# C-147 REGISTRATION PACKAGE

***Blanco Wash Unit / Crow Canyon Unit I19 Staging / G-Tank Area and White Crow Unit 2408-P19 Well Pad***
***Recycling Containment and Recycling Facility***

**October 2024**

## ENDURING RESOURCES IV, LLC

**DJR Operating, LLC A Subsidiary Company of Enduring Resource, LLC**

**200 Energy Court**
**Farmington, New Mexico 87401**
**Phone: (505) 636-9720**

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-147
Revised April 3, 2017

# Recycling Facility and/or Recycling Containment

**Type of Facility:** ☒ Recycling Facility ☒ Recycling Containment*****

**Type of action:** ☒ Permit ☒ Registration
☐ Modification ☐ Extension
☐ Closure ☐ Other (explain) _____

*** At the time C-147 is submitted to the division for a Recycling Containment, a copy shall be provided to the surface owner.**

Be advised that approval of this request does not relieve the operator of liability should operations result in pollution of surface water, ground water or the environment. Nor does approval relieve the operator of its responsibility to comply with any other applicable governmental authority's rules, regulations or ordinances.

1.

Operator: **DJR Operating, LLC** (For multiple operators attach page with information) OGRID #: **371838**

Address: **200 Energy Court, Farmington, New Mexico 87401**

Facility or well name (include API# if associated with a well): **White Crow Unit AST Pad**

OCD Permit Number: 3RF-78 (For new facilities the permit number will be assigned by the district office)

U/L or Qtr/Qtr **P** Section **19** Township **24N** Range **08W** County: **San Juan**

Surface Owner: ☒ Federal ☐ State ☐ Private ☐ Tribal Trust or Indian Allotment

2.

☒ **Recycling Facility:**

Location of recycling facility (if applicable): Latitude **36.293890** Longitude **-107.716627** NAD83

Proposed Use: ☒ Drilling* ☒ Completion* ☒ Production* ☐ Plugging *

***The re-use of produced water may NOT be used until fresh water zones are cased and cemented***

☐ Other, ***requires permit for other uses. Describe use, process, testing, volume of produced water and ensure there will be no adverse impact on groundwater or surface water.***

☒ Fluid Storage

☒ Above ground tanks ☒ Recycling containment ☐ Activity permitted under 19.15.17 NMAC explain type_____

☐ Activity permitted under 19.15.36 NMAC explain type:_____ ☐ Other explain _____

☐ For multiple or additional recycling containments, attach design and location information of each containment

☐ **Closure Report (required within 60 days of closure completion):** ☐ Recycling Facility Closure Completion Date:_____

3.

☒ **Recycling Containment:**

☐ Annual Extension after initial 5 years (attach summary of monthly leak detection inspections for previous year)

Center of Recycling Containment (if applicable): Latitude **36.293890** Longitude **-107.716627** NAD83

☒ For multiple or additional recycling containments, attach design and location information of each containment

☒ Lined ☐ Liner type: Thickness **40** mil ☒ LLDPE ☐ HDPE ☐ PVC ☐ Other _____

☒ String-Reinforced

Liner Seams: ☒ Welded ☒ Factory ☐ Other _____ Volume: **360,000** bbl Dimensions: **Dia per 60K AST = 190'** x Height **12'**

☐ Recycling Containment Closure Completion Date:_____

4.

**Bonding:**

☒ Covered under bonding pursuant to 19.15.8 NMAC per 19.15.34.15(A)(2) NMAC **(These containments are limited to only the wells owned or operated by the owners of the containment.)**

☐ Bonding in accordance with 19.15.34.15(A)(1). Amount of bond $_____ **(work on these facilities cannot commence until bonding amounts are approved)**

☐ Attach closure cost estimate and documentation on how the closure cost was calculated.

5.

**Fencing:**

☐ Four foot height, four strands of barbed wire evenly spaced between one and four feet

☒ Alternate. Please specify _____**See variance request in registration package Exhibit H**_____

6.

**Signs:**

☒ 12"x 24", 2" lettering, providing Operator's name, site location, and emergency telephone numbers

☐ Signed in compliance with 19.15.16.8 NMAC

7.

**Variances:**

Justifications and/or demonstrations that the proposed variance will afford reasonable protection against contamination of fresh water, human health, and the environment.

***Check the below box only if a variance is requested:***

☒ Variance(s): Requests must be submitted to the appropriate division district for consideration of approval. If a Variance is requested, include the variance information on a separate page and attach it to the C-147 as part of the application.

**If a Variance is requested, it must be approved prior to implementation.**

8.

**Siting Criteria for Recycling Containment**

***Instructions: The applicant must provide attachments that demonstrate compliance for each siting criteria below as part of the application. Potential examples of the siting attachment source material are provided below under each criteria.***

| **General siting** | |
|---|---|
| Ground water is less than 50 feet below the bottom of the Recycling Containment.<br>NM Office of the State Engineer - iWATERS database search; USGS; Data obtained from nearby wells | ☐ Yes ☒ No<br>☐ NA |
| Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to NMSA 1978, Section 3-27-3, as amended.<br>- Written confirmation or verification from the municipality; written approval obtained from the municipality | ☐ Yes ☒ No<br>☐ NA |
| Within the area overlying a subsurface mine.<br>- Written confirmation or verification or map from the NM EMNRD-Mining and Minerals Division | ☐ Yes ☒ No |
| Within an unstable area.<br>- Engineering measures incorporated into the design; NM Bureau of Geology & Mineral Resources; USGS; NM Geological Society; topographic map | ☐ Yes ☒ No |
| Within a 100-year floodplain. FEMA map | ☐ Yes ☒ No |
| Within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse, or lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark).<br>- Topographic map; visual inspection (certification) of the proposed site | ☐ Yes ☒ No |
| Within 1000 feet from a permanent residence, school, hospital, institution, or church in existence at the time of initial application.<br>- Visual inspection (certification) of the proposed site; aerial photo; satellite image | ☐ Yes ☒ No |
| Within 500 horizontal feet of a spring or a fresh water well used for domestic or stock watering purposes, in existence at the time of initial application.<br>- NM Office of the State Engineer - iWATERS database search; visual inspection (certification) of the proposed site | ☐ Yes ☒ No |
| Within 500 feet of a wetland.<br>- US Fish and Wildlife Wetland Identification map; topographic map; visual inspection (certification) of the proposed site | ☐ Yes ☒ No |

9.
**Recycling Facility and/or Containment Checklist:**
***Instructions: Each of the following items must be attached to the application. Indicate, by a check mark in the box, that the documents are attached.***

☒ Design Plan - based upon the appropriate requirements. **– Section 3 of the C-147 Registration Package**
☒ Operating and Maintenance Plan - based upon the appropriate requirements. - **Section 4 of the C-147 Registration Package**
☒ Closure Plan - based upon the appropriate requirements. - **Section 5 of the C-147 Registration Package**
☒ Site Specific Groundwater Data – **Exhibit D of the C-147 Registration Package**
☒ Siting Criteria Compliance Demonstrations **– Section 2 of the C-147 Registration Package**
☒ Certify that notice of the C-147 (only) has been sent to the surface owner(s) **– C-147 package is being submitted concurrently to the Division and BLM FFO. See Exhibit C of the C-147 Registration Package for additional surface owner notification.**

10.
**Operator Application Certification:**
I hereby certify that the information and attachments submitted with this application are true, accurate and complete to the best of my knowledge and belief.

Name (Print): **Heather Huntington** Title: **Permitting Technician**
Signature: Heather Huntington Date: **10/14/2024**
e-mail address: **hhuntington@enduringresources.com** Telephone: **505-636-9751**

11.
**OCD Representative Signature:** Victoria Venegas **Approval Date:** 10/22/2024
**Title:** Environmental Specialist **OCD Permit Number:** 3RF-78

☒ OCD Conditions
☐ Additional OCD Conditions on Attachment

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# 1. INTRODUCTION

| | |
|---|---|
| Applicant | DJR Operating, LLC - Enduring Resources, LLC & DJR Operating, LLC are wholly owned subsidiaries of Enduring Resources IV, LLC. Leases, rights of ways, wells, and other property interests will continue to be held in their current entity names. |
| OGRID | 371838 |
| Project Name | Blanco Wash Unit / Crow Canyon Unit I19 Staging / G-Tank Area and White Crow Unit 2408-P19 Well Pad Recycling Containment and Recycling Facility |
| Project Type | Recycling Facility & Recycling Containment |
| Legal Location | Southeast ¼ of the Southeast ¼ of Section 19, Township 24N, Range 08W |
| Surface Owner | Federal surface managed by the Bureau of Land Management Farmington Field Office |

In accordance with 19.15.34 NMAC, DJR Operating, LLC (DJR) a subsidiary company of Enduring Resources, LLC requests registration of their Blanco Wash Unit / Crow Canyon Unit I19 Staging / G-Tank Area and White Crow Unit 2408-P19 Well Pad (White Crow AST Pad) Recycling Containment and Recycling Facility through the approval of this C-147 registration and permit package.

The recycling containment will consist of six 60,000 barrel (bbl) above ground storage tanks (AST) for a consolidated volume of 360,000 bbls. Per 19.15.34.7 B. NMAC a *"**Recycling containment**" is a storage containment which incorporates a synthetic liner as the primary and secondary containment device and is used solely in conjunction with a recycling facility for the storage, treatment or recycling of produced water only for the purpose of drilling, completion, production or plugging of wells used in connection with the development of oil or gas or both.* These AST containments fall within this definition and must meet all applicable requirements of a Recycling Containment in Rule 19.15.34 NMAC.

The recycling facility will consist of up to thirty 400 bbl vertical frac tanks with a consolidated volume of 12,000 bbls to treat (mechanical and chemical reconditioning process) produced water for reuse. DJR will only set as many tanks are anticipated to be needed based on incoming volumes and extent of treatment necessary. As defined in 19.15.34.7 A. NMAC a ***"Recycling facility"** is a stationary or portable facility used exclusively for the treatment, re-use or recycling of produced water. A recycling facility does not include oilfield equipment such as separators, heater treaters and scrubbers in which produced water may be used*. These tanks will be used as upright gun barrel oil water separators. This oil separation process will prevent having any visible layer of oil on the surface of the recycling containments in accordance with Rule 19.15.34.13 B.(1).

Per 19.15.34.9 A. water (produced water and Entrada water) stored/processed through this temporary recycling facility and containments will be used as part of a permitted operation for drilling, completing, and producing DJR Operating, LLC and Enduring Resources, LLC wells.

See Exhibit A for site survey plat and Exhibit B for a site diagram of the proposed ASTs and recycling facility layout. This facility will not be used for the disposal of produced water.

The geometric center of the combine Blanco Wash Unit / Crow Canyon Unit I19 Staging / G-Tank Area and White Crow Unit 2408-P19 Well Pad being the White Crow AST Pad is located at 36.293890 ° N, -107.716627 ° W, within Section 19, Township 24N, Range 08W, in San Juan County, New Mexico. The site is located on federal lands managed by the Bureau of Land Management Farmington Field Office (BLM FFO). DJR is the operator of the applicable oil and gas mineral rights at this location.

BLM FFO has been notified of DJRs intent to use this site for water storage and water recycling. See Exhibit C, the Sundry Notice of Intent for water storage at this location. Per New Mexico Oil Conservation Division (NMOCD)

Form C-147, DJR will provide A copy of this registration package to the BLM FFO concurrently with the submittal to the division.

This document provides supplemental information to NMOCD Form C-147 that is required for registration, including siting criteria and demonstrations, design and construction plan, operating and maintenance plan, closure plan, closure and site reclamation requirements, and surface owner notification.

Upon approval of this registration, the recycling containments located at this facility will be operated for up to five years.

If the AST containments are found to be needed beyond five years, DJR will submit annual extensions to NMOCD on Form C-147 at least 30 days prior to expiration. The extension request will include a summary of all monthly inspections of the containments, including monitoring of the leak detection systems indicating that the integrity has not been compromised.

# 2. SITING CRITERIA

### 2.1. Depth to Groundwater 19.15.34.11 A.(1)

Per 19.15.34.11 B. NMAC, DJR requests use of POD 1 SJ-04587 in the Northeast ¼ of the Southwest ¼ of Section 25, Township 24N, Range 09W. This water well was drilled to a total depth of 800 feet with depth to ground water measured at 640 feet. This water well is located approximately 8,818 feet southwest of the White Crow AST Pad. With the proposed containments being above ground tanks, water depth of 640 feet, and AST elevation within 30 vertical feet (downgradient) from this water well, the groundwater depth is greater than 50 feet below the bottom of the recycling containment. See Exhibit D for the water well summary. Additional average depth to ground water information can be found below for Township 24 North Range 08 West and Township 24 North Range 09 West.

Average, Minimum, and Maximum depth to ground water within T24N R08W = 445’, 200’, 690’

Average, Minimum, and Maximum depth to ground water within T24N R09W = 742’, 515’, 1073’

### 2.2. Distance to Surface Water 19.15.34.11 A.(2)

There are no continuously flowing watercourses within 300 feet; nor, any lakebeds, sinkholes, or playa lakes within 200 feet of the proposed ASTs as shown in Exhibit E Map 2.

There is one mapped USGS blue line drainage mapped through the White Crow AST location as seen in Exhibit E Map 2. DJR contracted SWCA Environmental Consultants in August of 2024 to assess this drainage and all surrounding drainages per 19.15.34.11 A.(2) NMAC. In the report provided to DJR titled, *Aquatic Resources Delineation Technical Memorandum*. SWCA Summarized the following. This report is attached hereto as Exhibit F. Please see the report for referenced maps, tables, and photographs.

> *No potentially jurisdictional non-wetland waters containing an OHWM were identified within the survey area during the August 2024 or 2020 field surveys. The NHD-mapped flowline was field-verified as an isolated erosional feature without strong, reliable, and consistent OHWM indicators (EF06). Four unmapped erosional features were also observed and documented in the field as vegetated upland swales or isolated erosional features (EF07−EF10) (Table 4; also see Figure A-1 in Appendix A and Photographs B-1−B-8 in Appendix B). Photographs of these five features and upland areas are provided in Appendix B.*
>
> *Based on the regulatory considerations provided in Section 2, evaluation of the survey area and observed aquatic resources, and SWCA’s understanding of the USACE Albuquerque District’s current policies regarding jurisdictional determinations, it is SWCA’s professional opinion that, per the 2023 Amended Rule, no features present within the survey area would be considered jurisdictional WOTUS by the USACE. Erosional features, as those observed in the survey area, are excluded from WOTUS jurisdiction (40 Code of Federal Regulations 120.2(b)(8)).*

*Pursuant to 19.15.34 NMAC, no OHWMs were observed within 200 feet of the project area. Therefore, no significant watercourse is likely to occur within 200 feet of the proposed recycling containment. Additionally, neither the project area nor the survey area intersect a FEMA 100-year flood zone.*

Thus, this drainage was found to be non-jurisdictional and non-significant during field investigations August 14, 2024 resulting in no significant drainages within 200 feet of the recycling containments.

### 2.3. Distance to Structures 19.15.34.11 A.(3)

The recycling containments are not located within 1,000 feet of a permanent residence, school, hospital, institution, or church in existence at the time of this application. As shown on the aerial map in Exhibit E Map 2, there are no permanent residences, schools, hospitals, institutions, or churches within the 1,000-foot buffer ring of the pad. A field visit verified there has been no new structure erected since the aerial imagery was obtained.

### 2.4. Distance to Non-Public Water Supply and Springs 19.15.34.11 A.(4)

The recycling containments are not located within 500 horizontal feet of a spring or fresh water well used for domestic or stock watering purposes in existence at the time of this application as shown on Exhibit E Map 1 and 2. Map 1 shows wells and springs/seeps regardless of use type in the surrounding area and Map 2 shows that no water wells, springs, or seeps are located within the 500-foot buffer of the pad. Please note, the nearest water well point shown in Map 2 is DJR's Blanco Wash Unit Water Supply Well for the production of non-potable water (5,370 feet West-Northwest). The nearest fresh water well according to New Mexico Office of the State Engineer (NM-OSE) is 8,818 feet Southwest and discussed in section 2.1 above. Nearest spring/seep according to the National Hydrologic Dataset (NHD) is 25,380 feet Northwest.

