1241226	1 25S	37E	E	1620N	330W	LEA	NM		JUSTIS NORTH	FUSSELMAN	86847	50450	363	2544
STATE Y #009	3002511777	32.10582	-103.1113434	25 25S	37E	A	990N	990E	LEA	NM		JUSTIS	FUSSELMAN	219570	129000	960	4630
STATE Y #009	3002511777	32.10582	-103.1113434	25 25S	37E	A	990N	990E	LEA	NM		JUSTIS	FUSSELMAN	163430	96000	290	3780
SOUTH JUSTIS UNIT #023C	3002511760	32.106728	-103.1184616	25 25S	37E	С	660N	2080W	LEA	NM		JUSTIS	FUSSELMAN	63817	35870	360	3442
CARLSON A #002	3002511764	32.100384	-103.1113434	25 25S	37E	1	2310S	990E	LEA	NM		JUSTIS	FUSSELMAN	208280	124000	510	3400
CARLSON B 25 #004	3002511784	32.096756	-103.1113434	25 25S	37E	Р	990S	990E	LEA	NM		JUSTIS	FUSSELMAN	184030	112900	68	1806

•

•

Attachment 5

Water Well Map and Well Data



Legend

★ Proposed SWD

NMOSE PODs

Status

- Active (0)
- Pending (0)
- Change Location of Well (0)
- Capped (0)
- Plugged (0)
- Incomplete (0)
- Unknown (0)



Water Well Sampling Rationale										
	Vista Disposal Solutions, LLC - Button Federal SWD #2									
SWD	Water Wells	Owner	Available Contact Information	Use	Sampling Required	Notes				
Note: No water wells are present within 1 mile of the proposed SWD location.										

•

•

•

Attachment 6

Induced Seismicity Assessment Letter



February 29, 2020

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 Button Federal SWD #2

Dear Mr. Goetze,

This letter provides information regarding the seismic potential associated with injection operations associated with Vista Disposal Solutions, LLC (Vista), proposed Button Federal SWD #2, 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 2,630' FSL & 91' FEL of Section 14, in T26-S and R34-E of Lea County, New Mexico. Historically, the Eddy and Lea Counties area has experienced very limited recorded seismic activity (per the U.S. Geological Survey [USGS] earthquake catalog database). Per USGS, there have been no known seismic events located within 100 square miles of the proposed Subject Well. The closest recorded seismic event was a M2.7 that occurred on October 21st, 2019 and was located approximately 15.4 miles north 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 2.9 miles to the west (See Exhibit 1).

Vista does not own either 2D or 3D seismic reflection data in the area of the Subject Well. Publicly available fault data from USGS indicates that the closest known fault is approximately 4.9 miles east 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 Induced Seismicity Potential Statement for the Button Federal SWD #2 February 29, 2020

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 Ellenberger 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

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

Enclosures References Exhibits

.

•

Induced Seismicity Potential Statement for the Button Federal SWD #2 February 29, 2020

References

Induced Seismicity Potential Statement for the Button Federal SWD #2 February 29, 2020

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." <u>http://www.beg.utexas.edu/resprog/permianbasin/PBGSP_members/writ_synth/Simpson.pdf</u> (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. <u>https://earthquake.usgs.gov/earthquakes/search/</u> (accessed June 14, 2018).

.

•

Induced Seismicity Potential Statement for the Button Federal SWD #2 February 29, 2020

Exhibits

Induced Seismicity Potential Statement for the Button Federal SWD #2 February 29, 2020

