ALL CONSULTING
GOVERNMENT RELATIONS · ENERGY · PLANNING · TECHNOLOGY
ENGINEERING · ENVIRONMENTAL

June 28, 2019

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

Subject: Goodnight Midstream Permian, LLC – Piper G 2
Application for Authorization to Inject

To Whom It May Concern,

On behalf of Goodnight Midstream Permian, LLC (Goodnight), ALL Consulting, LLC (ALL) is submitting the enclosed Application for Authorization to Inject for the Piper G 2, a proposed salt water disposal well, in Lea 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

7/2/2019 DATE IN	SUSPENSE	ENGINEER	LOGGED IN	SWD TYPE	pKAM1928246148, 2305 APP NO.

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	Nathan Alleman	Regulatory Specialist - ALL Consulting	6/28/2019
Print or Type Name	Signature	Title	Date

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

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

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

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____Secondary Recovery _____Pressure Maintenance ____X____Disposal
_____Storage Application qualifies for administrative approval? ____X____Yes _____No

II. OPERATOR: Goodnight Midstream Permian, LLC

ADDRESS: 5910 N Central Expressway, Suite 850, Dallas, TX 75206

CONTACT PARTY: Grant Adams PHONE: 214-444-7388(0)

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: Nathan Alleman TITLE: Regulatory Specialist - ALL Consulting

SIGNATURE: Nate Alleman DATE: 06/28/2019

E-MAIL ADDRESS: nalleman@all-llc.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

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: Piper G 2

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

A.

(1) General Well Information:

Operator: Goodnight Midstream Permian, LLC (OGRID No. 372311)
Lease Name & Well Number: Piper G 2
Location Footage Calls: 325' FSL & 775' FWL
Legal Location: Unit Letter M, S18 T21S R37E
Ground Elevation: 3,534'
Proposed Injection Interval: 5,200' – 5,600'
County: Lea

(2) Casing Information:

Type	Hole Size	Casing Size	Casing Weight	Setting Depth	Sacks of Cement	Estimated TOC	Method Determined
Surface	12-1/4"	9-5/8"	40.0 lb/ft	1,410'	445	Surface	Circulation
Intermediate 1	8-3/4"	7"	26.0 lb/ft	5,650'	850	Surface	Circulation/ CBL
Tubing	6-3/11"	4-1/2"	20.0 lb/ft	5,180'	N/A	N/A	N/A

(3) Tubing Information:

4-1/2" (composite weight string) of fiberglass-coated tubing with setting depth of 5,180'

(4) Packer Information: Lok-set or equivalent packer set at 5,180'

B.

(1) Injection Formation Name: Glorieta
Pool Name: SWD; GLORIETA
Pool Code: 91606
(2) Injection Interval: Perforated injection between 5,200' – 5,600'
(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.

- Grayburg (3,700')

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

- Tubb (6,240')

V – Well and Lease Maps

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

- 2-mile Oil & Gas Well Map
- 2-mile Lease Map
- 1/2-mile Well Detail List w/ Casing Information for Penetrating Wells
- Potash Lease Map
- Penetrating wells – Wellbore Diagram

VI – AOR Well List

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

There are six wells that penetrate the injection zone, five have been properly cased and cemented to isolate the injection zone, and one has been properly plugged and abandoned. Additionally, there is one proposed well that will penetrate the injection zone, and, based on application information, it will be properly case and cemented to isolate the injection zone. Wellbore diagrams and casing information for the wells are also included in ***Attachment 2*.**

VII – Proposed Operation

(1) **Proposed Maximum Injection Rate:** 20,000 bpd
Proposed Average Injection Rate: 12,500 bpd

(2) A **closed system** will be used.

(3) **Proposed Maximum Injection Pressure**: 1,040 psi (surface)
Proposed Average Injection Pressure: approximately 520 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 Glorieta formation which is a non-productive zone known to be compatible with formation water from the Wolfcamp and Bone Springs formations. Water analyses from the Glorieta formation in the area are included in ***Attachment 4*.**

VIII – Geologic Description

The proposed injection interval includes the Gloreta formations from 5,200 – 5,600 feet. This formation consists of interbedded carbonate rocks including dolomites, siltstones, and sands. Several thick intervals of porous and permeable rock capable of taking water are present within the subject formation in the area.

The freshwater formation is the Rustler at a depth of approximately 1,385 feet. Water well depths in the area range from approximately 95 - 143 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, eleven groundwater wells are located within 1-mile of the proposed SWD location; however two of the eleven water wells had been previously sampled. The first (CP-00446 POD 2) was sampled on 01/28/2019, and the other water well (CP-01026 POD 1) was sampled on 06/12/2019. No additional water well samples were taken.

A water well map, details of water wells within 1-mile, and any associated water analyses 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.

XIII – Proof of Notice

A Public Notice was filed with the Hobbs News-Sun newspaper and an affidavit is included in ***Attachment 6***.

A copy of the application was mailed to the OCD District Office, landowner, and leasehold operators within 1/2-mile of the proposed SWD location. A list of the recipients, as well as delivery confirmations, are included in ***Attachment 6***.

Attachments

Attachment 1: Wellbore Diagram

Attachment 2: Area of Review Information:

- 2-mile Oil & Gas Well Map
- 2-mile Lease Map
- 1/2-mile Well Detail List w/ Casing Information for Penetrating Wells
- Potash Lease Map
- Penetrating wells – Wellbore Diagram

Attachment 3: Source Water Analyses

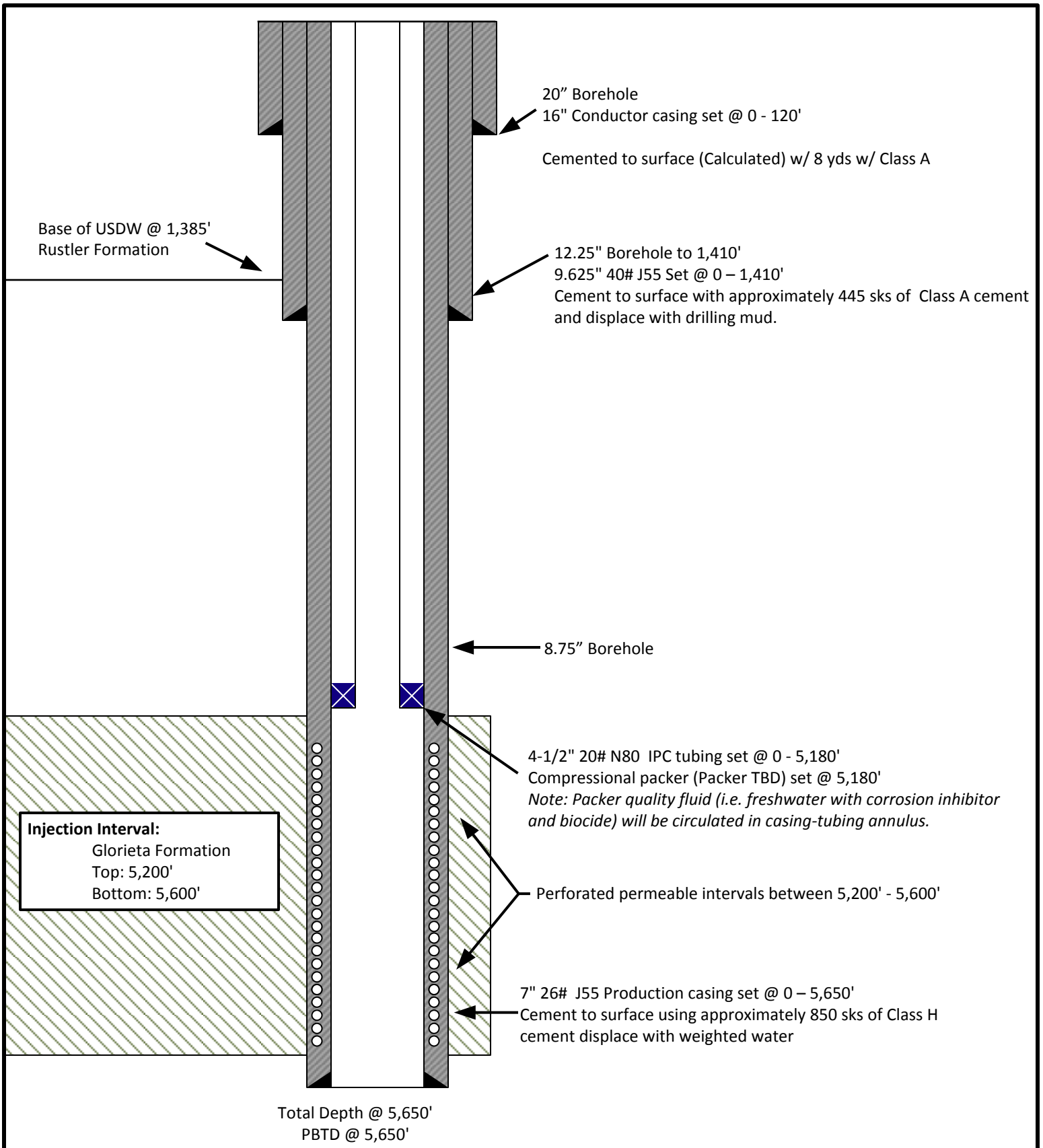
Attachment 4: Injection Formation Water Analyses