### 2.5. Distance to Municipal Boundaries and Defined Municipal Fresh Water Well Fields 19.15.34.11 A.(5)

The recycling Containments are not within any incorporated municipal boundaries nor within a defined municipal fresh water well field covered by a municipal ordinance adopted pursuant to Section 3- 27-3 NMSA 1978, as amended. Please see Exhibit E Map 1 showing the nearest municipal boundary being Bloomfield New Mexico approximately 27.8 miles North-Northwest.

### 2.6. Distance to Wetland 19.15.34.11 A.(6)

The recycling facility/containment is not located within 500 feet of a wetland per the evidence provided below. According to the US Fish and Wildlife Service National Wetland Inventory (NWI) and Exhibit E, the proposed site is located within 500 feet of a drainage that has been mapped as "Riverine" with classification code: R4SBJ. Please see decoded description below from US Fish and Wildlife Service.

R4SBJ:

*System **Riverine (R)** : The Riverine System includes all wetlands and deepwater habitats contained within a channel, with two exceptions: (1) wetlands dominated by trees, shrubs, persistent emergents, emergent mosses, or lichens, and (2) habitats with water containing ocean-derived salts of 0.5 ppt or greater. A channel is an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water.*

*Subsystem **Intermittent (4)** : This Subsystem includes channels that contain flowing water only part of the year. When the water is not flowing, it may remain in isolated pools or surface water may be absent.*

*Class **Streambed (SB)** : Includes all wetlands contained within the Intermittent Subsystem of the Riverine System and all channels of the Estuarine System or of the Tidal Subsystem of the Riverine System that are completely dewatered at low tide.*

*Water Regime **Intermittently Flooded (J)** : The substrate is usually exposed, but surface water is present for variable periods without detectable seasonal periodicity. Weeks, months, or even years may intervene between periods of inundation. The dominant plant communities under this Water Regime may change as soil moisture conditions change. **Some areas exhibiting this Water Regime do not fall within our definition of wetland***

***because they do not have hydric soils or support hydrophytes. This Water Regime is generally limited to the arid West.***

The data used and displayed near the project area on the US Fish and Wildlife Service Wetland Inventory was mapped as described in the San Juan, Estancia Basin, and Sante Fe County, NM - Supplemental Map Information document as follows:

*All feature creation and attribution was completed with on-screen digitization procedures using Esri, ArcGIS Pro 2.7.0, and ArcMap 10.7.1, with advanced editing tools.*

*The wetland mapping of this project involved an area-wide inventory of wetlands and non-wetland riparian habitats using 2018, year color infrared and true-color aerial imagery. Fieldwork review was conducted for the purpose of verification of wetland features and non-wetland features and a "selective key" of photo-signatures was created. This baseline information served as a guide for identifying and classifying features (as interpreted from the project imagery) within the NWI (version 2.0), and the Landscape Position Landform Water Flow Path and Water Body Type (LLWW, version 2) Classification Systems.*

Since the Wetlands Inventory is identified and mapped from a desktop perspective utilizing photo-signatures the resulting data is a desktop approximation of potential wetlands and non-wetland riparian habitat. Thus, field investigation is necessary to confirm or deny wetland status based on the presents of hydric soils or support hydrophytes. Riparian habitat in this region would be indicated by cottonwood, willow, elm, invasive salt cedar and russian olive.

DJR contracted SWCA Environmental Consultants in August of 2024 to assess the drainage for wetland determination per 19.15.34.11 A.(6) NMAC. In the report provided to DJR titled, *Aquatic Resources Delineation Technical Memorandum*. SWCA Summarized the following regarding wetlands. This report is attached hereto as Exhibit F:

*SWCA did not observe or delineate any wetland features during the August 2024 or 2020 field surveys due to the lack of three-parameter wetlands within the survey area. The NWI-mapped riverine feature investigated in the field was lacking an OHWM or three-parameter wetland characteristics and is likely an erosional feature from stormwater surface flows.*

## 2.7. Distance to Subsurface Mines 19.15.34.11 A.(7)

According to New Mexico Energy, Minerals and Natural Resources Department (EMNRD) Mining and Minerals Divisions database, there are no subsurface mines in Township 24N, Range 08W, San Juan County, New Mexico. See Exhibit E Map 1 showing mines regardless of status near the project area. The nearest EMNRD recorded permit (being a withdrawn permit) is a Humate pit approximately 19.75 miles south-southeast.

## 2.8. Site Stability 19.15.34.11 A.(8)

The recycling containments are not located in an unstable area. DJR's construction practices will provide adequate compaction of the pad surface for the anticipated load of the recycling facility and AST containments.

The following additional best management practices are implemented during pad construction to prevent equipment settling and ensure site stability.

- Prior to earthwork, all trees (if applicable) and slash/brush, is mulched and incorporated into the topsoil. Tree roots and trunks are removed from the site. The topsoil (vegetative root layer) and mulched organic matter is stripped from location and windrowed along the perimeter of location. Topsoil is not used for pad construction as the organic matter mixed within the soil prevents adequate compaction.
- Subsoil horizons are then utilized to construct a balanced (high areas are cut and used to fill low areas) location. Fill slopes are deposited and compacted in approximate 6-inch lifts with optimal soil moisture content.
- If soil is deemed too wet from inclement weather, it is not utilized as adequate compaction cannot be achieved. Additionally, if construction occurs during winter months, the frost layer if applicable is stripped and sub frost line soil horizons are utilized for construction to achieve adequate compaction that will not settle with warming temperatures.

- Cut and fill slopes around location are 3:1 or better to ensure surface and slope stability.
- The windrowed topsoil and any additional diversions found to be necessary are used to prevent surface sheet flow from entering location.
- Each AST containment will have a properly constructed foundation consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities to prevent the liner's rupture or tear.

Other factors contributing to site stability include:

- Per 19.15.34.11 A.(7) the location is not in an area overlying a subsurface mine according to the New Mexico EMNRD Mining and Minerals Divisions database.
- This area of New Mexico is not known for underlying caves and karst features.

### 2.9. Distance to 100-Year Floodplain 19.15.34.11 A.(9)

The recycling containments are not located within a 100-year (1% annual) floodplain. As shown in Exhibit E Map 2, the project is in Zone X (area of minimal flood hazard). The nearest 100-year flood hazard area shown in Exhibit E Map 2 is 545 feet Northeast.

## 3. DESIGN AND CONSTRUCTION SPECIFICATIONS

Pursuant to 19.15.34.12 NMAC, the following Design Plan presents the minimum standards and specifications for the design and construction of the proposed recycling containments at the White Crow AST Pad. The facility and recycling containments have been designed to prevent releases and potential overtopping due to wave action (by wind) or rainfall. To supplement the information provided below, the manufacturers specifications for the design and construction of the aboveground containments are provided as Exhibit G.

### 3.1. Foundation Construction

The containment ASTs will be constructed on DJR's approved Blanco Wash Unit / Crow Canyon Unit I19 Staging / G-Tank Area and White Crow Unit 2408-P19 Well Pad. The AST footprints will have a properly constructed foundation consisting of a firm, unyielding base, smooth and free of rocks, debris, sharp edges or irregularities to prevent the liner's rupture or tear. The containments will ensure confinement of produced water, to prevent releases and to prevent overtopping due to wave action or rainfall. Geotextile is used under the liners to reduce localized stress-strain or protuberances that otherwise may compromise the liner integrity. The containments are above ground and are not subject to water run-on.

### 3.2. Liner and Leak Detection

The containments will be Well Water Solutions and Rentals, Inc. double-lined frac water tank system. These tank systems are designed to incorporate a 40-mil thickness LLDPE primary (upper) string-reinforced liner and a 30-mil LLDPE secondary (lower) string- reinforced liner. The primary liner is designed to be impervious, synthetic material that will resist deterioration by ultraviolet light, petroleum hydrocarbons, salt solutions, and acidic/alkaline solutions. Liners meet or exceed the compatibility requirements of EPA SW-846 Method 9090A. Steel bolts secure the liners to the top of the AST tank. Specifications provided by Well Water Solutions and Rentals, Inc. are attached as Exhibit G.

Liner seams are minimized and are oriented vertically up and down the containment walls, not horizontally across the containment. Factory welded seams are incorporated, where possible. Field seams, welding, and testing on the geosynthetic liners is performed by a manufacturer qualified person. For any field welded seams, liners will overlap 4 to 6 inches and be thermally sealed. Field seams are avoided or minimized in corners and irregularly shaped areas.

At points of discharge into, or suction from, the recycling containments, the liner is protected from excessive hydrostatic force or mechanical damage. External discharge or suction lines do not penetrate the liners.

A leak detection system is installed between the upper and lower liners of each containment and consists of a 200-mil geonet drainage layer. The leak detection system covers the bottom and sides of each containment and includes a minimum of 3 feet of freeboard. A 6-inch PVC pipe is inserted in the sump at the bottom of each containment and

between the liners. Each containment is slightly sloped, with the sump placed at the location with the lowest elevation to facilitate the earliest possible leak detection. A schematic of the leak detection system is included in Exhibit G.

The sump piping is checked weekly with a water-level meter to determine if leakage is occurring through the primary liner. If water is detected in the leak detection sump, water will be removed to assess if water returns indicating a leak in the primary liner. Controls for surface water run-on is not needed due to the containments being above ground level.

### 3.3. Signage

The facility will have a sign no less than 12" by 24" with lettering not less than 2" in height in a conspicuous place near the facility entrance. The sign will contain the operator's name, location of the facility by quarter-quarter or unit letter, Section, Township, Range, and emergency phone numbers.

### 3.4. Entrance Protection

Please see variance request attached as Exhibit H.

With the recycling containments being ASTs with 12-foot wall height, entrance into containments would have to be intentional. There is no risk of accidental entrance into the containments by wildlife or the public. The site will be maintained to prevent harm to wildlife and the public.

### 3.5. Netting

DJR will install bird netting provided by the tank manufacturer over the containments. The netting will be inspected monthly for disrepair. The containments will be inspected weekly for dead migratory birds. DJR will report dead migratory birds and/or other wildlife to the appropriate wildlife agency, surface management agency, and NMOCD.

## 4. Maintenance and Operating Plan

### 4.1. Inspection Timing and Maintenance

Pursuant to 19.15.34.13 NMAC, DJR will follow the maintenance and operational requirements described below. At a minimum, DJR will perform weekly inspections on the containment and leak detection systems while the containments hold fluid. DJR will maintain records and make them available for review by the NMOCD.

- If fluids are found in the sump, the fluids will be sampled and then pumped out.
- DJR will remove any visible oil from the surface of the containments upon discovery.
- DJR will maintain a minimum of three feet of freeboard in the containments at all times.
- The injection and withdrawal of fluids from the containments shall be accomplished through a header, diverter or other hardware that prevents damage to the liner by erosion, fluid jets or impact from installation and removal of hoses or pipes.
- If a leak is discovered in the primary liner above the liquid level in either of the containment, DJR will repair the primary liner within 48 hours, or request an extension on repair within the 48-hour time limit.
- If a leak is discovered in the primary liner below the liquid level in either of the containments, DJR will notify the division office of the leak, remove all fluids above the leak level, and repair the primary liner within 48 hours, or request an extension on repair within the 48-hour time limit.
- The facility will be operated in such a way to prevent the collection of surface water.
- An oil absorbent boom or other device will be onsite to contain an unanticipated release.
- The facility will not be used for the storage or discharge of hazardous waste.

### 4.2. Reporting and Record Keeping

During operation of the recycling facility and containments, DJR will keep accurate records and report monthly to the NMOCD the total volume of water received for recycling, with the volume of fresh water received listed separately, and the total volume of water leaving the facility for disposition of use. Water volume totals will be submitted on NMOCD Form C-148. Accurate records identifying the sources and disposition of recycled water will be maintained during the operation of the facility and made available for review to the NMOCD upon request.

### 4.3. Cessation of Operations

DJR will consider the recycling containments to have ceased operations if less than 20% of the total fluid volume is used every six (6) months following the first withdrawal of produced water for use. DJR will report cessation of operations to the appropriate NMOCD district office. If additional time is needed for closure, DJR will request an extension from the appropriate NMOCD district office prior to the expiration of the initial six (6) month time period.

# 5. CLOSURE PLAN

Pursuant to 19.15.34.14 NMAC, the activities summarized below describe the closure and reclamation requirements for the White Crow AST Pad. Within 60 days of closure completion, DJR will submit a closure report on NMOCD Form C-147 and include required attachments to document all closure activities, sampling results, and details on backfilling, capping, or covering, where applicable.

### 5.1. Containment Closure

DJR will remove all fluids from the facility and containments within 60 days from the date that operations cease and close the containments from use within six months from the date that DJR ceases operations. Alternatively, DJR can request an extension for the removal of fluids from the NMOCD not to exceed an additional two months. DJR can also request an extension for the closure of the containments, not to exceed an additional six months.

DJR will remove all fluids, contents, synthetic liners, and leak detection piping and transfer these materials to an NMOCD-approved facility for disposal. All other equipment associated with the recycling containments and recycling facility will be removed from the site.

### 5.2. Closure Soil Sampling

Once the containments are removed, DJR will test the soils beneath for contamination with a five-point composite sample which includes stained or wet soils, if any, and that sample shall be analyzed for the constituents listed in the following table:

**TABLE 1. CONTAMINATED SOIL TEST CONSTITUENTS**

| Constituents | Test Method | Groundwater Depth 51 – 100 Feet | Groundwater Depth >100 Feet |
|---|---|---|---|
| Chloride | EPA 300.0 | 10,000 mg/kg | 20,000 mg/kg |
| TPH (GRO+DRO+MRO) | EPA SW-846 Method 8015M | 2,500 mg/kg | 2,500 mg/kg |
| GRO + DRO | EPA SW-846 Method 8015M | 1,000 mg/kg | 1,000 mg/kg |
| BTEX | EPA SW-846 Method 8021B or 8260B | 50 mg/kg | 50 mg/kg |
| Benzene | EPA SW-846 Method 8021B or 8260B | 10 mg/kg | 10 mg/kg |

If any contaminant concentration is higher than the parameter limits listed above, the NMOCD may require additional delineation upon review of the results and DJR must receive approval before proceeding with closure. If all contaminant concentrations are less than or equal to the parameter limits listed above, then DJR can proceed to backfill with non-waste containing, uncontaminated, earthen material.

### 5.3. Reclamation

The location will be reclaimed upon completion of use in accordance with the approved reclamation plans attached to the approved APDs associated with DJR's wells on the Blanco Wash Unit /Crow Canyon Unit (White Crow Unit) 2408-I19 pad and 2408-P19 pad. These reclamation plans were developed with, and approved by, the surface managing agency.