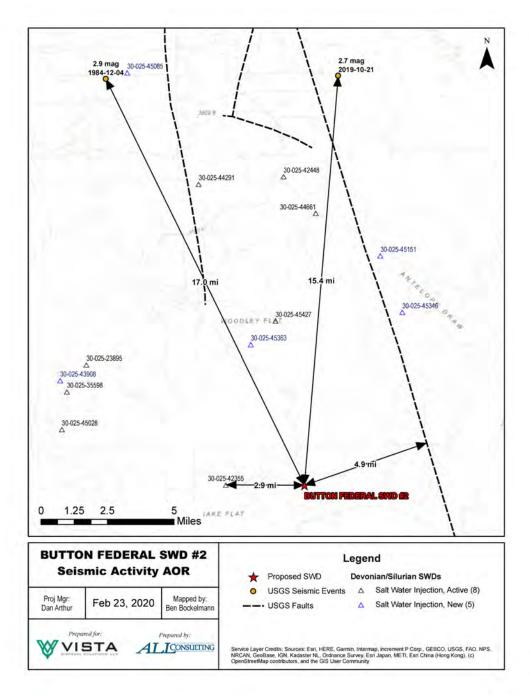


Exhibit 1. Map Showing the Distances from Known and Inferred Faults, Seismic Event, and Closest Deep Injection Well

Induced Seismicity Potential Statement for the Button Federal SWD #2 February 29, 2020

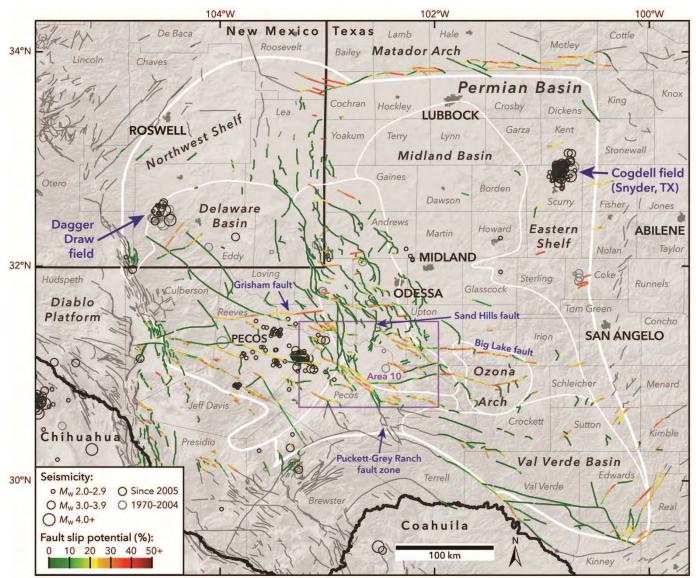


Exhibit 2. Results of the Snee and Zoback (2018) Probabilistic FSP Analysis Across the Permian Basin

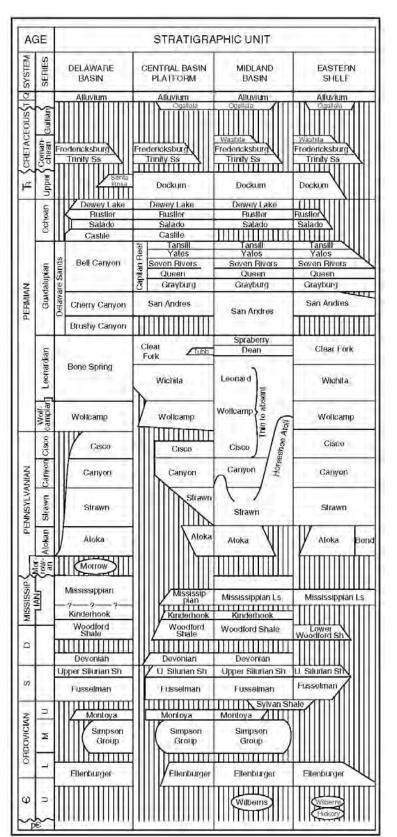


Exhibit 3. Delaware Basin Stratigraphic Chart (Ball 1995)

-

.