Attachment 5: Water Well Map and Well Data

Attachment 6: Public Notice Affidavit and Notice of Application Confirmations

Attachment 1

Wellbore Diagram



NOT TO SCALE

Note: Listed depths and cement volumes are approximates based on available information.

Prepared by: ALL CONSULTING	Drawn by: Joshua Ticknor	Goodnight Midstream Permian, LLC
	Project Manager: Nathan Alleman	Piper G 2
	Date: 05/30/2019	Section 18, Twp 21S, Rng 37E 325' FSL & 775' FWL Lea County, NM

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.

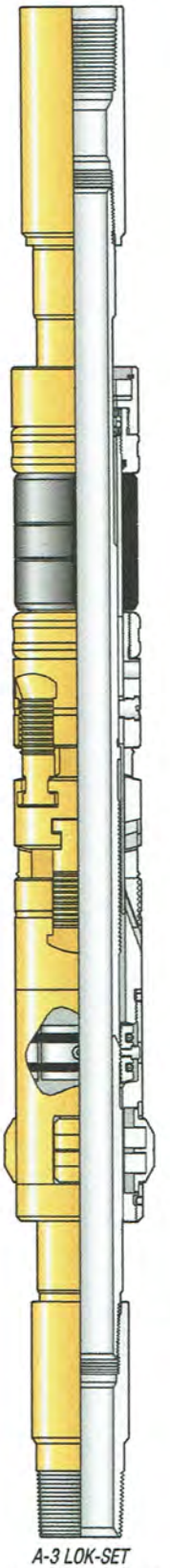
Advantages

- 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

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
		17–20	47A4	2.441	62.0	5.827	148.0
7	177.8	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			6.093	154.8
		17–20	47C2			6.281	159.5
7-5/8	193.7	33.7–39	47C4	2.441	62.0	6.468	164.3
		24–29.7	47D2			6.687	169.9
		20–24	47D4			6.827	173.4
8-5/8	219.1	44–49	49A2	3.500	88.9	7.327	186.1
		32–40	49A4			7.546	191.7
		20–28	49B			7.796	198.0
9-5/8	244.5	47–53.5	51A2	3.500	88.9	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	in.	mm
5-1/2	139.7	20	45A2 x 2-3/8	2.375	60.3	4.562	115.9	4.592	116.6
		15.5–17	45A4 x 2-3/8			4.656	118.3	4.750	120.7
		13	45B x 2-3/8			4.796	121.8	4.902	124.5
6	152.4	26	45B x 2-3/8	2.375	60.3	4.796	121.8	4.902	124.5

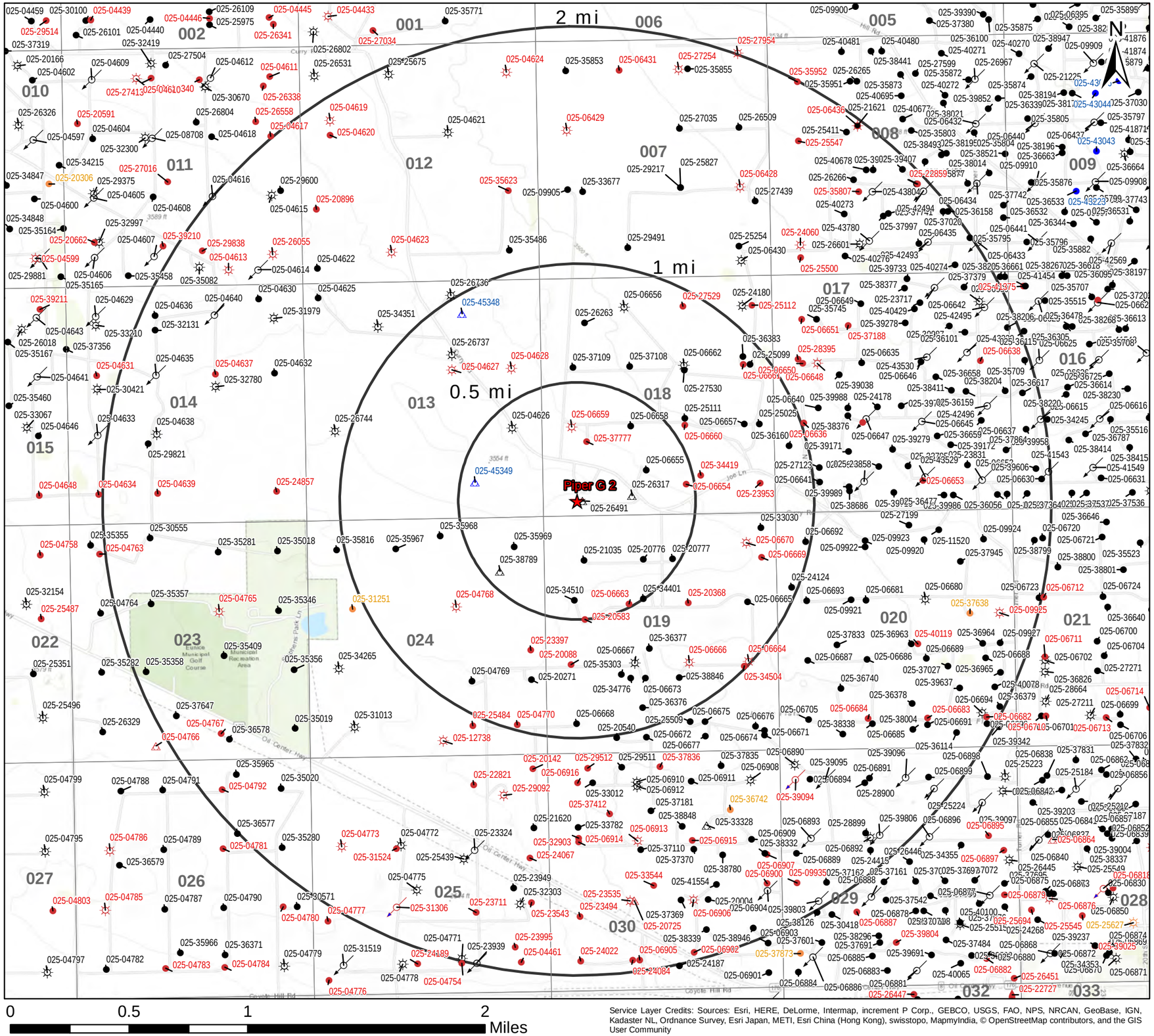
• *When selecting a packer for a casing weight common to two weight ranges (same OD), choose the packer size shown for the lighter of the two weight ranges. Example: for 7-in. (177.8 mm) OD 26 lb/ft casing use packer size 47B4. Under certain circumstances the other packer size may be run, such as when 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
- 1/2-mile Well Detail List w/ Casing Information for Penetrating Wells
- Potash Lease Map
- Penetrating wells - Wellbore Diagram