# EXHIBIT A. PLAT

**WELL FLAG**
LATITUDE: 36.293707° N
LONGITUDE: 107.717101° W
DATUM: NAD83

# DJR OPERATING, LLC
## BLANCO WASH UNIT #513H

411' FSL & 937' FEL
LOCATED IN THE SE/4 SE/4 OF SECTION 19,
T24N, R8W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 6720', NAVD 88
FINISHED PAD ELEVATION: 6720.3', NAVD 88
WC P19-2408

50' 0 50' 100'
SCALE = 1" = 100'

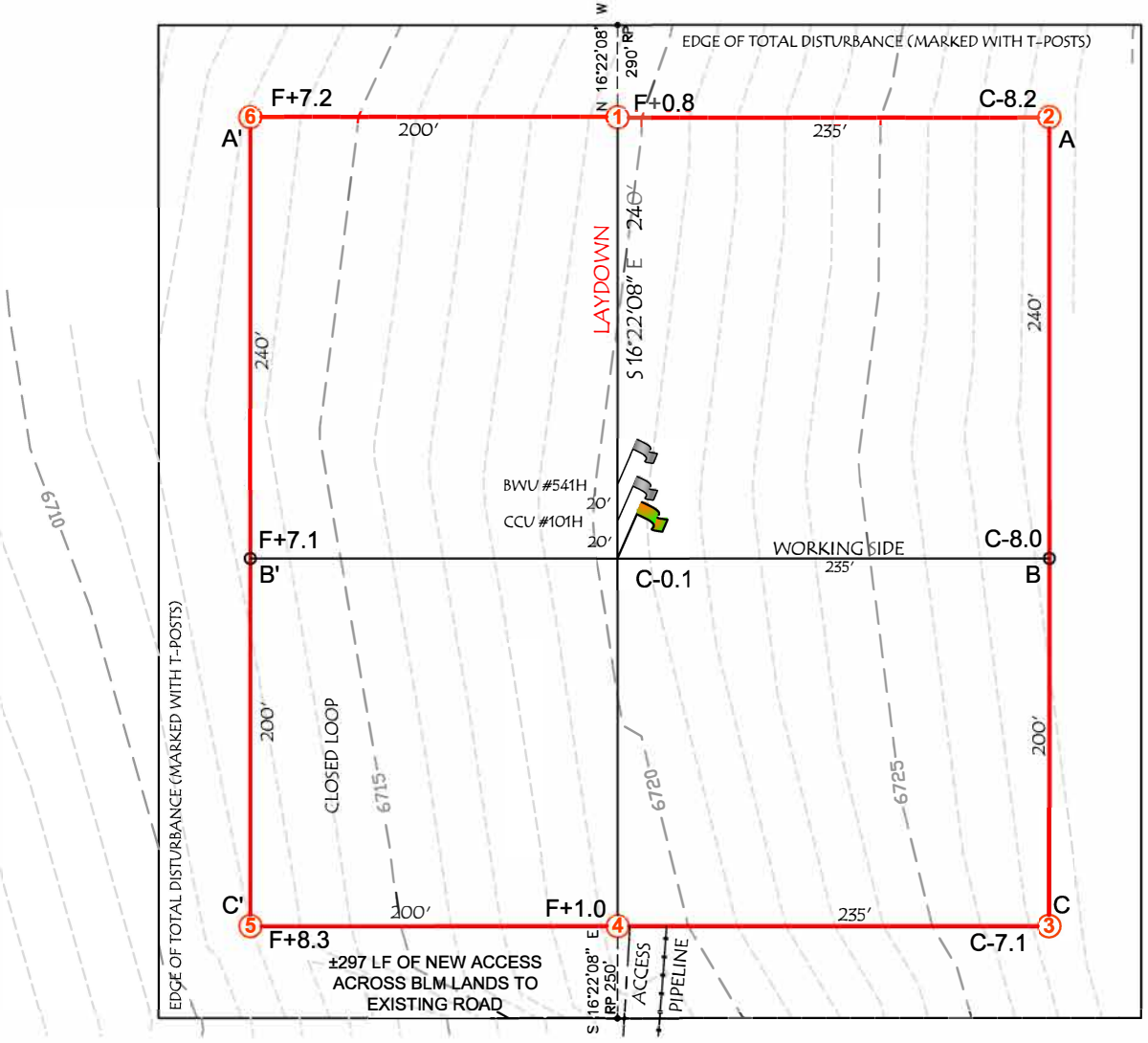
NOTES:

1.) BASIS OF BEARING: BETWEEN FOUND MONUMENTS AT THE SOUTH QUARTER CORNER AND THE SOUTHWEST CORNER OF SECTION 19, TOWNSHIP 24 NORTH, RANGE 8 WEST, N.M.P.M. SAN JUAN COUNTY, NEW MEXICO.
LINE BEARS: S 89°54'44" W A DISTANCE OF 2680.68 FEET AS MEASURED BY G.P.S. AND BASED ON THE N.M.S.P. COORDINATE SYSTEM (WEST ZONE).

2.) LATITUDE, LONGITUDE AND ELLIPSOIDAL HEIGHT BASED ON AZTEC CORS L1 PHASE CENTER.
DISTANCES SHOWN ARE GROUND DISTANCES USING A TRAVERSE MERCATOR PROJECTION FROM A WGS84 ELLIPSOID, CONVERTED TO NAD83.
NAVD88 ELEVATIONS AS PREDICTED BY GEOID03.

3.) LOCATION OF UNDERGROUND UTILITIES DEPICTED ARE APPROXIMATE. PRIOR TO EXCAVATION UNDERGROUND UTILITIES SHOULD BE FIELD VERIFIED. ALL CONSTRUCTION ACTIVITIES SHOULD BE FIELD VERIFIED WITH NEW MEXICO ONE-CALL AUTHORITIES AT LWEST 48 HOURS PRIOR TO CONSTRUCTION.

4.) T-POSTS HAVE BEEN SET TO DEFINE THE EDGE OF DISTURBANCE LIMITS WHICH ARE 50' OFFSETS FROM THE EDGE OF THE STAKED WELL PAD.




| ~ SURFACE OWNERSHIP ~ |
|---|
| BUREAU OF LAND MANAGEMENT |
| |

**TOTAL PERMITTED AREA**
**540' x 535' = 6.63 ACRES**
**SCALE: 1" = 100'**
**DATE: 04/07/20**
**DRAWN BY: GRR**

SLOPES TO BE CONSTRUCTED TO MATCH THE ORIGINAL CONTOURS AS CLOSE AS POSSIBLE.

NOTE:
CHENAULT CONSULTING, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED, BURIED PIPELINES OR CABLES ON WELL PAD, IN CONSTRUCTION ZONE AND/OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

DJR OPERATING, LLC

CCI
CHENAULT CONSULTING INC.
4600 COLLEGE BLVD.
SUITE 201
FARMINGTON, NM 87402
(505)-325-7707

**CENTER OF PAD**
LATITUDE: 36.293959° N
LONGITUDE: 107.715628° W
DATUM: NAD83

# DJR OPERATING, LLC
## BLANCO WASH UNIT #513H
## STAGING AREA AND G-TANK PAD

LOCATED IN THE SE/4 SE/4 OF SECTION 19,
T24N, R8W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
GROUND ELEVATION: 6706', NAVD 88
FINISHED PAD ELEVATION: 6705.5', NAVD 88
WC P19-2408

CCI
CHENAULT CONSULTING INC.
4600 COLLEGE BLVD.
SUITE 201
FARMINGTON, NM 87402
(505)-325-7707

NOTES:

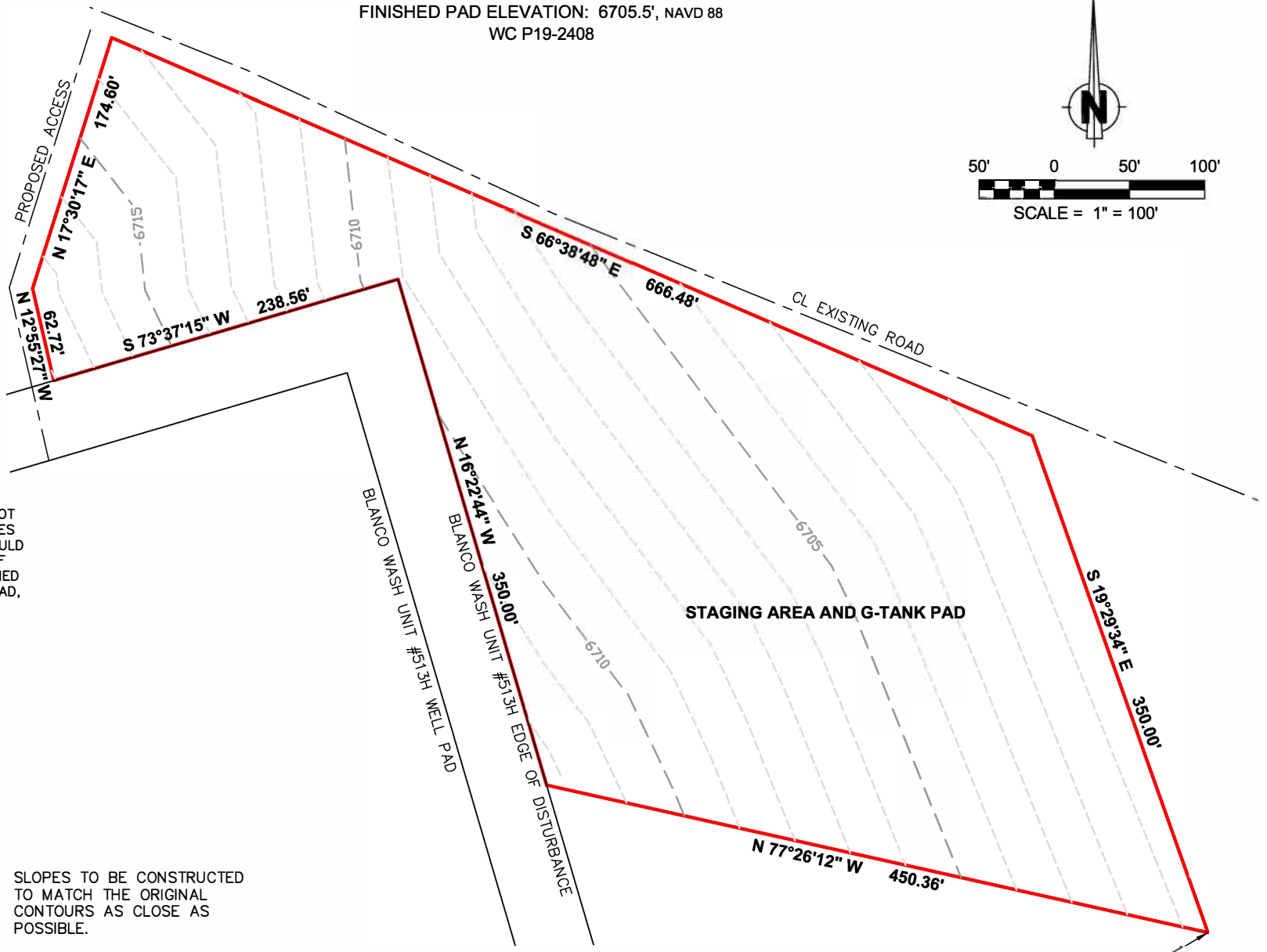
1.) BASIS OF BEARING: BETWEEN FOUND MONUMENTS AT THE SOUTHEAST QUARTER CORNER AND THE SOUTH QUARTER CORNER OF SECTION 19, TOWNSHIP 24 NORTH, RANGE 8 WEST, N.M.P.M. SAN JUAN COUNTY, NEW MEXICO.
LINE BEARS: S 89°56'03" W A DISTANCE OF 2639.14 FEET AS MEASURED BY G.P.S. AND BASED ON THE N.M.S.P. COORDINATE SYSTEM (WEST ZONE).

2.) LATITUDE, LONGITUDE AND ELLIPSOIDAL HEIGHT BASED ON AZTEC CORS L1 PHASE CENTER.
DISTANCES SHOWN ARE GROUND DISTANCES USING A TRAVERSE MERCATOR PROJECTION FROM A WGS84 ELLIPSOID, CONVERTED TO NAD83.
NAVD88 ELEVATIONS AS PREDICTED BY GEOID03.

3.) LOCATION OF UNDERGROUND UTILITIES DEPICTED ARE APPROXIMATE. PRIOR TO EXCAVATION UNDERGROUND UTILITIES SHOULD BE FIELD VERIFIED. ALL CONSTRUCTION ACTIVITIES SHOULD BE FIELD VERIFIED WITH NEW MEXICO ONE-CALL AUTHORITIES AT LWEST 48 HOURS PRIOR TO CONSTRUCTION.

4.) T-POSTS HAVE BEEN SET TO DEFINE THE EDGE OF DISTURBANCE LIMITS WHICH ARE 50' OFFSETS FROM THE EDGE OF THE STAKED WELL PAD.

NOTE:
CHENAULT CONSULTING, INC. IS NOT LIABLE FOR UNDERGROUND UTILITIES OR PIPELINES. CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED, BURIED PIPELINES OR CABLES ON WELL PAD, IN CONSTRUCTION ZONE AND/OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.




| ~ SURFACE OWNERSHIP ~ |
| --- |
| BUREAU OF LAND MANAGEMENT |
| |

**TOTAL PERMITTED AREA**
**4.222 ACRES**
**SCALE: 1" = 100'**
**DATE: 04/24/20**
**DRAWN BY: GRR**

SLOPES TO BE CONSTRUCTED TO MATCH THE ORIGINAL CONTOURS AS CLOSE AS POSSIBLE.

TIE TO SE CORNER SEC. 19
S 38°42'56" W 366.66'

DJR OPERATING, LLC

PROPOSED ACCESS FOR

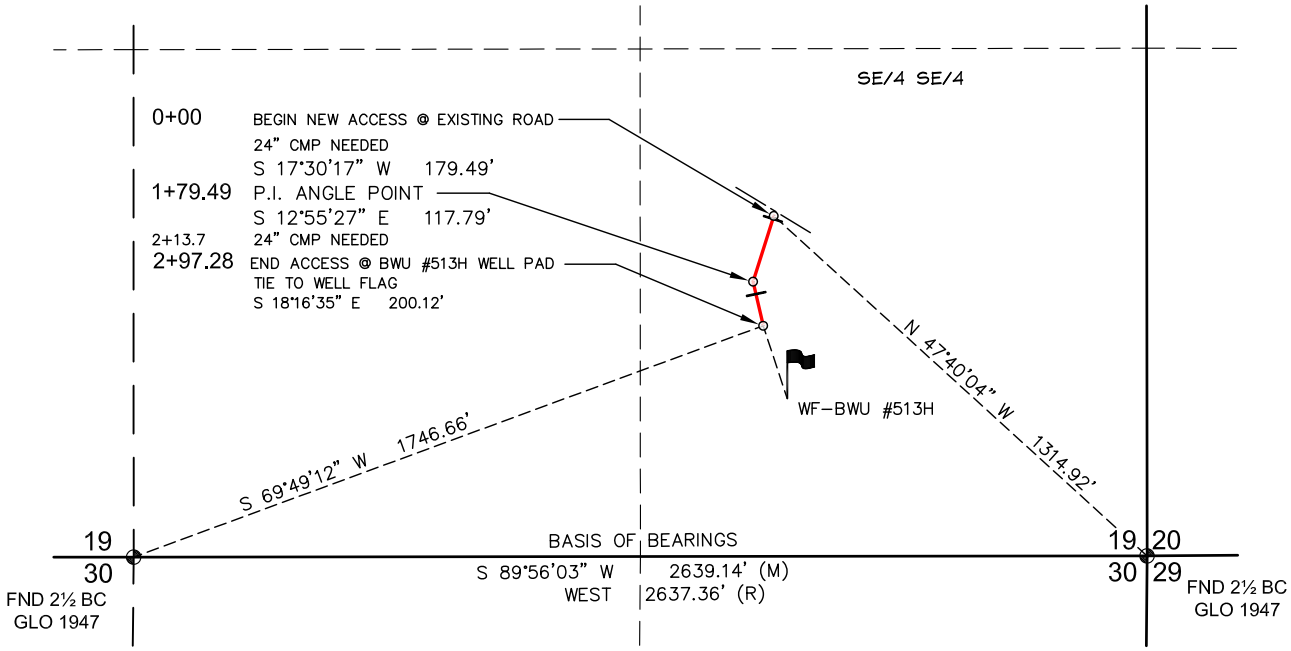
*DJR OPERATING, LLC*

BLANCO WASH UNIT #513H

LOCATED IN THE SE/4 SE/4 OF SECTION 19,
T24N, R8W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO

250' 0 250' 500'

SCALE: 1"=500'




*NOTES*

1) BASIS OF BEARINGS FOR THIS SURVEY ARE BETWEEN FOUND MONUMENTS AT THE SOUTHEAST CORNER AND THE SOUTH QUARTER CORNER OF SECTION 19, TOWNSHIP 24 NORTH, RANGE 8 WEST, N.M.P.M., SAN JUAN COUNTY, NEW MEXICO LINE BEARS: S 89°56'03" W 2639.14'
2) DATE OF FIELD SURVEY: AUGUST, 2019.
3) THIS EXHIBIT IS NOT A BOUNDARY SURVEY AND SHOULD NOT BE USED AS SUCH.
4) THIS EXHIBIT MAY NOT SHOW ALL EXISTING EASEMENTS AND UTILITIES.
5) CALL THE NEW MEXICO 811 SYSTEM FOR UTILITY LOCATIONS BEFORE EXCAVATING OR DIGGING.