Attachment 7

Public Notice Affidavit and Notice of Application Confirmations

Affidavit of Publication

STATE OF NEW MEXICO COUNTY OF LEA

I, Daniel Russell, Publisher of the Hobbs News-Sun, a newspaper published at Hobbs, New Mexico, solemnly swear that the clipping attached hereto was published in the regular and entire issue of said newspaper, and not a supplement thereof for a period of 1 issue(s).

> Beginning with the issue dated February 19, 2020 and ending with the issue dated February 19, 2020.

Publisher

Sworn and subscribed to before me this 19th day of February 2020.

Business Manager

My commission expires January 29, 2023 (Seat) OFFICIAL SEAL GUSSIE BLACK Notary Public State of New Mexico My Commission Expires 1-29-23

This newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chapter 167, Laws of 1937 and payment of fees for said

67115320

DANIEL ARTHUR ALL CONSULTING 1718 S. CHEYENNE AVE. **TULSA, OK 74119**

LEGAL NOTICE **FEBUARY 19, 2020**

APPLICATION FOR AUTHORIZATION TO INJECT

NOTICE IS HEREBY GIVEN: That Vista Disposal Solutions, LLC, 12444 NW 10th St., Building G, Suite 202-512, Yukon, OK 73099, is requesting that the New Mexico Oil Conservation Division administratively approve the APPLICATION SOP 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: Button Federal SWD #2

Located 14.9 miles Southwest of Jal. NM NE ¼ SE ¼. Section 14, Township 26S, Range 34E 91' FEL & 2,630' FSL Lea County, NM

NAME AND DEPTH OF DISPOSAL ZONE: <u>Devonian – Silurian (18.555' – 20.015')</u> EXPECTED MAXIMUM INJECTION RATE: <u>40.000</u> Bbls/day EXPECTED MAXIMUM INJECTION PRESSURE:

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

Additional information may be obtained by contacting Nate Alleman at 918-382-7581.

00239613

APPLICATION FOR AUTHORIZATION TO INJECT

NOTICE IS HEREBY GIVEN: That Vista Disposal Solutions, LLC, 12444 NW 10th St., Building G, Suite 202-512, Yukon, OK 73099, 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: <u>Button Federal SWD #2</u>

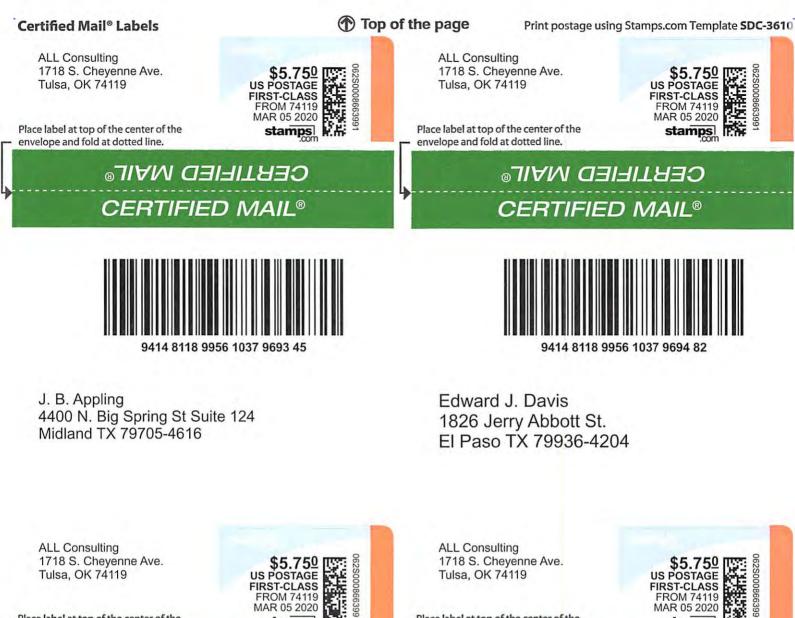
Located 14.9 miles Southwest of Jal, NM
NE 1/4 SE 1/4, Section 14, Township 26S, Range 34E
91' FEL & 2,630' FSL
Lea County, NM
•

NAME AND DEPTH OF DISPOSAL ZONE:Devonian – Silurian (18,555' – 20,015')EXPECTED MAXIMUM INJECTION RATE:40,000 Bbls/dayEXPECTED MAXIMUM INJECTION PRESSURE:3,711 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 Nate Alleman at 918-382-7581.