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Legend

- Proposed SWD
- Miscellaneous (1)
- Gas, Active (67)
- Gas, Plugged (34)
- Gas, Temporarily Abandoned (1)
- Injection, Active (82)
- Injection, Plugged (3)
- Oil, Active (415)
- Oil, New (4)
- Oil, Plugged (120)
- Oil, Temporarily Abondoned (5)
- Salt Water Injection, Active (4)
- Salt Water Injection, New (2)
- Salt Water Injection, Plugged (3)
- Water, Plugged (1)

O&G Wells Area of Review

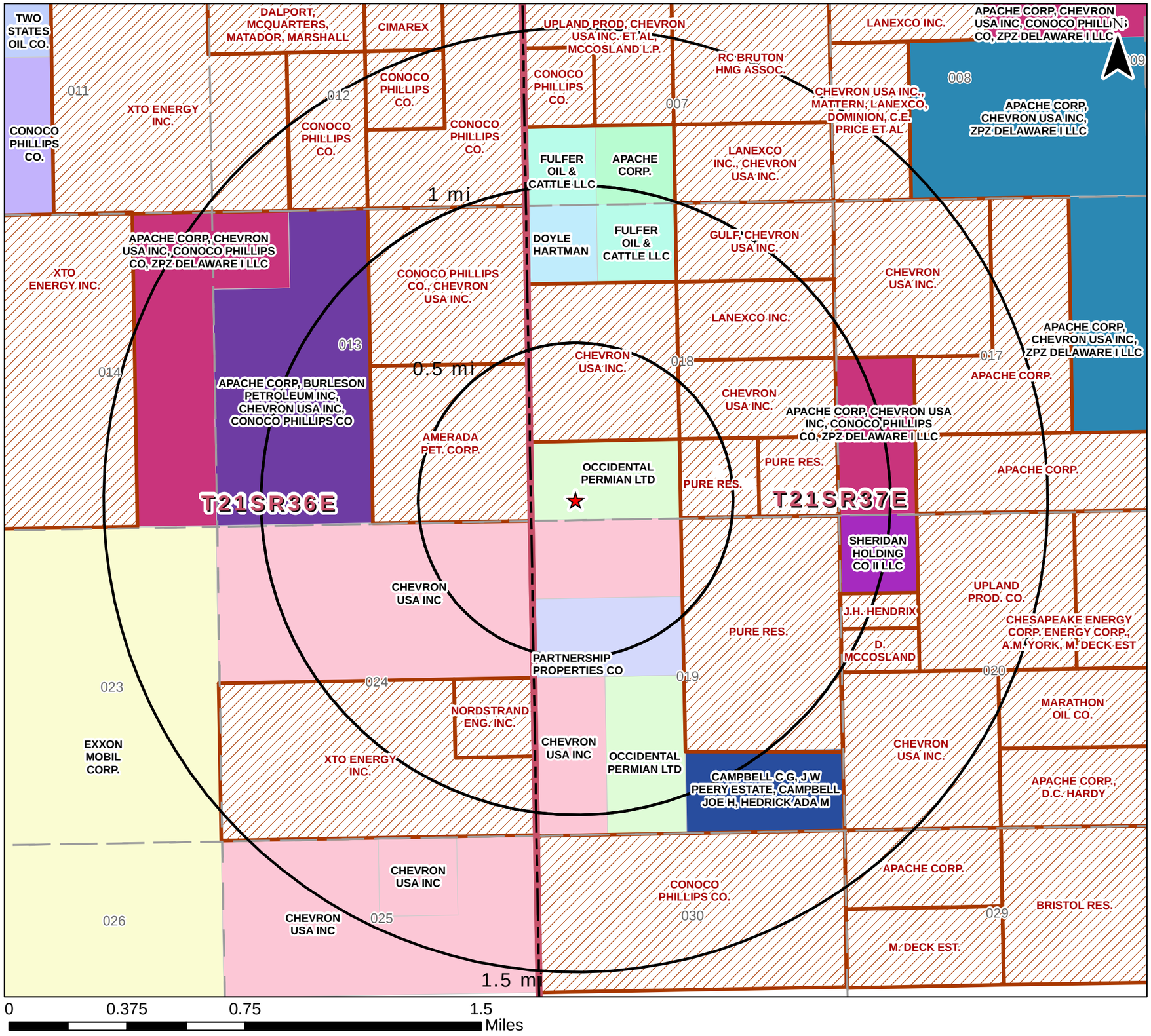
Piper G 2

Lea County, New Mexico

Proj Mgr:		Mapped by:
Dan Arthur	May 29, 2019	Ben Bockelmann

Prepared by:

ALL CONSULTING



Legend

- Proposed SWD
- Private Mineral Leases

BLM Mineral Leases

- APACHE CORP, BURLESON PETROLEUM INC, CHEVRON USA INC, CONOCO PHILLIPS CO
- APACHE CORP, CHEVRON USA INC, CONOCO PHILLIPS CO, ZPZ DELAWARE I LLC
- APACHE CORP, CHEVRON USA INC, ZPZ DELAWARE I LLC
- CAMPBELL C G, J W PEERY ESTATE, CAMPBELL JOE H, HEDRICK ADA M
- SHERIDAN HOLDING CO II LLC

NMSLO Mineral Leases

- APACHE CORP.
- CHEVRON USA INC
- CONOCO PHILLIPS CO.
- DOYLE HARTMAN
- EXXON MOBIL CORP.
- FULFER OIL & CATTLE LLC
- OCCIDENTAL PERMIAN LTD
- PARTNERSHIP PROPERTIES CO
- TWO STATES OIL CO.

Mineral Lease Area of Review

Piper G 2

Lea County, New Mexico

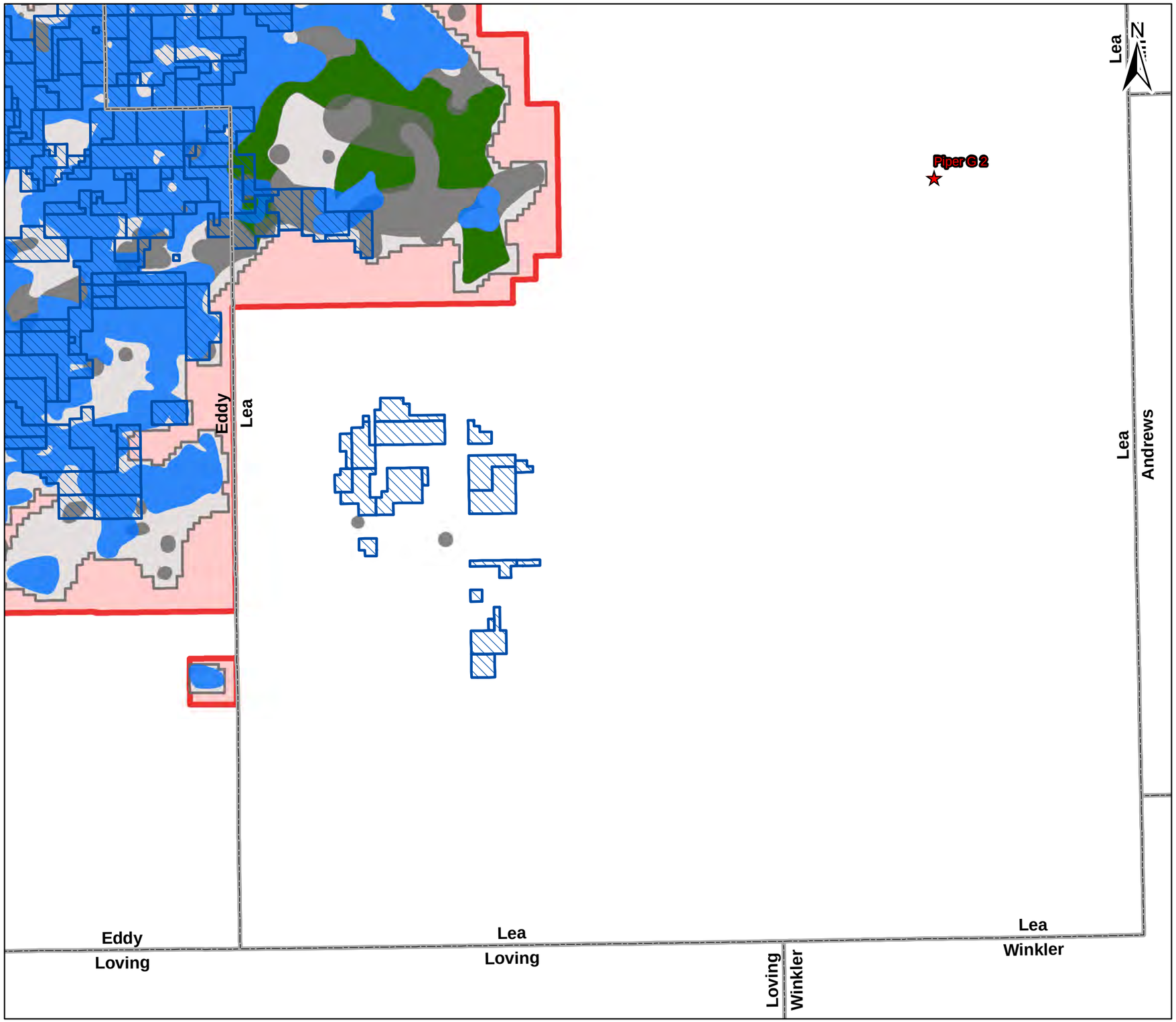
Proj Mgr: Nate Alleman	June 12, 2019	Mapped by: Ben Bockelmann