HENRY P. BROADHURST JR. NEW MEXICO 11393 PROFESSIONAL SURVEYOR
01/31/2020

| ~ SURFACE OWNERSHIP ~ BUREAU OF LAND MANAGEMENT | | |
|---|---|---|
| SECTION 19, T24N, R8W<br>0+00 TO 2+97.28<br>297.28 FT / 18.02 RODS | | |
| DATE OF SURVEY | 10/22/19 | GR/JC |

PREPARED BY:

CCI
CHENAULT CONSULTING INC.
4800 COLLEGE BLVD #105
FARMINGTON, NM 87402
(505) 325-7707

*I, HENRY P. BROADHURST, JR., A NEW MEXICO REGISTERED PROFESSIONAL SURVEYOR CERTIFY THAT I CONDUCTED AND AM RESPOSIBLE FOR THIS SURVEY, THAT THIS SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT THIS SURVEY AND PLAT MEET THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO.*

| | |
|---|---|
| DRAWING: BWU #513H | |
| SCALE: 1" = 500' | REV. 0 01/30/2020 |
| DRAFTED BY: GRR | |
| SHEET: 1 of 1 | |

DJR OPERATING, LLC

DJR OPERATING, LLC
BLANCO WASH UNIT #513H
411' FSL & 937' FEL
LOCATED IN THE SE/4 SE/4 OF SECTION 19,
T24N, R8W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
WC P19-2408

## DIRECTIONS

1) FROM THE INTERSECTION OF HWY 64 & HWY 550 IN BLOOMFIELD, GO SOUTH ON HWY 550, 35.0 MILES TO INDIAN ROUTE 459 (M.P. 116.6).
2) TURN LEFT ONTO I.S.R. 459 AND GO 0.7 MILES TO A "Y" INTERSECTION.
3) CONTINUE LEFT ON I.S.R. 459;
CROSS A CATTLE GUARD AT 0.9 MILES

ACCESS IS STAKED ON THE RIGHT SIDE OF THE ROAD AT 1.9 MILES.

WELL FLAG LOCATED AT LAT. 36.293707° N, LONG.107.717101° W (NAD 83).

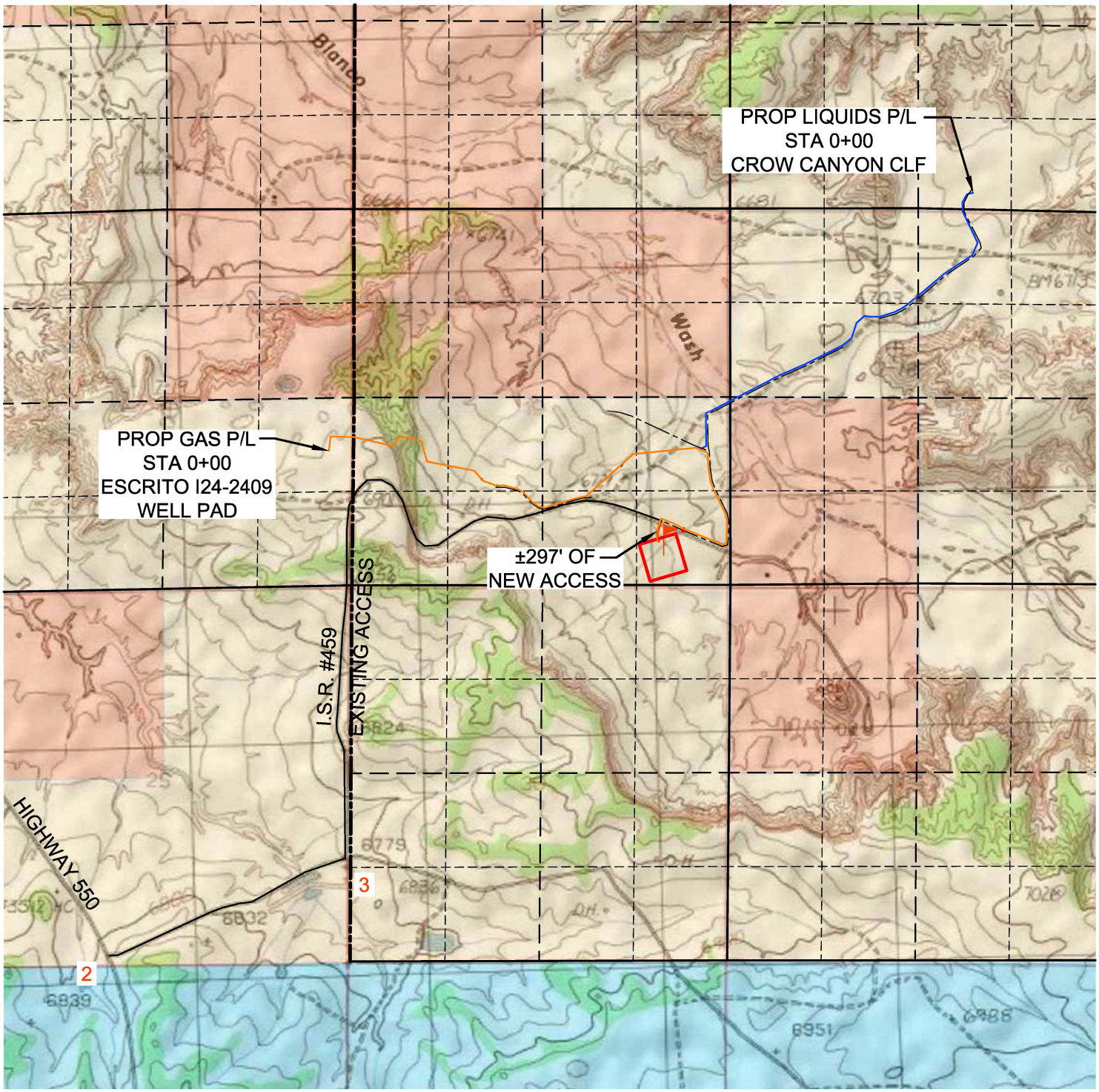
**WELL FLAG**
LATITUDE: 36.293707° N
LONGITUDE: 107.717101° W
DATUM: NAD83

**OWNERSHIP LEGEND**
- BLM
- BOR
- FOREST
- ALLOTTED/TRIBAL
- PRIVATE
- STATE

# *DJR OPERATING, LLC*

## BLANCO WASH UNIT #513H

411' FSL & 937' FEL
LOCATED IN THE SE/4 SE/4 OF SECTION 19,
T24N, R8W, N.M.P.M.,
SAN JUAN COUNTY, NEW MEXICO
±297' OF NEW ACCESS ACROSS BLM LANDS
WC P19-2408




**U.S.G.S. QUAD: CROW MESA**
**WEST SCALE: 1" = 2000' (1:24,000)**
**DATE: 04/07/20**
**DRAWN BY: GRR**

***BLANCO WASH UNIT #513H***
**NEW ACCESS**

| | |
|---|---|
| STA. 0+00 | 24" CMP |
| STA. 0+13.7 | 24" CMP |

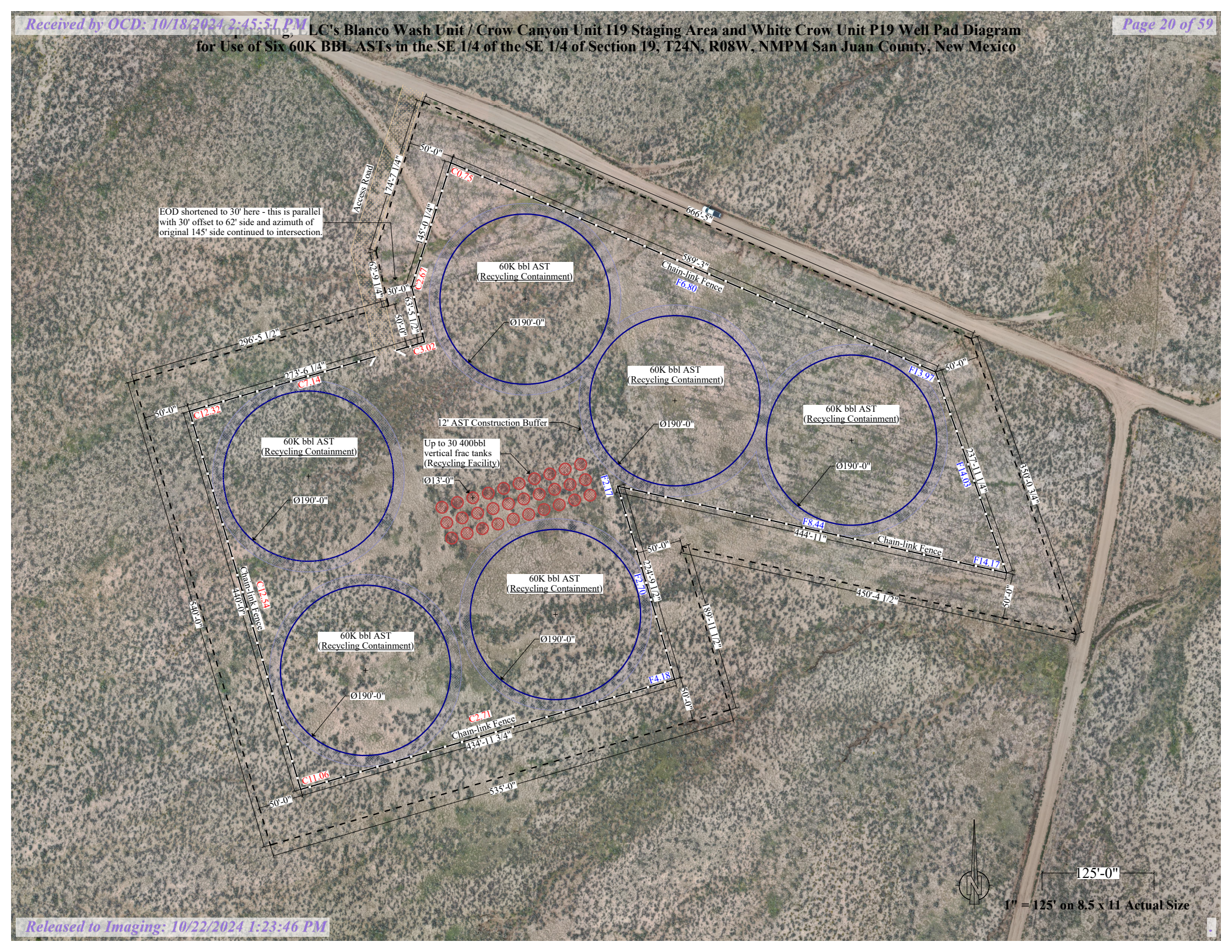
DJR OPERATING, LLC

CCI
CHENAULT CONSULTING INC.
4600 COLLEGE BLVD.
SUITE 201
FARMINGTON, NM 87402
(505)-325-7707

# EXHIBIT B. RECYCLING FACILITY AND RECYCLING CONTAINMENT SITE DIAGRAM

B

# Hilcorp Energy Company, LLC's Blanco Wash Unit / Crow Canyon Unit I19 Staging Area and White Crow Unit P19 Well Pad Diagram for Use of Six 60K BBL ASTs in the SE 1/4 of the SE 1/4 of Section 19, T24N, R08W, NMPM San Juan County, New Mexico



# EXHIBIT C. SURFACE OWNER NOTIFICATION

C

**Well Name:** CROW CANYON UNIT

**Well Location:** T24N / R8W / SEC 19 / SESE / 36.293654 / -107.717082

**County or Parish/State:** SAN JUAN / NM

**Well Number:** 101H

**Type of Well:** OIL WELL

**Allottee or Tribe Name:**

**Lease Number:** NMNM54980

**Unit or CA Name:** /1/CROW CANYON UNIT

**Unit or CA Number:** NMNM135203A

**US Well Number:** 3004538226

**Operator:** DJR OPERATING LLC

## Notice of Intent

**Sundry ID:** 2816033

**Type of Submission:** Notice of Intent

**Type of Action:** Other

**Date Sundry Submitted:** 10/08/2024

**Time Sundry Submitted:** 03:41

**Date proposed operation will begin:** 10/08/2024

**Procedure Description:** DJR Operating, LLC proposes to construct three 60,000-barrel AST containments on the White Crow 2408 19P well pad. This well pad sits adjacent/adjoining the irregular shaped staging area in the southeast ¼ of the southeast ¼, of Section 19, T24N, R08W. This staging area was proposed and approved for AST water storage to complete DJR wells in the surrounding area. To maximize storage ability, DJR would like to construct the White Crow 2408 19P well pad and adjacent staging area to the same grade allowing placement of six (6) 60,000 barrel AST containments. Please see the attached diagram showing this proposed layout.

## Surface Disturbance

**Is any additional surface disturbance proposed?:** No

## NOI Attachments

**Procedure Description**

20241002_BWU_CCU_Staging_and_WCU_P19_Pad_AST_20241008154131.pdf

**Well Name:** CROW CANYON UNIT

**Well Location:** T24N / R8W / SEC 19 / SESE / 36.293654 / -107.717082

**County or Parish/State:** SAN JUAN / NM

**Well Number:** 101H

**Type of Well:** OIL WELL

**Allottee or Tribe Name:**

**Lease Number:** NMNM54980

**Unit or CA Name:** /1/CROW CANYON UNIT

**Unit or CA Number:** NMNM135203A

**US Well Number:** 3004538226

**Operator:** DJR OPERATING LLC

## Operator

*I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a*

**Operator Electronic Signature:** HEATHER HUNTINGTON

**Signed on:** OCT 08, 2024 03:41 PM

**Name:** DJR OPERATING LLC

**Title:** Permitting Technician

**Street Address:** 200 ENERGY COURT

**City:** FARMINGTON **State:** NM

**Phone:** (505) 636-9751

**Email address:** HHUNTINGTON@ENDURINGRESOURCES.COM

## Field

**Representative Name:**

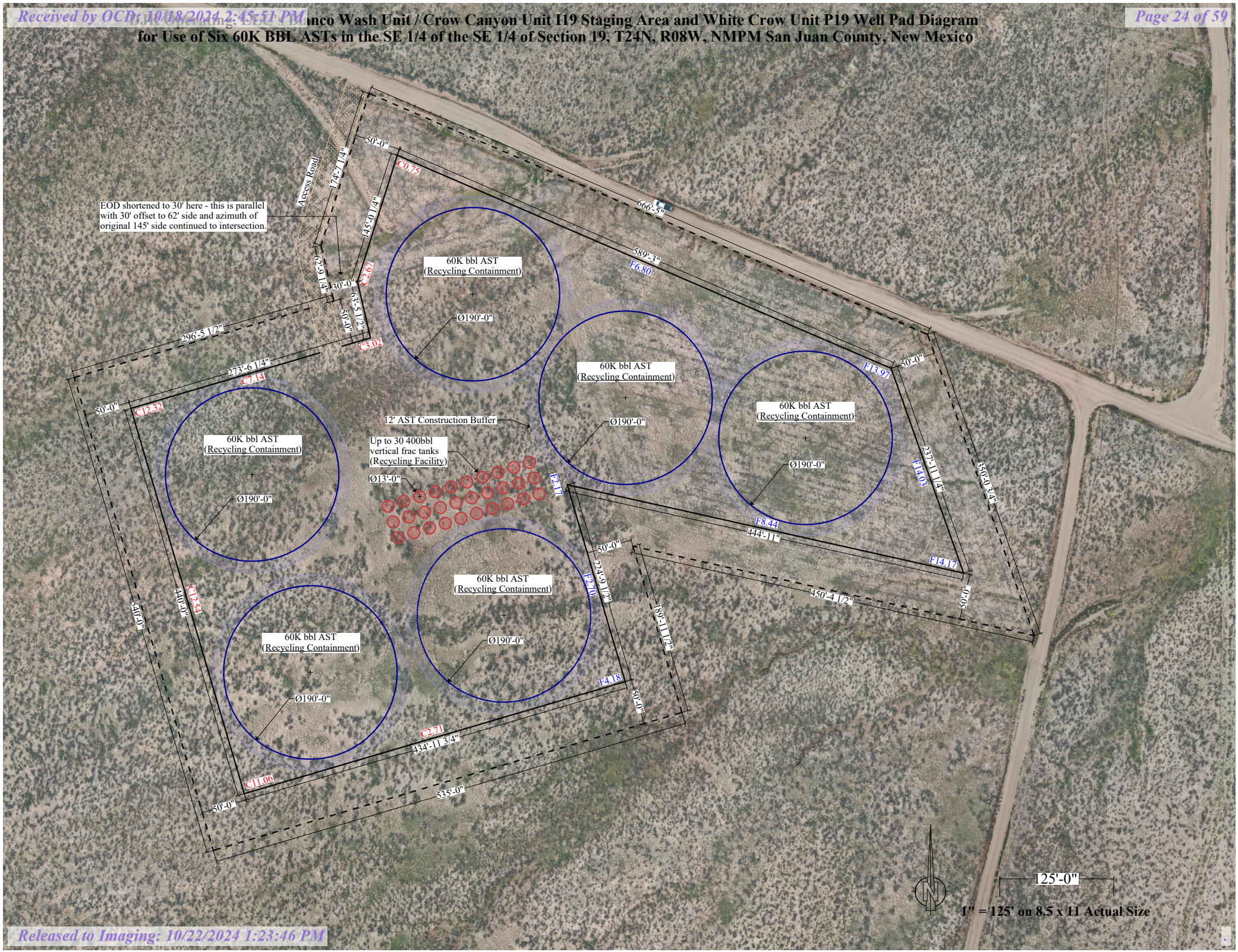
**Street Address:**

**City:** **State:** **Zip:**

**Phone:**

**Email address:**

# Blanco Wash Unit / Crow Canyon Unit I19 Staging Area and White Crow Unit P19 Well Pad Diagram for Use of Six 60K BBL ASTs in the SE 1/4 of the SE 1/4 of Section 19, T24N, R08W, NMPM San Juan County, New Mexico