Button Fee	deral SWD #1 - Notice of Application Rec	ipients		
Entity	Address	City	State	Zip Code
	Landowner & Mineral Owner			
New Mexico BLM	620 E Greene St.	Carlsbad	NM	88220
	OCD District			
NMOCD District 1	1625 N. French Drive	Hobbs	NM	88240
	Leasehold Operators			
Black Rock Capital, Inc. (BLACK ROCK CAPITAL INC)	16623 Cantrell Rd., Suite 1B	Little Rock	AR	72223
Chevron USA Inc. (Chevron USA INC)	6301 Deauville Blvd	Midland	ТΧ	79706
Devon Energy Production Company, LP (DEVON ENERGY PROD CO LP)	333 W. Sheridan Ave.	Oklahoma City	ОК	73102
Edward J. Davis (DAVIS ED)	1826 Jerry Abbott St.	El Paso	ТΧ	79936
EOG Resources, Inc. (EOG Y RES INC) (EOG A RES INC) (EOG M RES INC)	104 S. 4th Street	Artesia	NM	88210
J. B. Appling (APPLING J B)	4400 N. Big Spring, Suite 124	Midland	ТΧ	79705
Lyman Estate (C V LYMAN EST)	185 Lyman St.	Waltham	MA	02452
Marathon Oil Permian, LLC (MARATHON OIL PERMIAN LLC)	5555 San Felipe St.	Houston	ТХ	77056
OXY Y-1 Company (OXY Y-1 CO)	P.O. Box 27570	Houston	ΤХ	77227
Notes: The table above shows the Entities who v detail list (Attachment 2) or on the 2-mile Miner abbreviated entity names used on either the 1-m 2).	al Lease Map (Attachment 2). The names	listed above in pare	nthesis, are	e the



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



©ERTIFIED MAIL® CERTIFIED MAIL®

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





©ERTIFIED MAIL®

CERTIFIED MAIL®

y and/or for use with U.S. Patents 6,244,763,6,868,406,7,216,110, 7,236,970,7,343,357,7,490,065,7,557,940,7,613,639,7,743,043, 8,027,926,8,027,927,8,027,935,04,04,952,075,912,639,7,743,043, 8,301,572,8,392,391 8,498,943.

9414 8118 9956 1037 9637 63

Chevron USA Inc. 6301 Deauville Midland TX 79706-2964



9414 8118 9956 1037 9632 37

Black Rock Capital, Inc. 16623 Cantrell Rd., Suite 1B Little Rock AR 72223-4100





Lyman Estate 185 Lyman St. Waltham MA 02452-5645



9414 8118 9956 1037 9634 28

Marathon Oil Permian, LLC 5555 San Felipe St. Houston TX 77056-2701



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

NMOCD District 1 1625 N. French Drive Hobbs NM 88240-9273

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

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

> ©ERTIFIED MAIL® CERTIFIED MAIL®

\$5.750 US POSTAGE FIRST-CLASS FROM 74119 \$5.750 US POSTAGE FIRST-CLASS FROM 74119 MAR 05 2020 stampson

stamps

062S000866399

9414 8118 9956 1037 9635 89



9414 8118 9956 1037 9648 07

OXY Y-1 Company P.O. Box 27570 Houston TX 77227-7570

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

> ©ERTIFIED MAIL® **CERTIFIED MAIL®**

9414 8118 9956 1037 9642 96

For best results, feed this sheet through your printer as few times as possible. ht Buth 3 Befor printing instructions go to www.stamps.com/3610.