MODRALL SPERLING

LAWYERS

August 24, 2018

Jennifer L. Bradfute
505.848.1845
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jlb@modrall.com

Florene Davidson
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, NM 87505

Re: APPLICATION OF NGL WATER SOLUTIONS PERMIAN, LLC TO APPROVE SALT WATER DISPOSAL WELLS IN LEA AND EDDY COUNTY, NEW MEXICO.

Case 16438

Dear Ms. Davidson:

Enclosed please find three copies of the following:

1. NGL Water Solutions Permian, LLC's Application – Jack Tank No. _____ .

Thank you for your assistance. Please contact me if you have any questions.

Sincerely,

Zina Crum
Legal Assistant to
Jennifer L. Bradfute

JLB/zc
Enclosure

Modrall Sperling
Roehl Harris & Sisk
P.A.

Bank of America
Centre
500 Fourth Street
NW
Suite 1000
Albuquerque,
New Mexico 87102

PO Box 2168
Albuquerque,
New Mexico
87103-2168

Tel: 505.848.1800

STATE OF NEW MEXICO
DEPARTMENT OF ENERGY, MINERALS AND NATURAL RESOURCES
OIL CONSERVATION DIVISION

APPLICATION OF NGL WATER SOLUTIONS PERMIAN, LLC TO APPROVE SALT WATER DISPOSAL WELL IN LEA COUNTY, NEW MEXICO.

CASE NO. 16438

APPLICATION

NGL Water Solutions Permian, LLC ("NGL"), OGRID No. 372338, through its undersigned attorneys, hereby makes this application to the Oil Conservation Division pursuant to the provisions of N.M. Stat. Ann. § 70-2-12, for an order approving drilling of a salt water disposal well in Lea County, New Mexico. In support of this application, NGL states as follows:

(1) NGL proposes to drill the Jack Tank SWD #1 well at a surface location 1,400 feet from the North line and 1,853 feet from West line of Section 5, Township 24 South, Range 32 East, NMPM, Lea County, New Mexico for the purpose of operating a salt water disposal well.

(2) NGL seeks authority to inject salt water into the Devonian and Silurian formations at a depth of 16,800' – 17,809'.

(3) NGL further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day.

(4) NGL anticipates using an average pressure of 2,520 psi for this well, and it requests that a maximum pressure of 3,360 psi be approved for the well.

(5) A proposed C-108 for the subject well is attached hereto in Attachments A.

(6) The granting of this application will avoid the drilling of unnecessary wells, will prevent waste, and will protect correlative rights.

WHEREFORE, NGL requests that this application be set for hearing before an Examiner of the Oil Conservation Division on October 4, 2018; and that after notice and hearing, the Division enter its order approving this application.

Respectfully submitted,

MODRALL, SPERLING, ROEHL, HARRIS
& SISK, P.A.

By: _____

Jennifer Bradfute
Deana Bennett
Post Office Box 2168
Bank of America Centre
500 Fourth Street NW, Suite 1000
Albuquerque, New Mexico 87103-2168
Telephone: 505.848.1800
Attorneys for Applicant

CASE NO. 16438: Application of NGL Water Solutions Permian, LLC for approval of salt water disposal well in Lea County, New Mexico. Applicant seeks an order approving disposal into the Devonian and Silurian formations through the Jack Tank SWD #1 well. NGL proposes to drill this well at a surface location 1,400 feet from the North line and 1,853 feet from West line of Section 5, Township 24 South, Range 32 East, NMPM, Lea County, New Mexico. The target injection interval is the Devonian and Silurian formations at a depth of 16,800' – 17,809'. NGL further seeks approval of the use of 7 inch tubing inside the surface and intermediate casings and 5 ½ inch tubing inside the liner and requests that the Division approve a maximum daily injection rate for the well of 50,000 bbls per day. Said area is located approximately 31 miles west of Jal, New Mexico.

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: NGL WATER SOLUTIONS PERMIAN, LLC

ADDRESS: 1509 W WALL ST // STE 306 // MIDLAND, TX 79701

CONTACT PARTY: SARAH JORDAN PHONE: (432) 685-0005 x1989

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: Christopher B. Weyand TITLE: Consulting Engineer

SIGNATURE: _____ DATE: 8/21/2018

E-MAIL ADDRESS: chris@lonquist.com

* If the information required under Sections VI, VIII, X, and XI above h[illegible] 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 ap[illegible]

EXHIBIT
A

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.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: NGL WATER SOLUTIONS PERMIAN, LLC