Prepared by:

ALL CONSULTING

AOR Tabulation for Piper G 2 (Top of Injection Interval: 5,200')							
Well Name	API#	Well Type	Operator	Spud Date	Location (Sec., Tn., Rng.)	Total Vertical Depth (feet)	Penetrate Inj. Zone?
H T MATTERN NCT C #019	30-025-37777	Plugged	CHEVRON U S A INC	4/24/2006	3-18-21S-37E	Plugged (4323)	No
MARSHALL #001	30-025-04626	G	ZACHARY OIL OPERATING CO	12/31/1954	I-13-21S-36E	3705	No
L G WARLICK #002	30-025-20777	O	CHEVRON MIDCONTINENT, L.P.	2/24/1964	B-19-21S-37E	6722	Yes
STATE DC #001	30-025-06663	Plugged	CHEVRON MIDCONTINENT, L.P.	10/22/1962	F-19-21S-37E	Plugged (6700)	Yes
STATE DC #004	30-025-34510	O	CHEVRON MIDCONTINENT, L.P.	10/10/1998	2-19-21S-37E	7200	Yes
STATE DC #003	30-025-34401	O	CHEVRON MIDCONTINENT, L.P.	5/25/1998	F-19-21S-37E	7825	Yes
H T MATTERN NCT C #002	30-025-06658	O	CHEVRON U S A INC	6/21/1944	K-18-21S-37E	3913	No
SUNSHINE STATE #001	30-025-20776	O	FULFER OIL & CATTLE LLC	4/13/1964	C-19-21S-37E	6717	Yes
STATE B #001	30-025-06655	O	FULFER OIL & CATTLE LLC	11/11/1945	N-18-21S-37E	3810	No
LEONARD STATE #004	30-025-35969	O	HORSESHOE OPERATING INC.	5/6/2004	A-24-21S-36E	3968	No
H T MATTERN NCT C COM #003	30-025-06659	Plugged	XTO ENERGY, INC	9/3/1944	3-18-21S-37E	Plugged (3846)	No
PENROC STATE E TR 27 #002	30-025-26491	S	GOODNIGHT MIDSTREAM PERMIAN, LLC	10/19/1979	4-18-21S-37E	6900	Yes
NOLAN RYAN #001	30-025-45349	S	GOODNIGHT MIDSTREAM PERMIAN, LLC	Not Drilled	A-24-21S-36E	Proposed (5,700)	Yes
L G WARLICK #001	30-025-06654	Plugged	MARATHON OIL CO	10/20/1944	O-18-21S-37E	Plugged (3817)	No
SUNSHINE STATE #002	30-025-21035	O	CAMERON OIL & GAS INC	11/18/1964	1-19-21S-37E	3903	No
PARKER ENERGY SWD #005	30-025-38789	S	PARKER ENERGY SUPPORT SERVICES INC.	8/31/2008	A-24-21S-36E	4675	No
STATE E TRACT 27 #001	30-025-26317	S	RICE OPERATING COMPANY	9/3/1979	N-18-21S-37E	6900	Yes

Casing Information for Wells Penetrating the Piper G 2 Injection Zone																					
Well Name	Surface Casing						Intermediate Casing						Production Casing						Tubing			Packer	
	Set Depth	Casing Size	TOC	TOC Method Determined	Sks of Cement	Hole size	Set Depth	Casing Size	TOC	TOC Method Determined	Sks of Cement	Hole Size	Set Depth	Casing Size	TOC	TOC Method Determined	Sks of Cement	Hole Size	Set Depth	Tubing Size	Lining Material	Packer Type	Packer Set Depth
L G WARLICK #002	307	13 3/8	G.S.	RECORDS	300	17 1/2	2960	10	G.S.	RECORDS	950	12	6722	7	1250	Temp. Survey	811	8 3/4	6717	2 7/8	N/A	N/A	6722
STATE DC #001	296	16	G.S.	CIRCULATION	300/150	20	2565	13 3/8, 10 3/4	G.S.	RECORDS	1720	14	6692',6694', 5317',6690'	2 7/8 (4 strings)	3120	*unknown	1850	9 7/8	N/A	N/A	N/A	N/A	N/A
STATE DC #004	1208	8 5/8	G.S.	RECORDS	490	11	N/A	N/A	N/A	N/A	N/A	N/A	7200, DVT 4424	6	3100	CBL	1410	8	N/A	N/A	N/A	N/A	N/A
STATE DC #003	1220	8 5/8	G.S.	CALCULATION	555	11	N/A	N/A	N/A	N/A	N/A	N/A	7825	6	2230	CBL	1783	8	7820	2 7/8	N/A	N/A	7825
SUNSHINE STATE #001	267	13 3/8	G.S.	CIRCULATION	275	17 1/2	2553	10	G.S.	RECORDS	950	12	6717	7	4350	DVT @ 3950, 250 SX, TOC 2650	650	8 3/4	N/A	N/A	N/A	N/A	5614
PENROC STATE E TR 27 #002	1230	9 5/8	G.S.	RECORDS	300, 150	12 1/4	N/A	N/A	N/A	N/A	N/A	N/A	6900	7	5'	RECORDS	1400, 350, 450	8 3/4	N/A	N/A	N/A	N/A	N/A
NOLAN RYAN #001**	1350	9 5/8	G.S.	RECORDS	860	12 1/4	N/A	N/A	N/A	N/A	N/A	N/A	5700	7	G.S.	RECORDS	725	8 3/4	N/A	N/A	N/A	N/A	N/A
STATE E TRACT 27 #001	1225	9 5/8	G.S.	RECORDS	450	12 1/4	N/A	N/A	N/A	N/A	N/A	N/A	6900	7	1340'	RECORDS	1525	8 3/8	N/A	N/A	N/A	N/A	N/A
													Note: *Information can not be found on the OCD Website. See wellbore diagram.										
Note: **All information for this well is proposed.																							