# EXHIBIT D. GROUND WATER REPORT

D

# *New Mexico Office of the State Engineer*
# Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

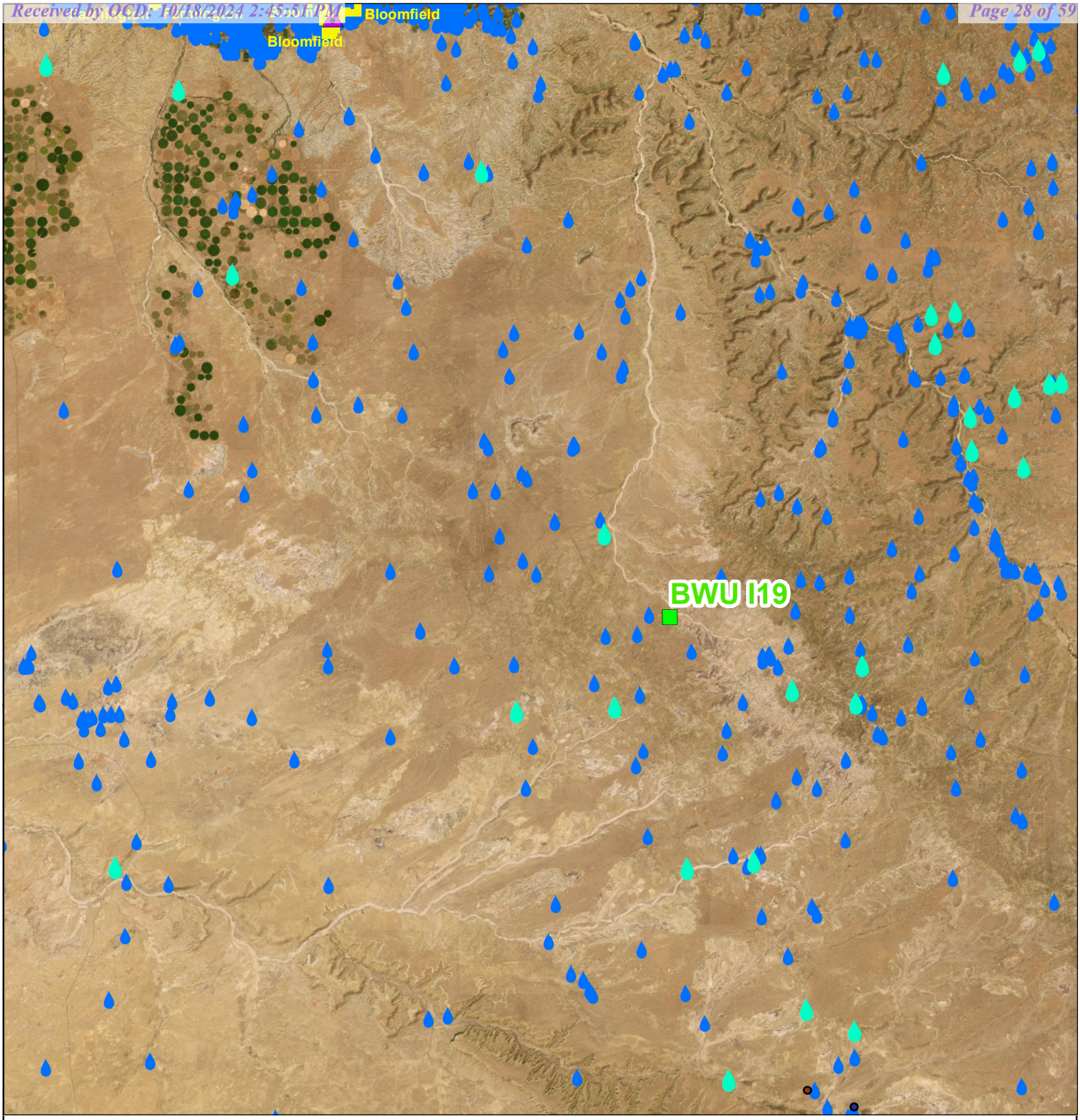
| Well Tag | POD Number | Q64 | Q16 | Q4 | Sec | Tws | Rng | X | Y |
|---|---|---|---|---|---|---|---|---|---|
| 50115 | SJ 04587 POD1 | | 2 | 3 | 25 | 24N | 09W | 253561 | 4018930 |

| | | | | | |
|---|---|---|---|---|---|
| **Driller License:** | 1842 | **Driller Company:** | MW ELECTRIC INC. | | |
| **Driller Name:** | STOTTS, CHADDD GLENNALL OFF | | | | |
| **Drill Start Date:** | 02/08/2024 | **Drill Finish Date:** | 03/05/2024 | **Plug Date:** | |
| **Log File Date:** | 03/13/2024 | **PCW Rcv Date:** | | **Source:** | Shallow |
| **Pump Type:** | | **Pipe Discharge Size:** | | **Estimated Yield:** | 10 GPM |
| **Casing Size:** | 4.75 | **Depth Well:** | 800 feet | **Depth Water:** | 640 feet |

| Water Bearing Stratifications: | Top | Bottom | Description |
|---|---|---|---|
| | 0 | 60 | Shallow Alluvium/Basin Fill |
| | 60 | 400 | Shale/Mudstone/Siltstone |
| | 400 | 500 | Sandstone/Gravel/Conglomerate |
| | 500 | 640 | Sandstone/Gravel/Conglomerate |
| | 640 | 670 | Sandstone/Gravel/Conglomerate |
| | 670 | 700 | Sandstone/Gravel/Conglomerate |
| | 700 | 800 | Sandstone/Gravel/Conglomerate |

| Casing Perforations: | Top | Bottom |
|---|---|---|
| | 0 | 640 |
| | 640 | 670 |
| | 670 | 700 |
| | 700 | 800 |

# EXHIBIT E. SITING CRITERIA MAPS




# BWU I19 Containment Location Map1

## Siting Critieria

- OSE Water Wells
- Spring Seep
- Active Mining
- Active Mining, Active Reclamation
- Approved
- Enforcement
- No Permit
- No Response
- Pending
- Released
- Temporary Suspension
- Under Development
- New_Mexico_incorporated_places_April2023

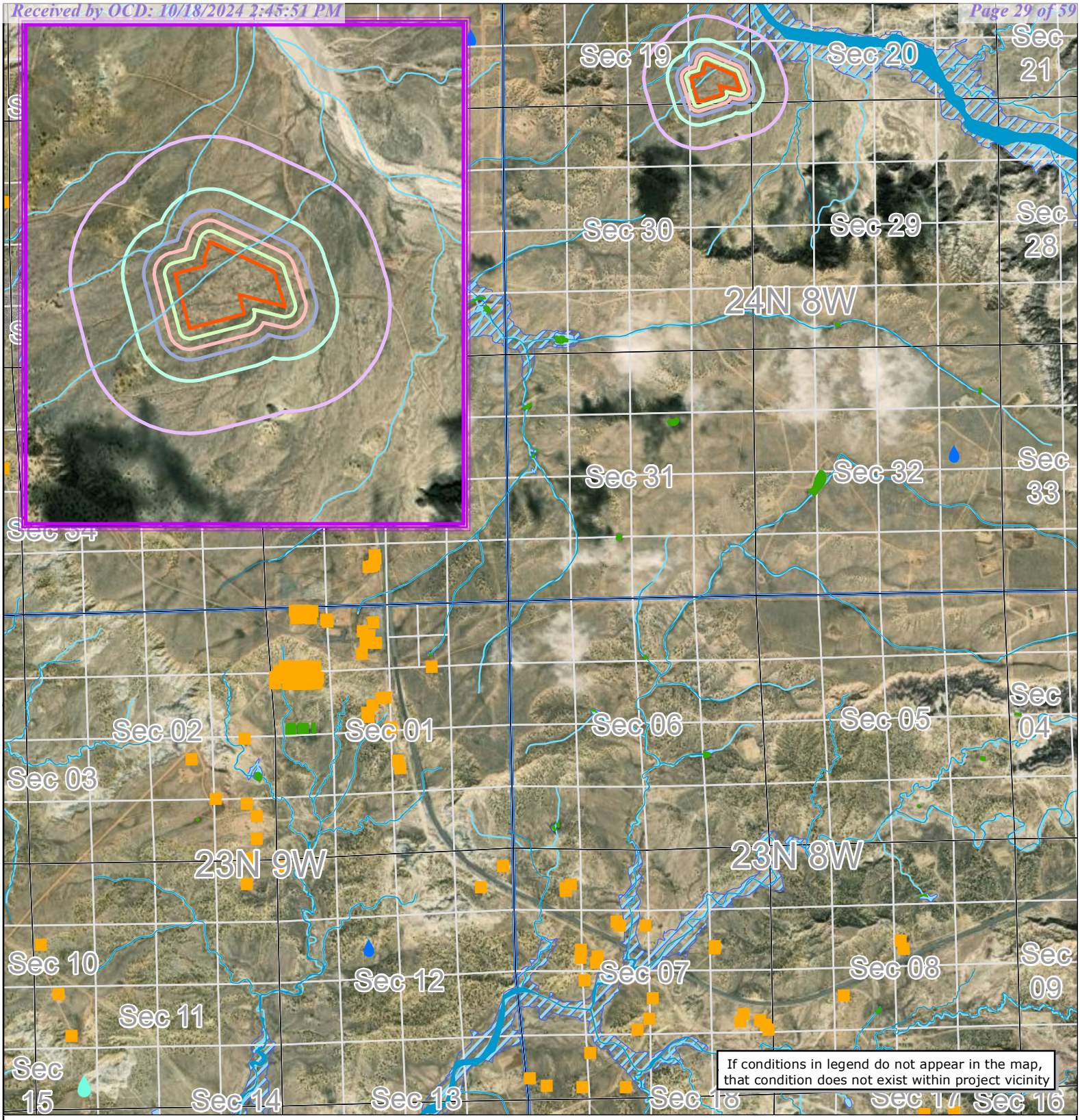
ENDURING RESOURCES, LLC

Miles

0 4 8 12 16

Data Source Statement:
BLM-FFO, Enduring Resources GIS, ESRI Inc., NCE Surveys, USGS

| NAD 1983 2011 StatePlane New Mexico West FIPS 3003 Ft US | Author: drogers | Date: 9/10/2024 |
|---|---|---|




# BWU I19 Staging Containment Location Map 2
## Siting Critieria

- BWU I19 Staging
- OSE Water Wells
- Spring Seep
- Residence
- USGS Water Courses

- 100
- 200
- 300
- 500
- 1000

- Active Mining
- Active Mining, Active Reclamation
- Approved
- Enforcement
- No Permit
- No Response
- Pending
- Released
- Temporary Suspension
- Under Development

**USA_Wetlands**
- Marine
- Estuary
- Marsh, Swamp, Bog, Prairie
- Riverine
- Lake, Reservoir
- NHDWaterbody
- FEMA High Risk Flood Zone

ENDURING RESOURCES, LLC

Feet
0 1,000 2,000 3,000 4,000 5,000

Data Source Statement:
BLM-FFO, Enduring Resources GIS, ESRI Inc., NCE Surveys, USGS

| NAD 1983 2011 StatePlane New Mexico West FIPS 3003 Ft US | Author: drogers | Date: 9/10/2024 |
|---|---|---|

# EXHIBIT F. AQUATIC RESOURCES DELINEATION TECHNICAL MEMORANDUM

SWCA ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

7770 Jefferson Street NE, Suite 410
Albuquerque, New Mexico 87109
Tel 505.254.1115 Fax 505.254.1116
www.swca.com

# AQUATIC RESOURCES DELINEATION TECHNICAL MEMORANDUM

**To:** Casey Haga, Enduring Resources IV, LLC

**From:** SWCA Environmental Consultants

**Date:** September 30, 2024

**Re:** **Enduring's Blanco Wash Unit/Crow Canyon Unit I19 Staging and G-Tank Area and White Crow Unit P19 Well Pad Project in San Juan County, New Mexico, Aquatic Resources Delineation Technical Memorandum / SWCA Project No. 75253-104**

## 1. INTRODUCTION

SWCA Environmental Consultants (SWCA) was retained by Enduring Resources IV, LLC (Enduring), to complete an aquatic resources delineation survey, commonly referred to as a wetland delineation, and associated technical memorandum for a recycling containment facility associated with the Blanco Wash Unit/Crow Canyon Unit I19 Staging and G-Tank Area White Crow Unit P19 Project (project) in San Juan County, New Mexico. The project area comprises 10.9 acres of land managed by the Bureau of Land Management Farmington Field Office. The project components consist of one well pad and one G-tank and staging area (project area) (see Figure A-1 in Appendix A). A survey area that consists of the project area plus a 200-foot buffer was evaluated for aquatic resources around the G-tank and staging area. A previous survey area of the well pad included the well pad edge of disturbance plus a 100-foot buffer (SWCA 2020). The approximate center point of the survey area is at latitude 36.294230°, longitude −107.716452°.

The goal of conducting this aquatic resources delineation survey was to identify the potential presence and extent of features that may be jurisdictional waters of the United States (WOTUS) under Section 404 of the Clean Water Act (CWA) of 1972, as amended (*Federal Register* 88:61964). A delineation of aquatic resources includes the identification and recording of features if present, that may be determined to be WOTUS by the U.S. Army Corps of Engineers (USACE).

SWCA prepared this aquatic resources delineation technical memorandum, which summarizes aquatic resources desktop and field data, to support Enduring's application for permit or registration specific to 19.15.34 New Mexico Administrative Code (NMAC) via Form C-147. This technical memorandum serves as a record of existing aquatic resources that may be determined to be WOTUS, including wetlands and aquatic resources exhibiting an ordinary high-water mark (OHWM) in accordance with the USACE methods and guidance. The NMAC does not provide methods or guidance on determining watercourses or wetlands.

Regulatory considerations, survey methodology, survey results, and a summary are presented below.

# 2. Regulatory Considerations

## Waters of the United States

On September 8, 2023, the "Revised Definition of 'Waters of the United States'" rule as amended (2023 Amended Rule) (*Federal Register* 88:61964) went into effect and is currently applicable in the State of New Mexico.

WOTUS regulations, including the current 2023 Amended Rule, do not clearly define the differences between flow duration regimes (i.e., ephemeral, intermittent, and perennial). Because the 2023 Amended Rule removes the former significant nexus test, we no longer have a tool to assess connectivity for certain features where continuous connectivity is questionable. Currently, the USACE is developing guidance for how districts will assess non-relatively permanent waters and non-adjacent wetland waters (*Federal Register* 88:61964).

In general, WOTUS include traditional navigable waters, wetlands adjacent to traditional navigable waters, and relatively permanent waters defined as tributaries and wetlands adjacent to navigable waters that have a continuous surface connection and standing or continuously flowing bodies of water (U.S. Environmental Protection Agency 2024).

Wetlands are special aquatic sites defined by the USACE as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (USACE 1987). To meet the basic definition of a wetland, an area must contain the following three parameters under normal circumstances: 1) the presence of wetland hydrology indicators showing regular inundation, 2) a dominance of hydrophytic (water-loving) vegetation, and 3) soil characteristics and indicators of frequent saturation (i.e., hydric soils) (USACE 1987).

SWCA evaluated the presence/absence and characteristics of field-delineated surface aquatic resources to develop a professional opinion of potential WOTUS jurisdiction based on the 2023 Amended Rule and current guidance received by the USACE Albuquerque District at the time this document was prepared. The USACE has the regulatory authority and discretion in determining the jurisdictional status of aquatic resources at a given site.

## 19.15.34 New Mexico Administrative Code

19.15.34 NMAC applies to the transportation, disposal, recycling, reuse, or the direct surface or subsurface disposition by use of water produced or used in connection with the development or production of oil or gas or both; in road construction or maintenance, or other construction; and in the generation of electricity or in other industrial processes. 19.15.34 NMAC also applies to the transportation of drilling fluids and liquid oil field waste.