WELL NAME & NUMBER: JACK TANK SWD #1

WELL LOCATION: 1,400' FNL & 1,853' FWL | F | 05 | 24S | 32E

FOOTAGE LOCATION | UNIT LETTER | SECTION | TOWNSHIP | RANGE

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: 24.000" Casing Size: 20.000"

Cemented with: 1,616 sx. *or* _____ ft^3

Top of Cement: Surface Method Determined: Circulation

1st Intermediate Casing

Hole Size: 17.500" Casing Size: 13.375"

Cemented with: 2,713 sx. *or* _____ ft^3

Top of Cement: Surface Method Determined: Circulation

2nd Intermediate Casing

Hole Size: 12.250" Casing Size: 9.625"

Cemented with: 3,218 sx. *or* _____ ft^3

Top of Cement: Surface Method Determined: Circulation

Production Liner

Hole Size: 8.500"

Casing Size: 7.625"

Cemented with: 350 sx.

or _____ ft^3

Top of Cement: 11,700'

Method Determined: Calculation

Total Depth: 16,800'

Injection Interval

16,800 feet to 17,809 feet

(Open Hole)

Side 2

INJECTION WELL DATA SHEET

Tubing Size: 7", 26 lb/ft, P-110, TCPC from 0'- 11,600' and 5.500", 17 lb/ft, P-110 TCPC from 11,600'- 16,750'
Lining Material: Duoline

Type of Packer: 7.625" x 5.5" TCPC Permanent Packer with High Temp Elastomer and Full Inconel

Packer Setting Depth: 16,750'

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

Additional Data

1. Is this a new well drilled for injection? ___X___Yes _____No

   If no, for what purpose was the well originally drilled? N/A

2. Name of the Injection Formation: Devonian, Silurian, Fusselman and Montoya (Top 100')

3. Name of Field or Pool (if applicable): SWD; Silurian-Devonian

4. Has the well ever been perforated in any other zone(s)? List all such perforated intervals and give plugging detail, i.e. sacks of cement or plug(s) used. No, new drill.

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area:
   Delaware: 4,759
   Bone Spring: 8,559
   Wolfcamp: 11,969

NGL Jack Tank SWD #1 Drilling Prognosis

McCloy Ranch Drilling Project	Structural tops from regional mapping	Priority #2 - Jack Tank SWD 1 KMZ #11, (179' low to Todd Fed well)		
Well				
UIC/TXWDB no.		Permit no		
County/Area	Structure from regional mapping	Eddy Co., NM		3 mi SE of 015-20242 and Red Road SWD prospect
Loc				
API/ logs	Jack Tank 1	Jack Tank 1	17649	
Depths		Depth	Elev	Thickness
KB Elev			3664	
Surface Elev			3636	28
Quaternary				
Top Fresh water				
Cenozoic Alluvium		28	3636	390
Cretaceous		not present		
Triassic		418	3246	238
Permian Dewey Lake		656	3008	135
Rustler				
Rustler Anhydrite		791	2873	314
Salado Siliciclastics				
Salado Anh (base Silic)		1105	2559	194
Top Salt (Tx) NM		1299	2365	3240
Castile				
Base Salt (Bx) NM		4539	-875	220
Prog Datum		4759	-1095	
Delaware Mtn Group (shale mkr)	-1095	4759	-1095	13
Lamar Limestone		4772	-1108	52
Bell Canyon (Ramsey sand)		4824	-1160	1069
Cherry Canyon	-2050	5893	-2229	1781
Brushy Canyon	-3600	7674	-4010	885
Bone Spring (Leonard)	-5000	8559	-4895	3410
Bone Spring Lime 1				
Bone Spring Sd 1				
Bone Spring Lime 2				
Bone Spring Sd 2				
Bone Spring Lime 3				
Bone Spring Sd 3				
Wolfcamp	-8280	11969	-8305	1383
Penn	-9670	13352	-9688	217
Strawn (NM)		13569	-9905	160
Atoka (NM)	-10220	13729	-10065	860
Datum (NM)				
Morrow	-10700	14589	-10925	43
Morrow Lime (NM)		14632	-10968	247
Morrow Clastic (NM)		14879	-11215	130
Mid Morrow		15009	-11345	300
Lwr Morrow		15309	-11645	530
Mississippian		15839	-12175	40
Barnett	-12000	15879	-12215	295
Miss Lst	-12370	16174	-12510	395
Woodford	-12440	16569	-12905	200
Devonian (Sil-Dev)	-13070	16769	-13105	460
Silurian				
Fusselman	-13600	17229	-13565	480
Montoya	-14110	17709	-14045	364
Simpson	-14140	18073	-14409	500
Ellenburger	-14840	18573	-14909	650
Cambrian/Granite Wash		19223	-15559	150
Precambrian		19373	-15709	
TD	T/MNTY +100'	17649	-13985	T/MNTY +100'
Fm at TD		203MNTY		
Comments		estimated SMPS, ELBG, GRWS from TXWDB maps		