Legend

- Proposed SWD
- Potash Leases
- Ore Type - Measured
- Ore Type - Indicated
- Ore Type - Inferred
- KPLA
- SOPA

Potash Leases
Area of Review

Piper G 2
Lea County, New Mexico

Proj Mgr:		Mapped by:
Dan Arthur	May 30, 2019	Ben Bockelmann

Prepared by:

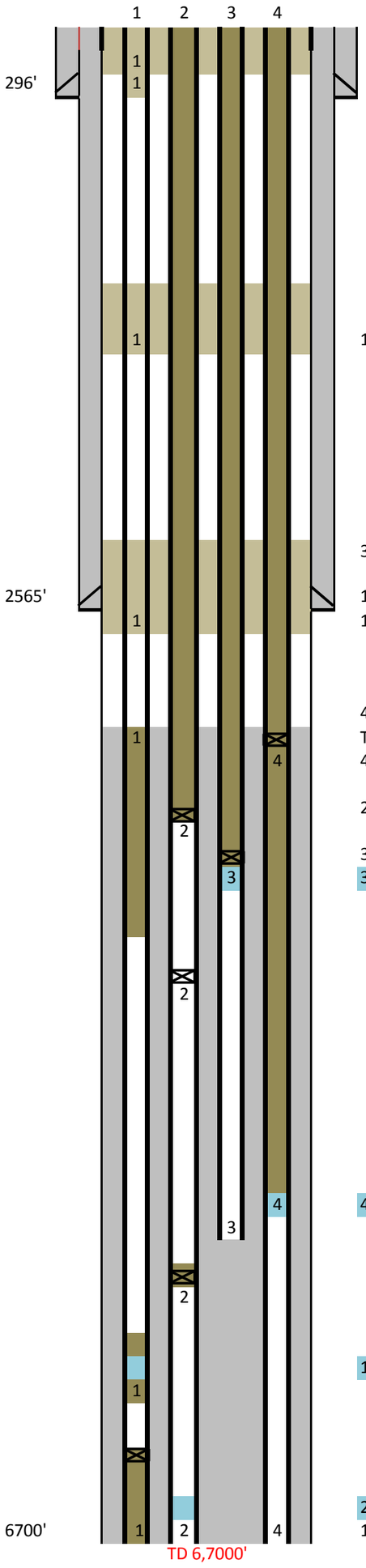
ALL CONSULTING

CHEVRON MIDCONTINENT, L.P. STATE DC #001

API# 30-025-06663

OPERATOR: CHEVRON MIDCONTINENT, L.P.
FIELD: Blinbry, Drinkard, Penrose-Skelly, Paddock
LEASE: STATE DC
COUNTY: LEA
LOCATION: 1980 FNL 1876 FWL

DATE: 4/29/2019
BY: F De Leon
WELL: 1
STATE: New Mexico
Survey: F-19-21S-37E



Scaled Depth G.S.	
0	
206	1- Perf 200' 140 sx cmt, TOC G.S.
309	16" CSG, 20" DH
412	1 - Perf 395' 10 sx cmt, tag 209'
515	
618	
722	
825	
928	
1031	
1134	
1237	
1340	
1443	1 - Perf 1450' 70 sx cmt, TOC @ 1250'
1546	
1649	
1752	
1855	
1958	
2062	
2165	
2268	
2371	3 - 80 sx cmt plug ot G.S.
2474	
2577	10 3/4 CSG, 13 3/4 DH
2680	1 - Perf 2669' 110 sx cmt, TOC 2369'
2783	
2886	
2989	
3092	4 - tag PBTD @ 3152', 80 sx to G.S.
3195	TOC 3120'
3298	4 - CIBP @ 3240' + 35' cmt cap
3402	
3505	2 - tag PBTD @ 3565', 95 sx to G.S.
3608	
3711	3 - tag PBTD @ 3687', 30 sx plug, TOC 2496'
3814	3 - Penrose-Skelly perfs 3684-3827'
3917	
4020	
4123	
4226	
4329	
4432	
4535	
4638	
4742	
4845	
4948	
5051	
5154	
5257	4 - Paddock perfs 5177-5184
5360	
5463	
5566	
5669	
5772	
5875	
5978	1 - Blinebry perfs 5604-5901'
6082	
6185	
6288	
6391	
6494	
6597	2 - Drinkard perfs 6635-6659'
6700	10 3/4 DH

Casing	**O.D.**	top	bottom	weight	Drld hole	Factor	
Conductor							
Surface	16		296		20		
Intermediate	13 3/8, 10 3/4		2565		13 3/4		TOP 3 JOINTS ARE 13 3/8" CASING
Production 1	2 7/8		6694				Blinebry Completion (5604-5901')
Production 2	2 7/8		6692				Drinkard Completion (6635-6659')
Production 3	2 7/8		5317				Penrose-Skelly Completion (3781-3827')
Production 4	2 7/8		6694				Paddock Completion (5177-5184')

Cement	Slurry	Class	Sacks	Volume	Yield	Fillup	bottom	top
Surface							296	G.S.
Intermediate		Diamix + A	1720				2565	G.S.
Production		C	1850					3120

Groundwater	
TD =	6700
PBTD =	
SPUD DATE:	10/22/1962
COMP. DATE:	
CURRENT STATUS:	Plugged
DERRICK FLOOR =	
Elevation =	3518

2 - CIBP @ 3550 + 35' cmt cap
3 - CIBP @ 3761 + 30' cmt cap

1 - 4000-3120' cmt plug

2 - CIBP @ 4210'

4 - 3250-8184 cmt plug, CIBP @ 3240 + 35' cmt cap

2 - CIBP @ 5580+45' cmt cap

1 - 5900-6000' cmt plug

1 - CIBP @ 6340'

1 - 6336-' cmt plug

Attachment 3

Source Water Analyses

PRDUCED WATER FROM BONE SPRING, DELAWARE, DEVONIAN, WOLFCAMP

API	SECTION	TOWNSHIP	RANGE	FORMATION	tds mgL	chloride mgL	bicarbonate mgL	sulfate mgL
3002502424	11	20S	34E	BONE SPRING	29436	16720	634	1142
3002502427	12	20S	34E	BONE SPRING	15429			
3002502427	12	20S	34E	BONE SPRING	180701	108300	1016	670
3002502429	12	20S	34E	BONE SPRING	202606	118100	5196	992
3002502429	12	20S	34E	BONE SPRING	121800			
3002502431	12	20S	34E	BONE SPRING	147229	89640	108	1038
3002531696	2	20S	34E	DELAWARE	152064	102148	404	691
3002532105	2	20S	34E	DELAWARE	296822	215237	143	294
3002532466	2	20S	34E	DELAWARE	340838	245270	229	147
3002502427	12	20S	34E	DELAWARE	214787	132700	208	1816
3002502431	12	20S	34E	DEVONIAN	33414	18570	227	1961
3002502432	13	20S	34E	DEVONIAN	45778	26440	1145	729
3002501912	16	16S	34E	WOLFCAMP	164004	102500	4204	1249
3002501922	20	16S	34E	WOLFCAMP	104541	64290	280	541
3002501922	20	16S	34E	WOLFCAMP	104033	64080	268	515
3002501922	20	16S	34E	WOLFCAMP	105175	65570	207	192
3002501925	21	16S	34E	WOLFCAMP	86355	51800	610	665
3002501928	21	16S	34E	WOLFCAMP	119102	73300	227	454
3002501928	21	16S	34E	WOLFCAMP	35422	19170	979	1949
3002501930	22	16S	34E	WOLFCAMP	30015	14800	750	3300
3002501931	22	16S	34E	WOLFCAMP	87680	53000	301	681
3002501933	28	16S	34E	WOLFCAMP	59960	35100	515	1500
3002501933	28	16S	34E	WOLFCAMP	60309	35350	586	1297
3002501940	30	16S	34E	WOLFCAMP	82422	49890	361	787
3002501944	30	16S	34E	WOLFCAMP	83960	51410	418	641
3002520222	27	16S	34E	WOLFCAMP	85457	51020	544	1201
3001542895	2	23S	31E	WOLFCAMP	119472	73173		1036

