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# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW MEXICO

and	)
STATE OF NEW MEXICO, ex rel. STATE ENGINEER,	)
ENGINEER,	)
Plaintiffs,	)
1	) No. 01cv00072 BB-WDS
and	) ) ZUNI RIVER BASIN
ZUNI INDIAN TRIBE, NAVAJO NATION,	) ADJUDICATION
Plaintiffs in Intervention,	)
v.	) Subfile No. ZRB-1-0100
A & R PRODUCTIONS, et al.	)
Defendants.	) )

# DECLARATION OF KIT F. NIELSEN, P.E.

- 1. I, KIT F. NIELSEN, P.E. am employed by Natural Resources Consulting Engineers, Inc. (NRCE), as a Senior Groundwater Engineer. NRCE has been contracted by the U.S. Department of Justice to perform the Hydrographic Survey in the Zuni River Basin Adjudication.
- 2. I am a registered Professional Engineer in the State of New Mexico, License No. 16417. I have a MS in Civil Engineering from Colorado State University, and a BS in Environmental Engineering from the University of Florida. My current title is Senior Groundwater Engineer and I have worked in the area of groundwater resources for approximately 20 years and have been an NRCE employee since 2003.

- 3. My duties related to the Zuni River Basin Adjudication are to coordinate and implement the Hydrographic Survey portion of the project, primarily related to the non-Indian water users in the basin. This includes identifying and field surveying hydrographic features, entering the data into and maintaining a hydrographic database, determining ownership from county records, consultations with water users, updating and preparing consent orders, preparing default judgment orders, and technical support to the U.S. Department of Justice.
- 4. I have consulted NRCE's records and the Office of the State Engineer (OSE) for the State of New Mexico WATERS database concerning Subfile No. ZRB-1-0100.
- 5. The Zuni River Basin Adjudication Hydrographic Survey Report for Sub Areas 4 and 8 identified the well water uses listed in the consent order prepared for Subfile No. ZRB-1-0100 based on information contained in the WATERS database. When the consent order was prepared, and as late as January 2, 2007, the database indicated livestock watering as the use for well 8B-2-W01. This appears to be in error as the database was subsequently changed to reflect the use of the well as a 72-12-1 Domestic One Household. My research reveals that the initial application listed "household" as the intended use of the well. When the well was drilled in 1997 the original permit had expired and although a new application was submitted to the OSE in June 1998 listing "livestock watering" as the intended use of the well, the OSE approved the well for domestic use. After initially indicating in the WATERS database that the well was approved for livestock watering, OSE subsequently changed the database to indicate domestic household use.
- 6. Upon on my examination of NRCE's records and current WATERS data, the Zuni River Basin Adjudication Hydrographic Survey Report for Sub Areas 4 and 8 as

amended to reflect all currently assembled data indicates the right(s) of the JOANN STRICKLAND TRUST to divert and use the public waters of the Zuni River Stream System. Sub-Areas 4 and 8, should be as set forth below:

# JOANN STRICKLAND TRUST Subfile No. ZRB-1-0100

## STOCK POND

Map Label: 8A-2-SP01

Purpose of Use: LIVESTOCK

Priority date: 1/1/1940

Source of Water: Surface Runoff

Point of Diversion: Not Applicable

**Amount of Water:** 

**Depth (ft):** 4.0

Surface Area (sq.ft): 4,960

Storage Impoundment Volume (ac-ft): 0.273

**Pond Location:** As shown on Hydrographic Survey Map 8A-2

S. 35 T. 09N R. 14W 1/4, 1/16, 1/64: SE NW SW

**X(ft):** 2,588,005 **Y(ft):** 1,442,231

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Dam height (if greater than 9 ft):

#### STOCK POND

Map Label: 8A-2-SP27

**Purpose of Use:** LIVESTOCK

Priority date: 1/1/1930

Source of Water: Surface Runoff

Point of Diversion: Not Applicable

**Amount of Water:** 

**Depth (ft):** 3.0

Surface Area (sq.ft): 7,611

Storage Impoundment Volume (ac-ft): 0.315

**Pond Location:** As shown on Hydrographic Survey Map 8A-2

S. 35 T. 09N R. 14W 1/4, 1/16, 1/64: SW SW SW

**X(ft):** 2,585,362 **Y(ft):** 1,441,211

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Dam height (if greater than 9 ft):