A permit or registration, depending on the proposed activity, for recycling and reuse of produced water, drilling fluids, and liquid oil field waste including recycling containment is required via New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division's (NMOCD's) Form C-147.

Enduring is proposing recycling containment as part of the project, requiring compliance with 19.15.34.11 NMAC. As defined in 19.15.34.10(B), recycling containments may hold produced water for use in connection with drilling, completion, producing, or processing oil or gas or both. Such fluids may include fresh water, brackish water, recycled and treated water, fluids added to water to facilitate well drilling or completion, water produced with oil and gas, flowback from operations, water generated by an

oil or gas processing facility, or other waters that are gathered for well drilling or completion but may not include any hazardous waste. Form C-147 siting criteria require that a recycling containment not be located:

- where groundwater is less than 50 feet below the bottom of the containment;
- within 300 feet of a continuously flowing watercourse, or 200 feet of any other significant watercourse or lakebed, sinkhole, or playa lake (measured from the OHWM);
- within 500 feet of a spring or freshwater well used for domestic or stock watering purposes in existence at the time of the initial registration;
- within incorporated municipal boundaries or within a defined municipal freshwater well field covered by a municipal ordinance adopted pursuant to Section 3-27-3 New Mexico Statutes 1978, as amended, unless the municipality specifically approves the recycling containment in writing;
- within 500 feet of a wetland; or
- within a 100-year floodplain.

Watercourse is defined in 19.15.2.7 NMAC as "a river, creek, arroyo, canyon, draw or wash or other channel having definite banks and bed with visible evidence of the occasional flow of water." Wetlands are defined in 19.15.2.7 NMAC as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions in New Mexico." The term "significant" is not defined in NMAC.

# 3. METHODOLOGY

The aquatic resources inventory included a desktop review of existing data and a field survey of the project area plus the 200-foot buffer as requested by Enduring (Haga 2024), as described below.

## 3.1 Existing Data Review

A desktop review of existing publicly available data prior to the aquatic resources field survey was completed to evaluate surface aquatic resources within and adjacent to the proposed project area.

Sources reviewed included the U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) (USGS 2016), U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps (USFWS 2024), Federal Emergency Management Agency (FEMA) National Flood Hazard Layer (FEMA 2024), Natural Resources Conservation Service (NRCS) Web Soil Survey (NRCS 2024a) and hydrologic soil groups (NRCS 2024b), historic and current aerial imagery of the project area (Google Earth Pro 2024), and the USGS Watershed Boundary Dataset (USGS 2021). SWCA used the USACE's Antecedent Precipitation Tool (Version 2.0.0) (USACE 2023) to evaluate the conditions leading up to, and during, the site visit relative to normal conditions, seasonality, and typical-year considerations.

## 3.2 Field Survey

### *3.2.1 Wetlands*

The presence/absence of wetlands is determined in the field using delineation methods described in the *Corps of Engineers Wetlands Delineation Manual* (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (Regional Supplement) (USACE 2008a). Data at each potential wetland are recorded on Regional Supplement wetland

determination data forms (data sheets). Determination of wetland habitat type is based on the classification system developed by Cowardin et al. (1979). Wetland plant indicator status is based on the 2020 National Wetland Plant List (USACE 2020) for each species and is recorded on data sheets. Soil colors are identified using Munsell Soil Color Charts (Munsell Color 2010). Wetland boundaries are delineated where the three fundamental characteristics of hydrophytic vegetation, hydric soils, and hydrology are present.

### *3.2.2 Non-wetland Waters*

The presence and extent of non-wetland water features (e.g., streams, creeks, and ponds) was determined in the field using the guidance and methods provided in the USACE Regulatory Guidance Letter 05-05 (USACE 2005) and the USACE technical guidance, *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b). An OHWM is the line on a shore or bank established by fluctuations of water and is typically identified by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas. The spatial extent of non-wetland waters was delineated using the identified OHWM for each feature.

For stream features exhibiting an OHWM, SWCA conducted a streamflow duration assessment in the field using *User Manual for a Beta Streamflow Duration Assessment Method for the Arid West of the United States* (Mazor et al. 2023). The Streamflow Duration Assessment Method (SDAM) is a rapid, field-based method to determine flow duration class at the reach scale in the absence of long-term hydrologic data. Use of the SDAM may inform a range of activities where information on streamflow duration is useful, including certain jurisdictional determinations under the CWA; however, the SDAM is not a jurisdictional determination (Mazor et al. 2023). The method is specific to the Arid West Region and relies on five indicators to determine stream flow classification: perennial, intermittent, ephemeral, at least intermittent, and need more information. The field delineation crews recorded the status of these five indicators on a field form for every surface water feature in the survey area with an OHWM.

### *3.2.3 Mapping*

A handheld GPS receiver set to submeter accuracy was used to record the spatial extent of features, geographically reference data points, and demarcate wetland and water body boundaries during the field survey. Geographic information system (GIS) software was used to analyze recorded features, calculate areas, and generate the survey area maps.

# 4. RESULTS

## 4.1 Existing Data Review Results

The project area is entirely within the Blanco Canyon watershed (Hydrologic Unit Code 1408010305) (USGS 2021). The entire survey area (23.9 acres) is within FEMA Flood Zone X, an area of minimal flood hazard. The survey area did not intersect FEMA-designated 100-year flood zones (area of special flood hazards). According to the existing data review, one NHD-mapped flowline intersects the project area and no NWI-mapped wetlands overlap the survey area (USFWS 2024; USGS 2016) (Table 1; also see Figure A-1 in Appendix A).

**Table 1. National Hydrography Dataset and National Wetlands Inventory Features Mapped within the Survey Area**

| Aquatic Resource (NHD Identifier) | Length (linear feet) in Survey Area | Area (acres) in Survey Area |
|---|---|---|
| **NHD Flowline** | | |
| Intermittent stream/river (14080103003552) | 1035.1 | – |

Sources: USFWS (2024); USGS (2016)

Hydric soils are formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions (NRCS 2024b) and are one of the three fundamental characteristics of wetlands unless problematic conditions exist. There are no mapped soil units in the project area that are considered hydric (Table 2).

**Table 2. Mapped Soil Units in the Survey Area**

| Soil Map Unit Name | Soil Map Unit Number or Symbol | Hydric | Total Acres in Survey Area | Percent of Survey Area |
|---|---|---|---|---|
| Blancot-Notal association, gently sloping | BT | No | 23.9 | 100 |

Source: NRCS (2024a, 2024b)

Based on the results of the Antecedent Precipitation Tool (Product of 14), the project area experienced normal wetness conditions (Table 3) (USACE 2023). The survey was conducted during the dry season, and the drought index was rated as "mild drought." Any wetland hydrology indicators observed during SWCA's August 2024 field survey reflect those that would be expected in a typical year for this area.

**Table 3. Antecedent Precipitation Tool Results for Survey Area**

| 30 Days Ending | 30th Percentile (inches)* | 70th Percentile (inches)† | Observed (inches)‡ | Wetness Condition§ | Condition Value¶ | Month Weight± | Product** |
|---|---|---|---|---|---|---|---|
| August 14, 2024 | 0.94 | 2.36 | 1.20 | Normal | 2 | 3 | 6 |
| July 15, 2024 | 0.17 | 0.88 | 2.35 | Wet | 3 | 2 | 6 |
| June 15, 2024 | 0.03 | 0.52 | 0.27 | Normal | 2 | 1 | 2 |
| **Result** | | | | | | | **14 (Normal)** |

* 30th percentile represents the lower limit of the 30-year normal range for the month.

† 70th percentile represents the upper limit of the 30-year normal range for the month.

‡ Observed: Total precipitation recorded during the month.

§ Wetness Condition: Observed value above 30-year normal range (wet), observed value less than 30-year normal range (dry).

¶ Condition Value: wet = 3, normal = 2, dry =1.

± Month Weight: first 30-day period = 3, second 30-day period = 2, third 30-day period = 1.

** Product: Antecedent Condition Calculation (condition value × month weight).

## 4.2 Field Results

The aquatic resources delineation survey was completed on August 14, 2024. At the time of the survey, all project components appeared to have been previously cleared and grubbed but reclaimed. The reclamation consisted mostly of mature grasses as opposed to the adjacent undisturbed shrublands. A previous survey evaluated the well pad portion of the project area plus a 100-foot buffer (SWCA 2020).

### *4.2.1 Wetlands*

SWCA did not observe or delineate any wetland features during the August 2024 or 2020 field surveys due to the lack of three-parameter wetlands within the survey area. The NWI-mapped riverine feature investigated in the field was lacking an OHWM or three-parameter wetland characteristics and is likely an erosional feature from stormwater surface flows.

### *4.2.2 Non-wetland Waters*

No potentially jurisdictional non-wetland waters containing an OHWM were identified within the survey area during the August 2024 or 2020 field surveys. The NHD-mapped flowline was field-verified as an isolated erosional feature without strong, reliable, and consistent OHWM indicators (EF06). Four unmapped erosional features were also observed and documented in the field as vegetated upland swales or isolated erosional features (EF07−EF10) (Table 4; also see Figure A-1 in Appendix A and Photographs B-1−B-8 in Appendix B). Photographs of these five features and upland areas are provided in Appendix B.

**Table 4. Erosional Features in the Survey Area**

| Feature ID | Aquatic Resource Type | Coincides with mapped NHD and/or NWI Feature (Yes or No) | Notes |
|---|---|---|---|
| EF06 | Erosional feature | Yes | Headcut and some channelizing but no reliable, strong, or consistent OHWM indicators; dissipates to sheet flow. |
| EF07 | Erosional feature | No | Swale with no reliable, strong, or consistent OHWM indicators. |
| EF08 | Erosional feature | No | Headcut and some channelizing but no reliable, strong, or consistent OHWM indicators; dissipates to sheet flow. |
| EF09 | Erosional feature | No | Some channelizing but no reliable, strong, or consistent OHWM indicators; dissipates to sheet flow. |
| EF10 | Erosional feature | No | Swale and headcut with no reliable, strong, or consistent OHWM indicators. |

## 5. Summary

Based on the regulatory considerations provided in Section 2, evaluation of the survey area and observed aquatic resources, and SWCA's understanding of the USACE Albuquerque District's current policies regarding jurisdictional determinations, it is SWCA's professional opinion that, per the 2023 Amended Rule, no features present within the survey area would be considered jurisdictional WOTUS by the USACE. Erosional features, as those observed in the survey area, are excluded from WOTUS jurisdiction (40 Code of Federal Regulations 120.2(b)(8)).

Pursuant to 19.15.34 NMAC, no OHWMs were observed within 200 feet of the project area. Therefore, no significant watercourse is likely to occur within 200 feet of the proposed recycling containment. Additionally, neither the project area nor the survey area intersect a FEMA 100-year flood zone.

The results and summary provided are based on SWCA's professional opinion. Only the USACE has final and legal authority for determining the presence of jurisdictional WOTUS and the extent of their boundaries. Only the NMOCD has final and legal authority for determining the presence of continuously flowing watercourses, significant watercourses, or wetlands and the extent of their boundaries for the purposes of permitting and/or registration applicable to 19.15.34 NMAC.

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# APPENDIX A

# AQUATIC RESOURCES DELINEATION FIGURE

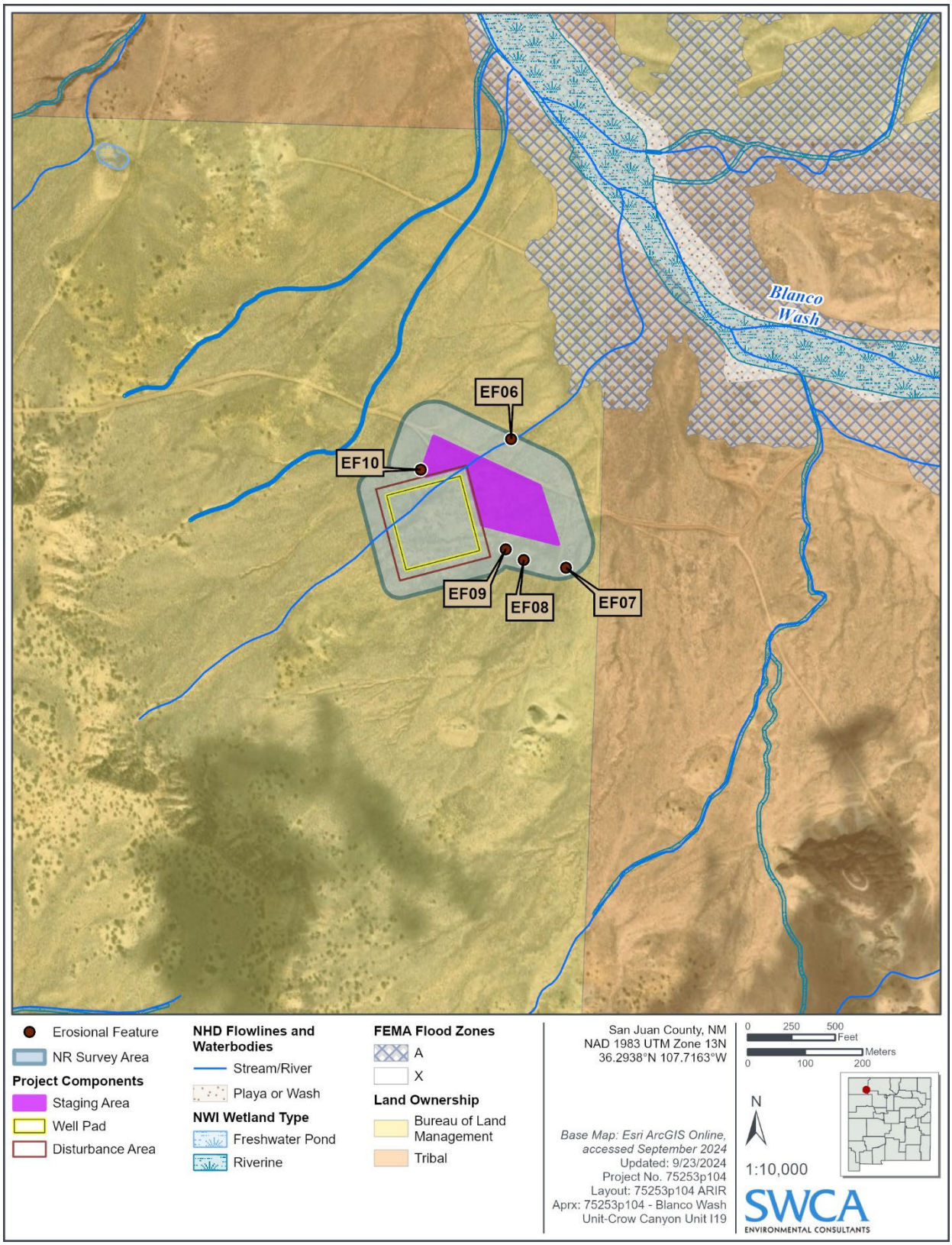



**Figure A-1. Overview of desktop aquatic resources data and field-assessed aquatic resources data within the survey area.**