EXHIBIT F

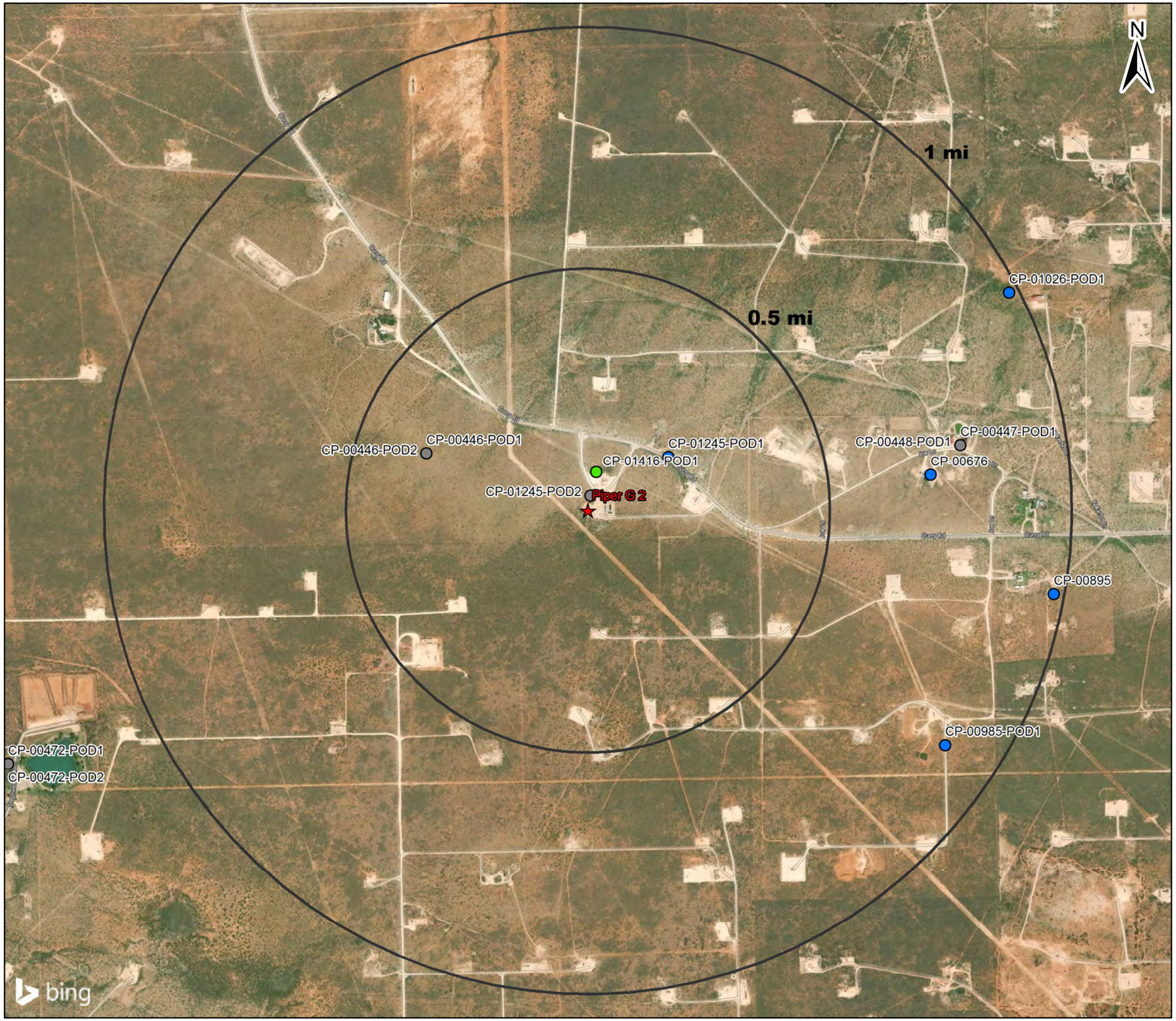
Attachment 4

Injection Formation Water Analyses

Injection Formation Water Analysis																	
Goodnight Midstream Permian, LLC - Glorieta Formation																	
Wellname	API	Latitude	Longitude	Section	Township	Range	Unit	Ftgns	Ftgew	County	State	Company	Field	Formation	Tds_mgL	Chloride_mgL	Bicarbonate_mgL	Sulfate_mgL
V M HENDERSON #002	3002506908	32.4553299	-103.1957474	30	21S	37E	A	660N	660E	LEA	NM		BLINEBRY	GLORIETA	138153	81610	744	2735
APACHE STATE Q #001	3002506116	32.5712776	-103.255394	16	20S	37E	J	1980S	2310E	LEA	NM		MONUMENT	GLORIETA	19087	8250	430	3400
C H WEIR A #007	3002506073	32.5858192	-103.2114944	12	20S	37E	L	1985S	660W	LEA	NM		SKAGGS	GLORIETA	135670	79600	1680	3100

Attachment 5

Water Well Map and Well Data



0 0.25 0.5 1 Miles

Service Layer Credits: © 2019 Microsoft Corporation © 2019 DigitalGlobe ©CNES (2019) Distribution Airbus DS © 2019 HERE

Legend

- ★ Proposed SWD

NMOSE PODs

Status

- Active (6)
- Pending (1)
- Unknown (6)

Water Wells Area of Review

Piper G 2

LEA County, New Mexico

Proj Mgr: Dan Arthur	May 28, 2019	Mapped by: Ben Bockelmann

Prepared by:

ALL CONSULTING

Water Well Sampling Rationale						
Goodnight Midstream Permian, LLC - Piper G 2						
SWD	**Water Wells**	**Owner**	**Available Contact Information**	**Use**	**Sampling Required**	**Notes**
Piper G 2	CP-01245 POD 1	Piper Energy, LLC	Charles Briggs Phone: 505-730-9170 Address: 7011 Rio Grande NW Los Ranchos, NM 87107	Commercial	No	Already sampling two wells within the AOR.
Piper G 2	CP-01245 POD 2	Piper Energy, LLC	Charles Briggs Phone: 505-730-9170 Address: 7011 Rio Grande NW Los Ranchos, NM 87107	Commercial	No	Already sampling two wells within the AOR.
Piper G 2	CP-00446 POD 1	W.J. McCasland & Dorothy Jo McCasland	P.O. Box 156 Eunice, NM 88231 Phone: 505-369-7945	Irrigation, Livestock, Domestic	No	Already sampling two wells within the AOR.
Piper G 2	CP-00446 POD 2	W.J. McCasland & Dorothy Jo McCasland	P.O. Box 156 Eunice, NM 88231 Phone: 505-369-7945	Irrigation, Livestock, Domestic	Yes	Sampled on 01-28-2019. Results are shown below.
Piper G 2	CP-00447 POD 1	Joe E. Sims	P.O. Box 338 Eunice, NM 88231 Phone: 575-394-3665	Domestic One Household	No	Already sampling two wells within the AOR.
Piper G 2	CP-00448 POD 1	Joe E. Sims	P.O. Box 338 Eunice, NM 88231 Phone: 575-394-3665	Domestic One Household	No	Already sampling two wells within the AOR.
Piper G 2	CP-00676	Joe E. Sims	P.O. Box 338 Eunice, NM 88231 Phone: 575-394-3665	Domestic One Household	No	Permit Pending. Application made to re-instate permit No. CP-00676 that expired April 30, 1986. Two water wells within the one mile AOR have already been sampled.
Piper G 2	CP-00895	Joe E. Sims	P.O. Box 338 Eunice, NM 88231 Phone: 575-394-3665	Domestic One Household	No	Permit was approved March 15, 2000. Drilling was completed March 17, 2000. Two water wells within the one mile AOR have already been sampled.
Piper G 2	CP-00985 POD 1	Ricky Ziegler	P.O. Box 1231 Eunice, NM 88231 Phone: 575-394-3665	Livestock Watering	No	Permit approved July 16, 2008. Drilling was completed November, 19, 2008. Two water well within the one mile AOR have already been sampled.
Piper G 2	CP-01026 POD 1	Samantha & David Kerbo	P.O. Box 1861 Eunice, NM 88232 Contact: 575-390-4386 & 575-394-2091	Domestic One Household	Yes	Sampled on 6-12-2019. Results are shown below.
Piper G 2	CP-01416 POD 1	Piper Energy, LLC	Charles Briggs Phone: 505-730-9170 Address: 7011 Rio Grande NW Los Ranchos, NM 87107	Commercial	No	Already sampling two wells within the AOR.