NGL Energy Partners LP	NGL Jack Tank SWD #1 Vertical Injection - Devonian, Silurian, Fusselman	Location - Eddy County NM	TD: 17809'	Directions to Site -		

Geologic Tops (MD ft)	Section	Bit/BHA	Casing	Logging	Cement (HOLD)	Injection String
Triassic - 418' Permian Dewey Lake - 656' Rustler Anhydrite - 791' Salado Anh - 1105' **Surface TD - 1250'**	**Surface** Drill 24" 0' - 1250 Set and Cement 20" Casing	24" Tricone 9-5/8" x 8" MM 9 jts: 8" DC 21 jts: 5" HWDP 5 " DP to surface	1250' of 20" 94# J55 BTC Centralizers - bottom 2 joints and every 3rd jt thereafter, Cement basket 5th jt from surface	No Logs	Thixotropic Cement 13.2 ppg Class C - 1,616 sks 3hr TT 25% Excess 1000psi CSD after 10hrs	11600' of 7" P110 26# TCPC 5150' of 5-1/2" P110 17# TCPC Duoline Internally Coated Injection Tubing
Top Salt - 1299' Base Salt - 4539' Delaware Mtn Group - 4759' **1st Int TD - 4770'**	**1st Intermediate** Drill 3520' of 17-1/2" Hole 1250' - 4770' Set and Cement 13-3/8" Casing	17-1/2" PDC 9-5/8" x 8" MM 9 jts: 8" DC 21 jts: 5" HWDP 5 " DP to surface	5M A Section Casing Bowl 4770' of 13-3/8" 68# L80 BTC Centralizers - bottom jt, every 3rd joint in open hole and 2 jt inside the surface casing	Mudlogger on site by 1250'	13.2 ppg Class C - 2,713 sks 4hr TT 10% Excess 1000psi CSD after 10 hrs Cement to Surface	
ECP DV Tool - 4765' Lamar Limestone - 4772' Bell Canyon - 4824' Cherry Canyon - 5893' Brushy Canyon - 7674' **DV Tool - 8600'** Bone Spring - 8559' **3rd Int Liner Top - 11700'** Wolfcamp - 11969' **2nd Int TD - 12200'**	**2nd Intermediate** Drill 7430' of 12-1/4" Hole 4770' - 12200' Set 9-5/8" Intermediate Casing and Cement in 3 Stages	12-1/4" PDC 8" MM 9jts: 8" DC 8" Drilling Jars 21 jts: 5" HWDP 5" DP to Surface	10M B Section 12200' of 9-5/8" 53.5# HCL80 BTC **Special Drift to 8.535"** Externally Coat 3850' Between DV Tools DV tool at at 8600' ECP DV Tool 15' Inside Previous Casing Centralizers - bottom jt, 100' aside of DV tool, every 3rd joint in open hole and 5 within the surface casing	MWD GR Triple combo + CBL of 13-3/8" Casing	**Stage 3:** 13.2 ppg Class C - 1,068 sk 5hr TT 10% XS 1000psi CSD after 10 hrs Cement to Surface **Stage 2:** 13.2 ppg Class H - 1,094 sks 5hr TT 10% XS 1000psi CSD after 10 hrs Cement to Surface **Stage 1:** 13.2 ppg Class H - 1,056 sks 6hr TT 10% XS 1000psi CSD after 10 hrs Cement to Surface	
Penn - 13352' Strawn - 13569' Atoka - 13729' Morrow - 14589' Miss Lst - 16174' Woodford - 16569' Perm Packer - 16750' **3rd Int TD - 16800'**	**3rd Intermediate** Drill 4600' of 8-1/2" Hole 12200' - 16800' Set 7-5/8" Liner and Cement in Single Stage	8-1/2" PDC 6-3/4" MM 9 jts: 6" DC 21 jts: 5" HWDP 5" DP to Surface	5100' of 7-5/8" 39# Q125 - DTL (FJ4) FJ (Gas Tight) VersaFlex Packer Hanger Centralizers on and 1 jt above shoe jt and then every 2nd jt.	MWD GR Triple combo, CBL of 9-5/8" Casing	15.6 ppg Class H - 350 sks 8hr TT 10% Excess 1000psi CSD after 10hrs	7-5/8" x 5-1/2" TCPC Permanent Packer with High Temp Elastomer and full Inconel 925 trim
Devonian - 16769' Fusselman - 17229' Montoya - 17709' TD - 17809'	**Injection Interval** Drill 1009' of 6-1/2" hole 16800' - 17809'	6-1/2" PDC 4-3/4"MM 9 jts: 4-3/4" DC 4-3/4" Drilling Jars 18 jts: 4" FH HWDP 4" FH DP to Surface	Openhole completion	MWD GR Triple Combo with FMI, CBL of 7-5/8"	Displace with 3% KCl (or heavier brine if necessary)	