# APPENDIX B

# PHOTOGRAPHS

**Photograph B-1. Overview of EF06, an erosional feature that does not contain an OHWM, facing upstream (north).**

**Photograph B-2. Overview of EF06, an erosional feature that does not contain an OHWM, facing downstream (south).**

**Photograph B-3. Overview of EF07, an erosional feature that does not contain an OHWM, facing upstream (east).**

**Photograph B-4. Overview of EF07, an erosional feature that does not contain an OHWM, facing downstream (north).**

**Photograph B-5. Overview of EF08, an erosional feature that does not contain an OHWM, facing upstream (south).**

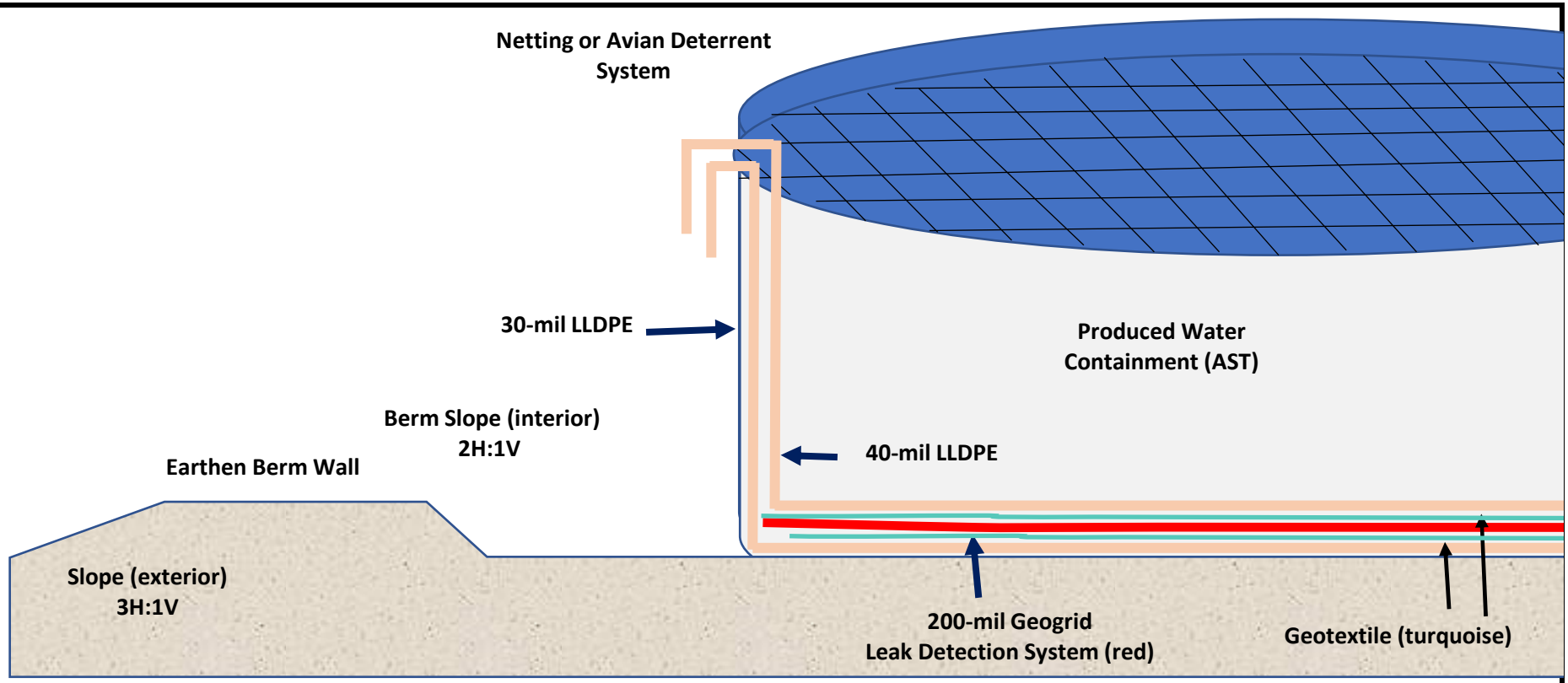
**Photograph B-6. Overview of EF08, an erosional feature that does not contain an OHWM, facing downstream (north).**

**Photograph B-7. Overview of EF09, an erosional feature that does not contain an OHWM, facing downstream (north).**

**Photograph B-8. Overview of EF10, an erosional feature that does not contain an OHWM, facing upstream (north).**

# EXHIBIT G. MANUFACTURE SPECIFICATION

G




## Description of Leak Detection System

- 40-mil LLDPE comprise primary liner and 30-mil LLDPE comprise the secondary liner
- 200-mil geogrid drainage layer lies between the primary and secondary liner per Plate 2
- Geotextile between the geogrid and each liner
- > 3-inch deep sump excavated on down slope side of AST per Sump Design Drawing
- A small hose runs from the collection sump to top of AST via tube (see Section D)
- Every week, a portable self-priming peristaltic pump connects to the leak detection system.
- The self-priming pump discharge hose runs back into the AST, on top of the primary liner
- If fluid is detected, it is tested for conductance to determine the origin of the water (i.e. produced water or condensation)

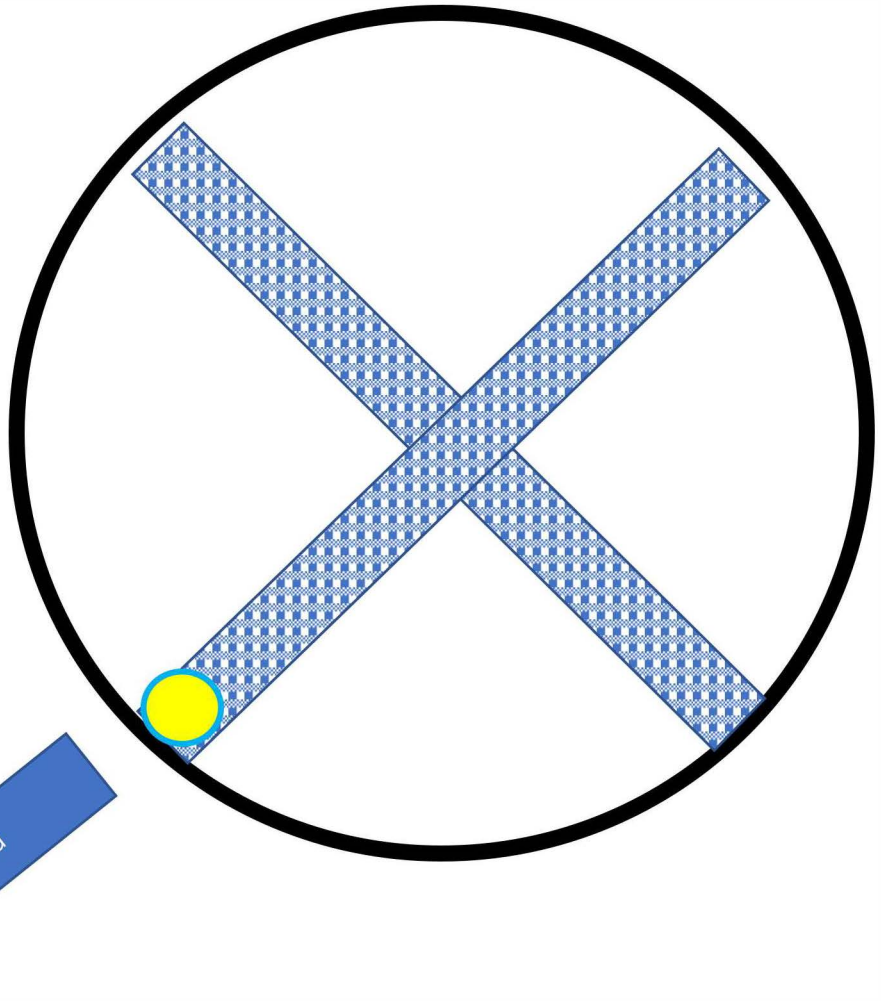
| | | |
|---|---|---|
| **R.T. Hicks Consultants Albuquerque, NM** | **Design Sketch** | **Plate 1** |
| | **Well Water Solutions** | **May-21** |

Use laser level to determine slope of pad and low point of AST

200 mil geogrid placed
- above 8-oz geotextile and 30-mil secondary liner
- inside of AST after set up, before install of primary liner
- below 40-mil primary liner

8-oz geotextile is placed
- over the 30-mil LLDPE liner inside the steel AST ring
- under the 40-mil primary liner inside the AST

Sump at lowest point of the AST set up

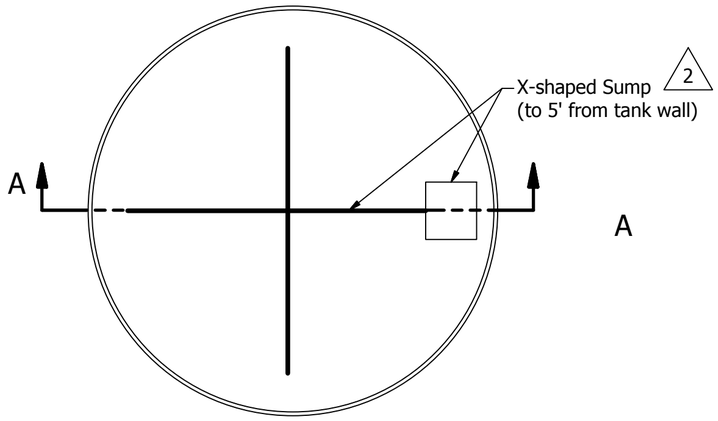


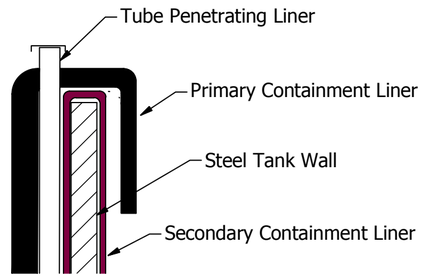

Sump Location

0 50 100

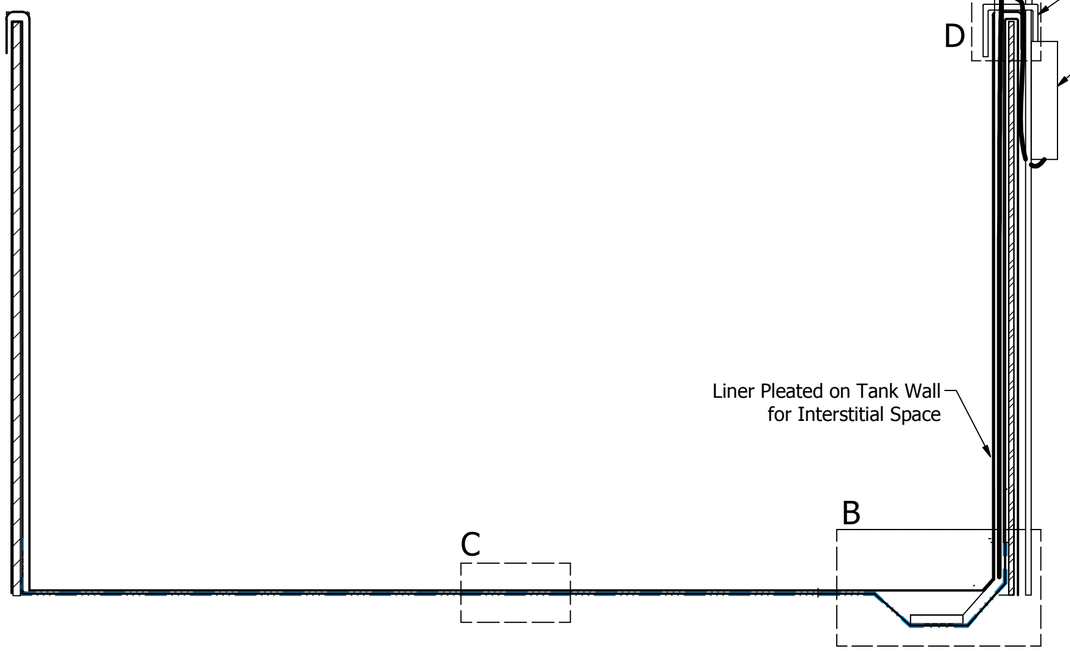
| | | |
|---|---|---|
| **R.T. Hicks Consultants Albuquerque, NM** | **Layout of Geogrid Drainage Mat** | **Plate 1** |
| | **WWS - New Mexico Produced Water Set Up** | **June 2021** |

# WWS DOUBLE-LINED FRAC WATER TANK SYSTEM

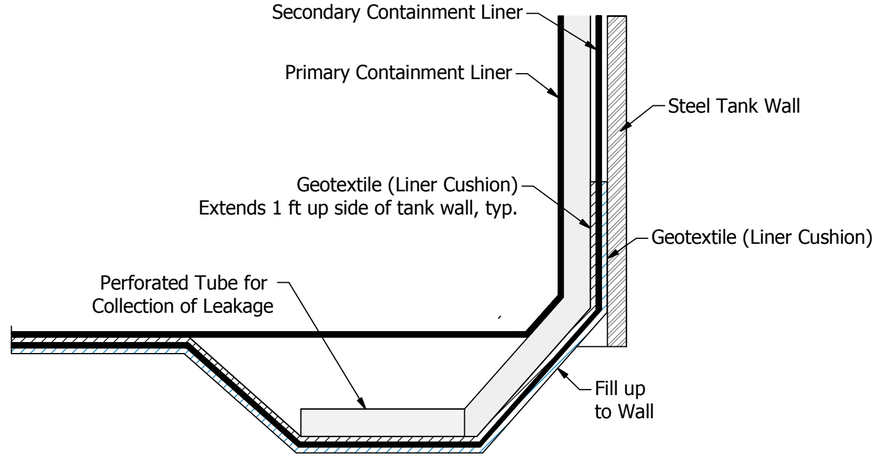


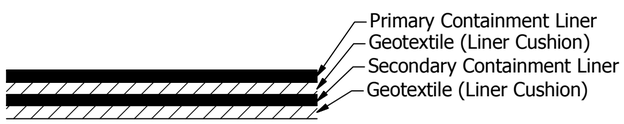

SECTION D
TUBE DETAIL
(Automated Leak Detection System Removed for Clarity)




VIEW A-A
TANK DETAIL




SECTION B
SUMP DETAIL




SECTION C
LINER DETAIL

LUCID
DRAFTING & DESIGN LLC
sarah@luciddrafting.com 307.752.7388

REVISION HISTORY

| REV | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 0 | INITIAL DWG | 10/29/2015 | SES |
| 1 | ADDED LEAK DETECTION SYSTEM | 11/6/2015 | SES |
| 2 | REVISED SUMP | 11/6/2015 | SES |
| 3 | ADDED GEOTEXTILE UNDER AND BETWEEN LINERS | 11/24/15 | SES |

| | |
|---|---|
| TITLE | Double-Lined Frac Tank System |
| CUSTOMER | |
| PROJECT/JOB | WWS Double-Lined Tank System |
| APPROVAL | |
| DRAFTER | SES |
| DATE | 10/28/2015 |

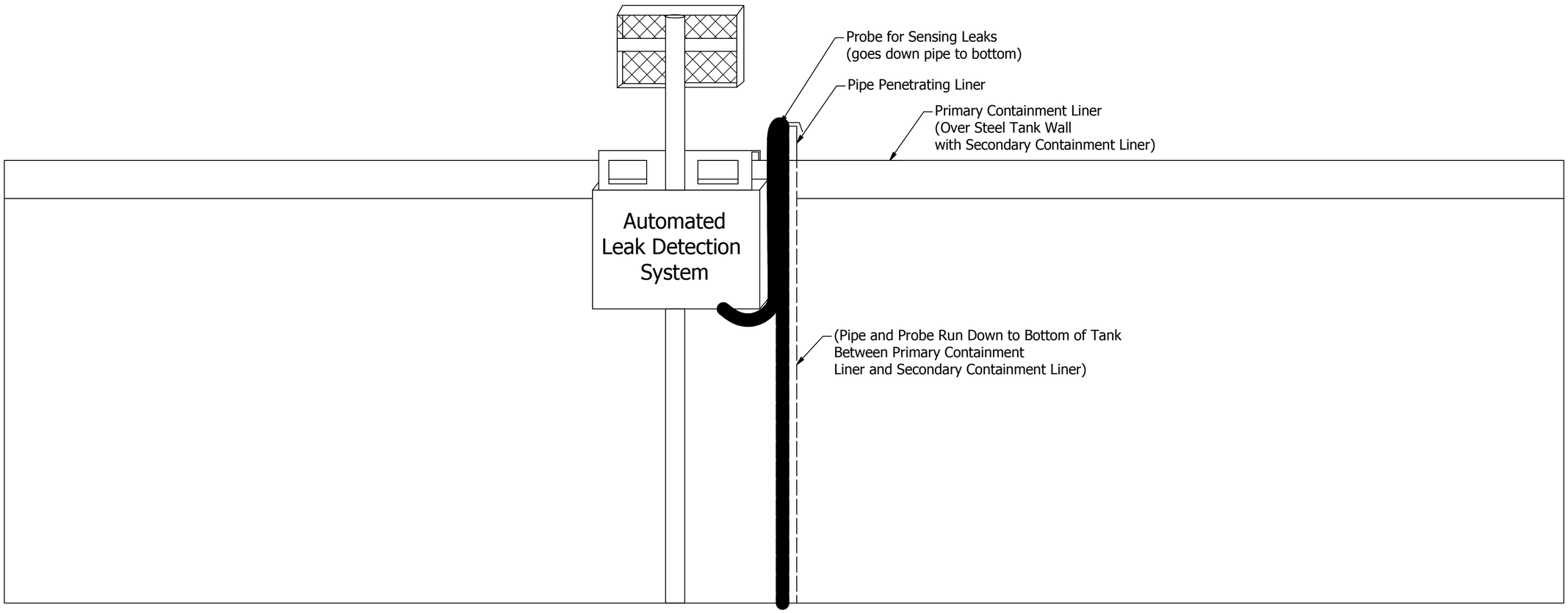


WELL WATER SOLUTIONS AND RENTALS, INC.