Analysis for CP00446-POD 2 - Attachment XI-2

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

Etech Environmental & Safety Solutions P.O. Box 301 Lovington NM, 88260	Project: GOODNIGHT MIDSTREAM Project Number: NONE GIVEN Project Manager: LANCE CRENSHAW Fax To: (575) 396-1429	Reported: 05-Feb-19 17:18

CP00446
~~CP0046~~-POD2

Sampled: January 28th, 2019

H900304-06 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**215**		5.00	mg/L	1	9012407	AC	30-Jan-19	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	9012407	AC	30-Jan-19	310.1	
Chloride*	**76.0**		4.00	mg/L	1	9012811	AC	31-Jan-19	4500-Cl-B	
Conductivity*	**729**		1.00	uS/cm	1	9013002	AC	30-Jan-19	120.1	
pH*	**8.65**		0.100	pH Units	1	9013002	AC	30-Jan-19	150.1	
Resistivity	**13.7**			Ohms/m	1	9013002	AC	30-Jan-19	120.1	
Specific Gravity @ 60° F	**0.9972**		0.000	[blank]	1	9013007	AC	30-Jan-19	SM 2710F	
Sulfate*	**100**		25.0	mg/L	2.5	9013006	AC	30-Jan-19	375.4	
TDS*	**368**		5.00	mg/L	1	9012801	AC	01-Feb-19	160.1	
Alkalinity, Total*	**176**		4.00	mg/L	1	9012407	AC	30-Jan-19	310.1	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Barium*	<0.050		0.050	mg/L	1	B901226	AES	04-Feb-19	EPA200.7	
Calcium*	**36.1**		0.100	mg/L	1	B901226	AES	04-Feb-19	EPA200.7	
Iron*	**0.067**		0.050	mg/L	1	B901226	AES	04-Feb-19	EPA200.7	
Magnesium*	**20.3**		0.100	mg/L	1	B901226	AES	04-Feb-19	EPA200.7	
Potassium*	**5.22**		1.00	mg/L	1	B901226	AES	04-Feb-19	EPA200.7	
Sodium*	**83.7**		1.00	mg/L	1	B901226	AES	04-Feb-19	EPA200.7	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

June 20, 2019

DAVID ALLEMAN

ALL CONSULTING, LLC

1718 S. CHEYENNE AVE.

TULSA, OK 74119

RE: KERBO

Enclosed are the results of analyses for samples received by the laboratory on 06/13/19 8:15.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-18-11. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Total Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Cardinal Laboratories is accredited through the State of New Mexico Environment Department for:

Method SM 9223-B	Total Coliform and E. coli (Colilert MMO-MUG)
Method EPA 524.2	Regulated VOCs and Total Trihalomethanes (TTHM)
Method EPA 552.2	Total Haloacetic Acids (HAA-5)

Accreditation applies to public drinking water matrices for State of Colorado and New Mexico.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Celey D. Keene

Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: KERBO Project Number: 32.447245 / - 103.410001 Project Manager: DAVID ALLEMAN Fax To: NA	Reported: 20-Jun-19 09:13

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
CP - 01026 - POD 1	H902048-01	Water	12-Jun-19 16:50	13-Jun-19 08:15

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: KERBO Project Number: 32.447245 / - 103.410001 Project Manager: DAVID ALLEMAN Fax To: NA	Reported: 20-Jun-19 09:13

CP - 01026 - POD 1

H902048-01 (Water)

Analyte	Result	MDL	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Notes
Cardinal Laboratories										
Inorganic Compounds										
Alkalinity, Bicarbonate	**200**		5.00	mg/L	1	9061405	AC	14-Jun-19	310.1	
Alkalinity, Carbonate	<1.00		1.00	mg/L	1	9061405	AC	14-Jun-19	310.1	
Chloride*	**32.0**		4.00	mg/L	1	9061310	AC	18-Jun-19	4500-Cl-B	
Conductivity*	**508**		1.00	uS/cm	1	9061403	AC	14-Jun-19	120.1	
pH*	**7.68**		0.100	pH Units	1	9061403	AC	14-Jun-19	150.1	
Resistivity	**19.7**			Ohms/m	1	9061403	AC	14-Jun-19	120.1	
Sulfate*	**40.9**		10.0	mg/L	1	9061708	AC	17-Jun-19	375.4	
TDS*	**376**		5.00	mg/L	1	9061308	AC	14-Jun-19	160.1	
Alkalinity, Total*	**164**		4.00	mg/L	1	9061405	AC	14-Jun-19	310.1	
TSS*	<2.00		2.00	mg/L	1	9061207	AC	14-Jun-19	160.2	
Green Analytical Laboratories										
Total Recoverable Metals by ICP (E200.7)										
Barium*	<0.250		0.250	mg/L	5	B906147	AES	19-Jun-19	EPA200.7	
Calcium*	**64.8**		0.500	mg/L	5	B906147	AES	19-Jun-19	EPA200.7	
Hardness as CaCO3	**241**		3.31	mg/L	5	[CALC]	AES	19-Jun-19	2340 B	
Iron*	<0.250		0.250	mg/L	5	B906147	AES	19-Jun-19	EPA200.7	
Magnesium*	**19.3**		0.500	mg/L	5	B906147	AES	19-Jun-19	EPA200.7	
Potassium*	<5.00		5.00	mg/L	5	B906147	AES	19-Jun-19	EPA200.7	
Sodium*	**14.4**		5.00	mg/L	5	B906147	AES	19-Jun-19	EPA200.7	
Strontium*	**1.39**		0.500	mg/L	5	B906147	AES	19-Jun-19	EPA200.7	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: KERBO Project Number: 32.447245 / - 103.410001 Project Manager: DAVID ALLEMAN Fax To: NA	Reported: 20-Jun-19 09:13

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061207 - Filtration										
Blank (9061207-BLK1)				Prepared: 13-Jun-19 Analyzed: 14-Jun-19						
TSS	ND	2.00	mg/L							
Duplicate (9061207-DUP1)	**Source: H902002-01**			Prepared: 13-Jun-19 Analyzed: 14-Jun-19						
TSS	265	2.00	mg/L		218			19.5	52.7	
Batch 9061308 - Filtration										
Blank (9061308-BLK1)				Prepared: 13-Jun-19 Analyzed: 14-Jun-19						
TDS	ND	5.00	mg/L							
LCS (9061308-BS1)				Prepared: 13-Jun-19 Analyzed: 14-Jun-19						
TDS	436		mg/L	527		82.7	80-120			
Duplicate (9061308-DUP1)	**Source: H902024-03**			Prepared: 13-Jun-19 Analyzed: 14-Jun-19						
TDS	436	5.00	mg/L		439			0.686	20	
Batch 9061310 - General Prep - Wet Chem										
Blank (9061310-BLK1)				Prepared: 13-Jun-19 Analyzed: 18-Jun-19						
Chloride	ND	4.00	mg/L							
LCS (9061310-BS1)				Prepared: 13-Jun-19 Analyzed: 18-Jun-19						
Chloride	96.0	4.00	mg/L	100		96.0	80-120			
LCS Dup (9061310-BSD1)				Prepared: 13-Jun-19 Analyzed: 18-Jun-19						
Chloride	100	4.00	mg/L	100		100	80-120	4.08	20	

Cardinal Laboratories

*=Accredited Analyte

Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: KERBO Project Number: 32.447245 / - 103.410001 Project Manager: DAVID ALLEMAN Fax To: NA	Reported: 20-Jun-19 09:13