# STOCK POND

Map Label: 8A-2-SP32

**Purpose of Use:** LIVESTOCK

Priority date: 1/1/1940

Source of Water: Surface Runoff

Point of Diversion: Not Applicable

**Amount of Water:** 

**Depth (ft):** 2.0

Surface Area (sq.ft): 9,434

Storage Impoundment Volume (ac-ft): 0.260

Pond Location: As shown on Hydrographic Survey Map 8A-2

S. 35 T. 09N R. 14W 1/4, 1/16, 1/64: NE SW NE

**X(ft):** 2,589,058 **Y(ft):** 1,444,161

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Dam height (if greater than 9 ft):

## STOCK POND

Map Label: 8A-2-SP33

**Purpose of Use:** LIVESTOCK

Priority date: 1/1/1940

Source of Water: Well

**Point of Diversion:** Fills from well 8A-2-W06 (Location **X(ft):** 2,589,619;

**Y(ft):** 1,448,532);

Amount of Water:

**Depth** (ft): 3.5

Surface Area (sq.ft): 8,250

Storage Impoundment Volume (ac-ft): 0.398

**Pond Location:** As shown on Hydrographic Survey Map 8A-2

**S.** 26 **T.** 09N **R.** 14W 1/4, 1/16, 1/64: SE NE NW

**X(ft):** 2,589,660 **Y(ft):** 1,448,584

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Dam height (if greater than 9 ft):

# STOCK POND

Map Label: 8A-2-SP34

Purpose of Use: LIVESTOCK

Priority date: 1/1/1940

Source of Water: Surface Runoff

Point of Diversion: Not Applicable

**Amount of Water:** 

**Depth (ft): 2.5** 

Surface Area (sq.ft): 7,158

Storage Impoundment Volume (ac-ft): 0.246

Pond Location: As shown on Hydrographic Survey Map 8A-2

**S.** 26 **T.** 09N **R.** 14W 1/4, 1/16, 1/64: NE SE SW

**X(ft):** 2,589,768 **Y(ft):** 1,449,007

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Dam height (if greater than 9 ft):

## STOCK POND

Map Label: 8B-1-SP17

**Purpose of Use:** LIVESTOCK

Priority date: 1/1/1940

Source of Water: Well

Point of Diversion: Fills from well 8B-1-W03 (Location X(ft): 2,591,396;

**Y(ft):** 1,453,778);

Amount of Water:

**Depth (ft):** 6.0

Surface Area (sq.ft): 8,017

Storage Impoundment Volume (ac-ft): 0.663

Pond Location: As shown on Hydrographic Survey Map 8B-1

S. 24 T. 09N R. 14W 1/4, 1/16, 1/64: SW NW NE

**X(ft):** 2,591,426 **Y(ft):** 1,453,660

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Dam height (if greater than 9 ft):

## STOCK POND

Map Label: 8B-1-SP18

Purpose of Use: LIVESTOCK

Priority date: 1/1/1940

Source of Water: Surface Runoff

Point of Diversion: Not Applicable

Amount of Water:

**Depth (ft):** 1.5

Surface Area (sq.ft): 3,984

Storage Impoundment Volume (ac-ft): 0.082

Pond Location: As shown on Hydrographic Survey Map 8B-1

S. 24 T. 09N R. 14W 1/4, 1/16, 1/64: NW NW SW

**X(ft):** 2,590,927 **Y(ft):** 1,455,446

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Dam height (if greater than 9 ft):

# STOCK POND

Map Label: 8B-1-SP19

Purpose of Use: LIVESTOCK

Priority date: 1/1/1940

Source of Water: Surface Runoff

Point of Diversion: Not Applicable

Amount of Water:

**Depth (ft):** 2.5

Surface Area (sq.ft): 5,121

Storage Impoundment Volume (ac-ft): 0.176

Pond Location: As shown on Hydrographic Survey Map 8B-1

S. 24 T. 09N R. 14W 1/4, 1/16, 1/64: NW NW NW

**X(ft):** 2,590,758 **Y(ft):** 1,456,605

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Dam height (if greater than 9 ft):

# STOCK POND

Map Label: 8B-1-SP27

**Purpose of Use:** LIVESTOCK

Priority date: 1/1/1940

Source of Water: Surface Runoff

Point of Diversion: Not Applicable

Amount of Water:

**Depth (ft):** 1.5

Surface Area (sq.ft): 1,766

Storage Impoundment Volume (ac-ft): 0.036

Pond Location: As shown on Hydrographic Survey Map 8B-1

S. 20 T. 09N R. 13W 1/4, 1/16, 1/64: NW SW NW

**X(ft):** 2,601,386 **Y(ft):** 1,454,653

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Dam height (if greater than 9 ft):

# STOCK POND

Map Label: 8B-2-SP02

**Purpose of Use:** LIVESTOCK

Priority date: 1/1/1940

Source of Water: Surface Runoff

Point of Diversion: Not Applicable

**Amount of Water:** 

**Depth (ft):** 4.0

Surface Area (sq.ft): 1,890

Storage Impoundment Volume (ac-ft): 0.104

Pond Location: As shown on Hydrographic Survey Map 8B-2

S. 30 T. 09N R. 13W 1/4, 1/16, 1/64: NW SW NE

**X(ft):** 2,596,478 **Y(ft):** 1,449,314

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Dam height (if greater than 9 ft): 10.0

#### STOCK POND

Map Label: 8B-2-SP03

Purpose of Use: LIVESTOCK

Priority date: 1/1/1940

Source of Water: Surface Runoff

Point of Diversion: Not Applicable

#### **Amount of Water:**

**Depth (ft):** 2.0

Surface Area (sq.ft): 14,913

Storage Impoundment Volume (ac-ft): 0.411

Pond Location: As shown on Hydrographic Survey Map 8B-2

**S.** 30 **T.** 09N **R.** 13W 1/4, 1/16, 1/64: SW NW SE

**X(ft):** 2,596,639 **Y(ft):** 1,447,430

New Mexico State Plane Coordinate System, West Zone, NAD 1983

## Dam height (if greater than 9 ft):

#### STOCK POND

Map Label: 8B-2-SP36

Purpose of Use: LIVESTOCK

Priority date: 1/1/1940

Source of Water: Surface Runoff

Point of Diversion: Not Applicable

Amount of Water:

**Depth (ft): 2.5** 

Surface Area (sq.ft): 1,310

Storage Impoundment Volume (ac-ft): 0.045

Pond Location: As shown on Hydrographic Survey Map 8B-2

S. 33 T. 09N R. 13W 1/4, 1/16, 1/64: NW SE SW

**X(ft):** 2,607,789 **Y(ft):** 1,443,321

New Mexico State Plane Coordinate System, West Zone, NAD 1983

# Dam height (if greater than 9 ft):

# **STOCK POND**

Map Label: 8B-2-SP40

**Purpose of Use: LIVESTOCK** 

Priority date: 1/1/1940

Source of Water: Surface Runoff

Point of Diversion: Not Applicable

**Amount of Water:** 

**Depth (ft):** 3.5

Surface Area (sq.ft): 5,834

Storage Impoundment Volume (ac-ft): 0.281

Pond Location: As shown on Hydrographic Survey Map 8B-2

**S.** 33 **T.** 09N **R.** 13W 1/4, 1/16, 1/64: SE NW NW

**X(ft):** 2,609,435 **Y(ft):** 1,443,072

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Dam height (if greater than 9 ft):

# STOCK POND

Map Label: 8B-2-SP56

**Purpose of Use:** LIVESTOCK

Priority date: 1/1/1940

Source of Water: Surface Runoff

Point of Diversion: Not Applicable

**Amount of Water:** 

**Depth (ft):** 1.5

Surface Area (sq.ft): 1,256

**Storage Impoundment Volume (ac-ft):** 0.026

**Pond Location:** As shown on Hydrographic Survey Map 8B-2

S. 29 T. 09N R. 13W 1/4, 1/16, 1/64: NW SE SW

**X(ft):** 2,602,516 **Y(ft):** 1,448,788

New Mexico State Plane Coordinate System, West Zone, NAD 1983

# Dam height (if greater than 9 ft):

#### STOCK POND

Map Label: 8B-2-SP57

**Purpose of Use:** LIVESTOCK

Priority date: 1/1/1940

Source of Water: Well

Point of Diversion: Fills from well 8B-2-W03 (Location X(ft): 2,603,858;

Y(ft):1,446,586);