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

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

Form C-10
Revised August 1
201
Submit one copy to appropriat
District Offic

☐ AMENDED REPOR

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name

[4] Property Code	[5] Property Name	[6] Well Number
	JACK TANK SWD	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
	NGL WATER SOLUTIONS	3605.00'±

[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
F	05	24 S	32 E	N/A	1400'	NORTH	1853'	WEST	EDDY

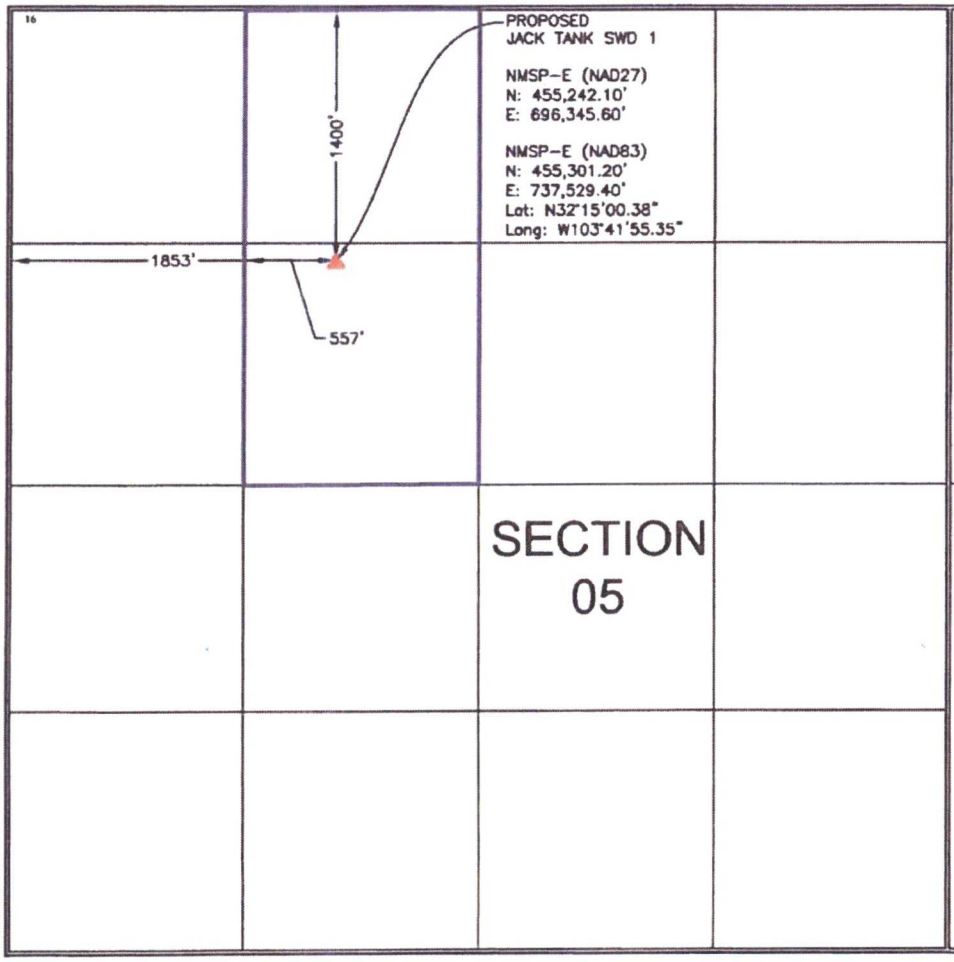
[11] Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

[16]



[17] OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete the best of my knowledge and belief, and that this organization either owns working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this locatic pursuant to a contract with an owner of such a mineral or working interest or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division

Signature Date

Printed Name

E-mail Address

[18] SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat wa plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

8/29/18
Date of Survey

Signature and Seal of Professional Surveyor

CODY A. CLARK
NEW MEXICO
23001
PROFESSIONAL SURVEYOR

Cody A. Clark 23001
Certificate Number