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061403 - General Prep - Wet Chem										
LCS (9061403-BS1)				Prepared & Analyzed: 14-Jun-19						
Conductivity	45800		uS/cm	50000		91.6	80-120			
pH	7.09		pH Units	7.00		101	90-110			
Duplicate (9061403-DUP1)	**Source: H902047-01**			Prepared & Analyzed: 14-Jun-19						
pH	7.48	0.100	pH Units		7.52			0.533	20	
Conductivity	7110	1.00	uS/cm		7170			0.840	20	
Resistivity	1.41		Ohms/m		1.39			0.840	20	
Batch 9061405 - General Prep - Wet Chem										
Blank (9061405-BLK1)				Prepared & Analyzed: 14-Jun-19						
Alkalinity, Carbonate	ND	1.00	mg/L							
Alkalinity, Bicarbonate	5.00	5.00	mg/L							
Alkalinity, Total	4.00	4.00	mg/L							
LCS (9061405-BS1)				Prepared & Analyzed: 14-Jun-19						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120			
Alkalinity, Bicarbonate	305	12.5	mg/L				80-120			
Alkalinity, Total	250	10.0	mg/L	250		100	80-120			
LCS Dup (9061405-BSD1)				Prepared & Analyzed: 14-Jun-19						
Alkalinity, Carbonate	ND	2.50	mg/L				80-120		20	
Alkalinity, Bicarbonate	318	12.5	mg/L				80-120	4.02	20	
Alkalinity, Total	260	10.0	mg/L	250		104	80-120	3.92	20	
Batch 9061708 - General Prep - Wet Chem										
Blank (9061708-BLK1)				Prepared & Analyzed: 17-Jun-19						
Sulfate	ND	10.0	mg/L							

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Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: KERBO Project Number: 32.447245 / - 103.410001 Project Manager: DAVID ALLEMAN Fax To: NA	Reported: 20-Jun-19 09:13

Inorganic Compounds - Quality Control

Cardinal Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9061708 - General Prep - Wet Chem										
LCS (9061708-BS1)				Prepared & Analyzed: 17-Jun-19						
Sulfate	16.2	10.0	mg/L	20.0		81.2	80-120			
LCS Dup (9061708-BSD1)				Prepared & Analyzed: 17-Jun-19						
Sulfate	16.1	10.0	mg/L	20.0		80.4	80-120	1.11	20	

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Analytical Results For:

ALL CONSULTING, LLC 1718 S. CHEYENNE AVE. TULSA OK, 74119	Project: KERBO Project Number: 32.447245 / - 103.410001 Project Manager: DAVID ALLEMAN Fax To: NA	Reported: 20-Jun-19 09:13

Total Recoverable Metals by ICP (E200.7) - Quality Control

Green Analytical Laboratories

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B906147 - Total Rec. 200.7/200.8/200.2										
Blank (B906147-BLK1)				Prepared: 17-Jun-19 Analyzed: 19-Jun-19						
Sodium	ND	1.00	mg/L							
Potassium	ND	1.00	mg/L							
Magnesium	ND	0.100	mg/L							
Iron	ND	0.050	mg/L							
Strontium	ND	0.100	mg/L							
Calcium	ND	0.100	mg/L							
Barium	ND	0.050	mg/L							
LCS (B906147-BS1)				Prepared: 17-Jun-19 Analyzed: 19-Jun-19						
Potassium	8.34	1.00	mg/L	8.00		104	85-115			
Strontium	4.26	0.100	mg/L	4.00		106	85-115			
Barium	2.07	0.050	mg/L	2.00		104	85-115			
Calcium	4.15	0.100	mg/L	4.00		104	85-115			
Magnesium	20.2	0.100	mg/L	20.0		101	85-115			
Sodium	3.63	1.00	mg/L	3.24		112	85-115			
Iron	4.05	0.050	mg/L	4.00		101	85-115			
LCS Dup (B906147-BSD1)				Prepared: 17-Jun-19 Analyzed: 19-Jun-19						
Strontium	4.19	0.100	mg/L	4.00		105	85-115	1.64	20	
Sodium	3.48	1.00	mg/L	3.24		107	85-115	4.43	20	
Calcium	4.04	0.100	mg/L	4.00		101	85-115	2.61	20	
Magnesium	19.9	0.100	mg/L	20.0		99.3	85-115	1.67	20	
Barium	2.03	0.050	mg/L	2.00		101	85-115	2.12	20	
Iron	3.99	0.050	mg/L	4.00		99.7	85-115	1.65	20	
Potassium	8.19	1.00	mg/L	8.00		102	85-115	1.81	20	

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Notes and Definitions

ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C
	Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

CARDINAL Laboratories

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240
(575) 393-2326 FAX (575) 393-2476

Company Name:	All Consulting	**BILL TO**	
Project Manager:		P.O. #:	
Address:		Company:	
City:	State: Zip:	Attn:	
Phone #:	Fax #:	Address:	
Project #:	Project Owner:	City:	
Project Name:	Kerbo	State: Zip:	
Project Location:	32.447245 - 103.410001	Phone #:	
Sampler Name:	Rolando Hernandez	Fax #:	

FOR LAB USE ONLY				MATRIX						PRESERV.			SAMPLING		ANALYSIS REQUEST										
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Cation / Anions	TSS	Resistivity	T. Hardness 200.7	Ba, Fe, Sr 200.7						
H902048																									
1	CP-01026-POD1	G	2	✓							✓		6-12-19	4:50pm	✓	✓	✓	✓	✓						

Relinquished By:	Date: 6-13-19	Received By:	Phone Result: ☐ Yes ☐ No Add'l Phone #:
	Time: 8:15		Fax Result: ☐ Yes ☐ No Add'l Fax #:
Relinquished By:	Date:	Received By:	REMARKS: Rush!
	Time:		

Delivered By: (Circle One)	Sample Condition	CHECKED BY:
Sampler - UPS - Bus - Other: -0.1°C #197	Cool: ☑ Yes ☐ No Intact: ☑ Yes ☐ No	(Initials) TO.

Attachment 6

Public Notice Affidavit and Notice of Application Confirmations

Affidavit of Publication

STATE OF NEW MEXICO
COUNTY OF LEA

I, Todd Bailey, Editor 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
June 05, 2019
and ending with the issue dated
June 05, 2019.

Editor

Sworn and subscribed to before me this
5th day of June 2019.

Business Manager

My commission expires
January 29, 2023
(Seal)

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

LEGAL LEGAL

LEGAL NOTICE
JUNE 5, 2019

APPLICATION FOR AUTHORIZATION TO INJECT

NOTICE IS HEREBY GIVEN: That Goodnight Midstream, 5910 N Central Expressway, Suite 850, Dallas, TX 75206, 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: Piper G 2
SW ¼ SW ¼, Section 18, Township 21S, Range 37E
325' FSL & 775' FWL
Lea County, NM

NAME AND DEPTH OF DISPOSAL ZONE: Glorieta (5,200' – 5,600')
EXPECTED MAXIMUM INJECTION RATE: 20,000 Bbls/day
EXPECTED MAXIMUM INJECTION PRESSURE: 1,040 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.
#34236

67115320 00229210

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

Piper G 2 - Notice of Application Recipients				
Entity	**Address**	**City**	**State**	**Zip Code**
Landowner				
New Mexico State Land Office	P.O. Box 1148	Santa Fe	NM	87504
OCD District				
NMOCD District 1	1625 N. French Drive	Hobbs	NM	88240
Mineral Owner				
New Mexico State Land Office	P.O. Box 1148	Santa Fe	NM	87504
Leasehold Operators				
Amerada Pet. Corp.	P.O. Box 591	Midland	TX	79702
Cameron Oil & Gas Inc	P.O. Box 1455	Roswell	NM	88202
Chevron Midcontinental, L.P.	6301 Deauville	Midland	TX	79706
Chevron USA Inc.	6301 Deauville	Midland	TX	79706
Conoco Phillips	P.O. Box 7500	Bartlesville	OK	74005
Fulfer Oil & Cattle, LLC	P.O. Box 1224	Jal	NM	88252
Goodnight Midstream Permian, LLC	5910 N. Central Expressway, Suite 850	Dallas	TX	75206
Horseshoe Operating Inc.	110 W. Louisiana Ave Suite 200	Midland	TX	79701
Occidental Permian LTD	5 Greenway Plaza, Suite 110	Houston	TX	77046
Parker Energy Support Services Inc.	P.O. Box 1957	Eunice	NM	88231
Partnership Properties Co	P.O. Box 2250	Denver	CO	80201
Pure Res.	500 W. Illinois Ave.	Midland	TX	79701
Rice Operating Company	112 W. Taylor St	Hobbs	NM	88240
Zachary Oil Operating Co	P.O. Box 1969	Eunice	NM	88231
Notes:				

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Midland TX 79706-2964

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