**Amount of Water:** 

**Depth (ft):** 1.5

Surface Area (sq.ft): 3,430

Storage Impoundment Volume (ac-ft): 0.071

Pond Location: As shown on Hydrographic Survey Map 8B-2

S. 29 T. 09N R. 13W 1/4, 1/16, 1/64: SW SE NE

X(ft): 2,603,727 Y(ft): 1,446,598

New Mexico State Plane Coordinate System, West Zone, NAD 1983

#### Dam height (if greater than 9 ft):

# STOCK POND

Map Label: 8B-2-SP58

Purpose of Use: LIVESTOCK

Priority date: 1/1/1940

Source of Water: Surface Runoff

Point of Diversion: Not Applicable

Amount of Water:

**Depth (ft):** 3.0

Surface Area (sq.ft): 5,448

Storage Impoundment Volume (ac-ft): 0.225

**Pond Location:** As shown on Hydrographic Survey Map 8B-2

S. 29 T. 09N R. 13W 1/4, 1/16, 1/64: SW SE SE

**X(ft):** 2,603,685 **Y(ft):** 1,446,028

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Dam height (if greater than 9 ft):

#### WELL

Map Label: 8A-2-W06

**OSE File No:** G 1985/75

**Priority date:** 12/31/1930

Purpose of Use: NON 72-12-1 LIVESTOCK WATERING

Well Location: As shown on Hydrographic Survey Map 8A-2

S. 26 T. 09N R. 14W 1/4, 1/16, 1/64: SE NE NW

**X(ft):** 2,589,619 **Y(ft):** 1,448,532

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Amount of Water (ac-ft per annum): 0.574

#### WELL\_

Map Label: 8B-1-W03

OSE File No: G 1976

**Priority date:** 12/31/1928

Purpose of Use: NON 72-12-1 LIVESTOCK WATERING

Well Location: As shown on Hydrographic Survey Map 8B-1

**S.** 24 **T.** 09N **R.** 14W 1/4, 1/16, 1/64: SW NW NE

**X(ft):** 2,591,396 **Y(ft):** 1,453,778

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Amount of Water (ac-ft per annum): 0.574

#### <u>WELL</u>

Map Label: 8B-1-W05

OSE File No: G 1974

**Priority date:** 12/31/1928

Purpose of Use: NON 72-12-1 LIVESTOCK WATERING

Well Location: As shown on Hydrographic Survey Map 8B-1

S. 24 T. 09N R. 14W 1/4, 1/16, 1/64: NW SW NW

**X(ft):** 2,590,873 **Y(ft):** 1,455,010

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Amount of Water (ac-ft per annum): 0.574

# WELL

Map Label: 8B-1-W07

OSE File No: G 2006

Priority date: 1/4/1961

Purpose of Use: NON 72-12-1 LIVESTOCK WATERING

Well Location: As shown on Hydrographic Survey Map 8B-1

S. 1 T. 09N R. 14W 1/4, 1/16, 1/64: NE SW NW

**X(ft):** 2,593,627 **Y(ft):** 1,470,603

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Amount of Water (ac-ft per annum): 0.574

# WELL

Map Label: 8B-2-W01

OSE File No: G 0751

**Priority date:** 10/4/1996

Purpose of Use: 72-12-1 DOMESTIC ONE HOUSEHOLD

Well Location: As shown on Hydrographic Survey Map 8B-2

S. 31 T. 09N R. 13W 1/4, 1/16, 1/64: SE SE SE

**X(ft):** 2,600,898 **Y(ft):** 1,440,977

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Amount of Water (ac-ft per annum): Historical beneficial use not to exceed

0.7 acre-feet per annum;

#### WELL

Map Label: 8B-2-W03

OSE File No: G 2008

Priority date: 8/1/1978

Purpose of Use: NON 72-12-1 LIVESTOCK WATERING

Well Location: As shown on Hydrographic Survey Map 8B-2

S. 29 T. 09N R. 13W 1/4, 1/16, 1/64: SE SW NW

**X(ft):** 2,603,858 **Y(ft):** 1,446,586

New Mexico State Plane Coordinate System, West Zone, NAD 1983

Amount of Water (ac-ft per annum): 0.574

I declare under penalty of perjury that the foregoing is true and correct.

Executed on January

Kit F. Nielsen, P.E.

Senior Groundwater Engineer

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