| SIZE | DWG NO | REV |
|---|---|---|
| C | LDD15-WWS-02 | 3 |

SHEET 1 OF 2

## 1 AUTOMATED LEAK DETECTION SYSTEM



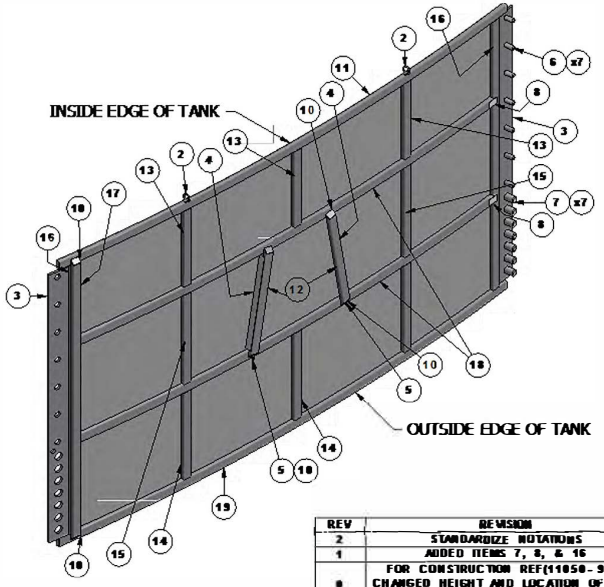

| | |
|---|---|
| TITLE | Double-Lined Frac Tank System |
| CUSTOMER | |
| PROJECT/JOB | WWS Double-Lined Tank System |
| APPROVAL | |
| DRAFTER | SES |
| DATE | 10/28/2015 |
| SIZE | C |
| DWG NO | LDD15-WWS-02 |
| REV | 3 |
| SHEET | 2 OF 2 |

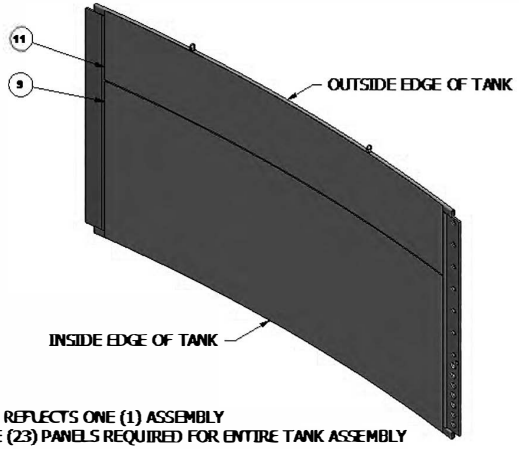


WELL WATER SOLUTIONS AND RENTALS, INC.

Parts List

| CK | ITEM | QTY | DESCRIPTION | WIDTH | LENGTH | MATERIAL | CLENGTH (in) | WEIGHT |
|---|---|---|---|---|---|---|---|---|
| | 1 | 14 | BAR, ROUND, 5/8" (LOCK PIN) | | 6 1/2 in | A36 | 6.50 | |
| | 2 | 2 | D-RING, 1/2" B38, WORKING LOAD 4000 lbs | | | A29/A29M - 91 1045(C-1045), MODIFIED TO WELD DOWN | | 2 |
| | 3 | 2 | FBAR, 1" | 10 in | 131 1/2 in | A36 | 131.50 | 373 |
| | 4 | 2 | FBAR, 10GA | 3 in | 43 1/8 in | A36 | 86.25 | 99 |
| | 5 | 2 | PAD EYE, #2 | | | CROSBY GROUP, S-264 | | 0 |
| | 6 | 7 | PIN, 2" DIA | | 4 1/2 in | KUSTOM KONCEPTS, A1018 | 31.50 | 3 |
| | 7 | 7 | PIN, 3 " DIA | | 4 1/2 in | KUSTOM KONCEPTS, A1010 | 31.50 | 8 |
| | 8 | 2 | PLATE, 3/16" | 3 in | 5 in | A36 | 10.00 | 2 |
| | 9 | 1 | PLATE, 3/16" | 96 in | 240 in | A36 | 240.00 | 156 |
| | 10 | 6 | SHEET, 10GA | 2 1/2 in | 3 3/4 in | A36 | 22.50 | 3 |
| | 11 | 1 | SHEET, 10GA | 42 1/2 in | 240 in | A36 | 240.00 | 50 |
| | 12 | 2 | TUBE, 4" x 2" x 1/4" (MITER BOTH ENDS) | | 52 in | A500B CLEAN COAT | 104.00 | 55 |
| | 13 | 3 | TUBE, 4" x 2" x 3/16" | | 37 1/4 in | A500B CLEAN COAT | 74.50 | 43 |
| | 14 | 3 | TUBE, 4" x 2" x 3/16" | | 42 3/4 in | A500B CLEAN COAT | 128.25 | 74 |
| | 15 | 2 | TUBE, 4" x 2" x 3/16" | | 44 in | A500B CLEAN COAT | 88.00 | 50 |
| | 16 | 2 | TUBE, 4" x 2" x 3/16" | | 132 in | A500B CLEAN COAT | 264.00 | 151 |
| | 17 | 1 | TUBE, 4" x 2" x 3/16" (MITER BOTH ENDS) | | 137 1/2 in | A500B CLEAN COAT | 137.50 | 78 |
| | 18 | 2 | TUBE, 4" x 2" x 3/16", (ROLL TO 155'-6 7/8" I.D.) | | 236 3/8 in | A500B CLEAN COAT | 472.75 | 271 |
| | 19 | 2 | TUBE, 4" x 2" x 3/16", (ROLL TO 155'-6 7/8" I.D.) | | 253 7/8 in | A500B CLEAN COAT | 507.75 | 291 |




**NOTES:**
-THIS DRAWING REFLECTS ONE (1) ASSEMBLY
-TWENTY THREE (23) PANELS REQUIRED FOR ENTIRE TANK ASSEMBLY

| REV | REVISION | DATE | BY |
|---|---|---|---|
| 2 | STANDARDIZE NOTATIONS | 1/17/2012 | JDV |
| 1 | ADDED ITEMS 7, 8, & 16 | 12/09/11 | DSG |
| 0 | FOR CONSTRUCTION REF(11050-901) CHANGED HEIGHT AND LOCATION OF PINS REF(11078-40-901) | 9/1/2011 | CJD |

FabTech
A NALCO COMPANY
4500 33 Mile Road
Casper, WY 82601
(307)472-9740

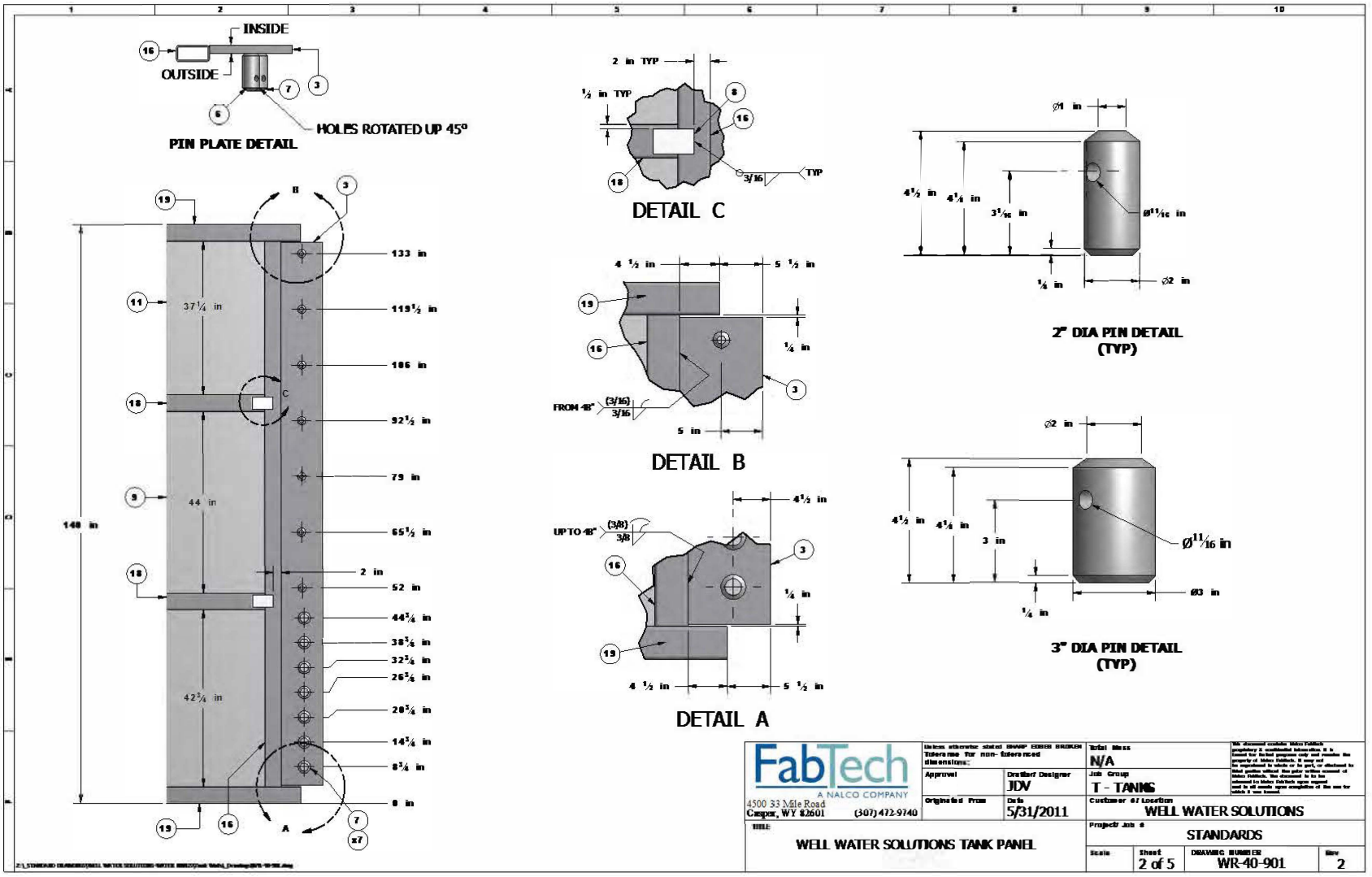
Unless otherwise stated SHARP EDGES BROKEN
Tolerance for non-toleranced dimensions:

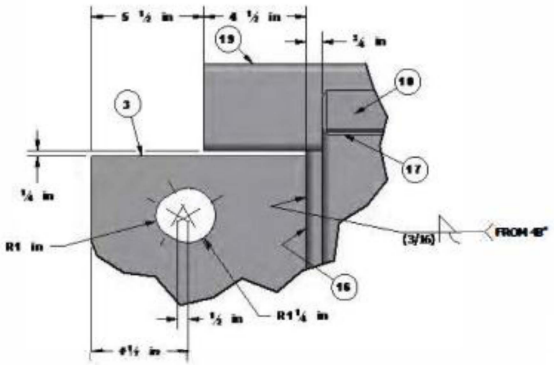
Approval | Drafted Designer: JDV | Originated From | Date: 5/31/2011

Total Mass: N/A
Job Group: T - TANKS
Customer or End Item: WELL WATER SOLUTIONS

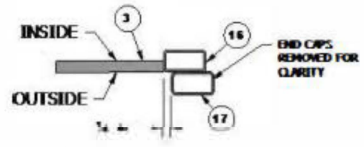
TITLE: WELL WATER SOLUTIONS TANK PANEL

Project Job #: STANDARDS
Scale | Sheet: 1 of 5 | DRAWING NUMBER: WR-40-901 | Rev: 2

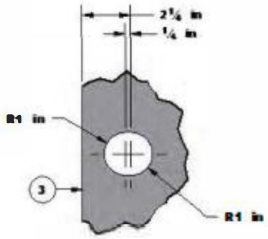

INSIDE
OUTSIDE
HOLES ROTATED UP 45°
PIN PLATE DETAIL
2 in TYP
½ in TYP
3/16 TYP
DETAIL C
4 ½ in
5 ½ in
¼ in
FROM 45°
(3/16)
3/16
5 in
DETAIL B
UP TO 45°
(3/8)
3/8
4½ in
¼ in
4 ½ in
5 ½ in
DETAIL A
Ø1 in
4½ in
4¼ in
3 5/8 in
Ø11/16 in
¼ in
Ø2 in
2" DIA PIN DETAIL
(TYP)
Ø2 in
4½ in
4¼ in
3 in
Ø11/16 in
¼ in
Ø3 in
3" DIA PIN DETAIL
(TYP)
140 in
37¼ in
44 in
42¾ in
133 in
119½ in
106 in
92½ in
79 in
65½ in
2 in
52 in
44¾ in
38⅛ in
32¾ in
26¾ in
20¾ in
14¾ in
8¾ in
0 in
FabTech
A NALCO COMPANY
4500 33 Mile Road
Casper, WY 82601
(307) 472-9740
Unless otherwise stated SHARP EDGES BROKEN
Tolerance for non-toleranced dimensions:
Approval
Drafted/ Designer
JDV
Originated From
Date
5/31/2011
Total Mass
N/A
Job Group
T - TANKS
Customer or Location
WELL WATER SOLUTIONS
Project/ Job #
STANDARDS
TITLE:
WELL WATER SOLUTIONS TANK PANEL
Scale
Sheet
2 of 5
DRAWING NUMBER
WR-40-901
Rev
2



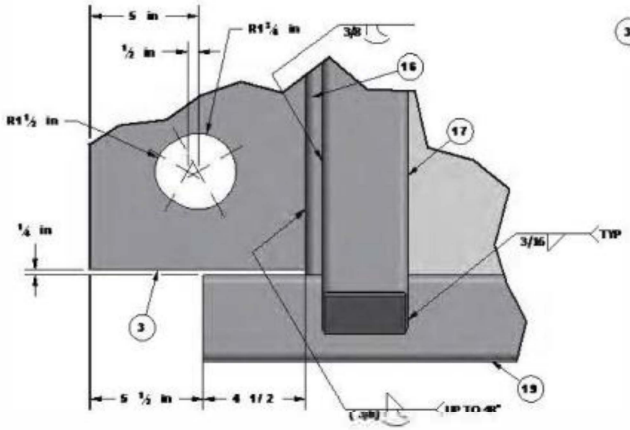
DETAIL E
(x7 TYP)



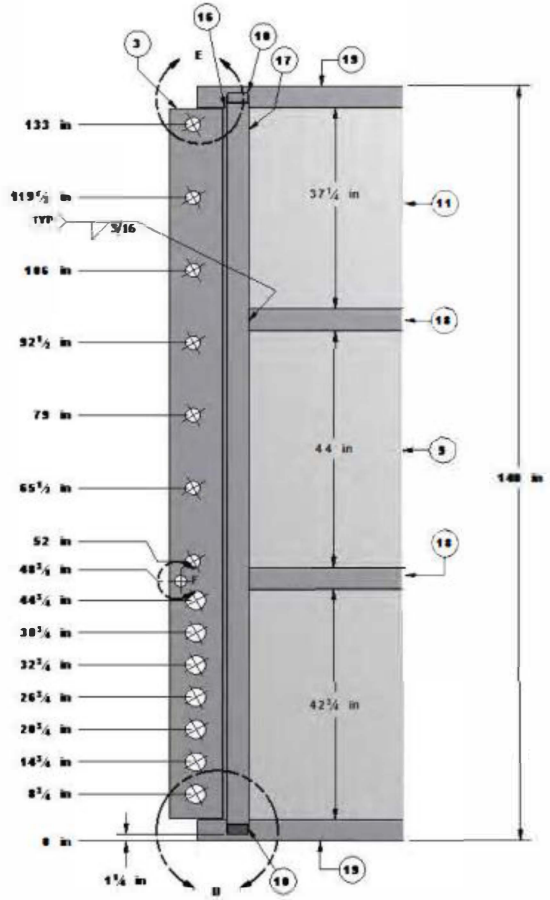

PIN-HOLE PLATE DETAIL



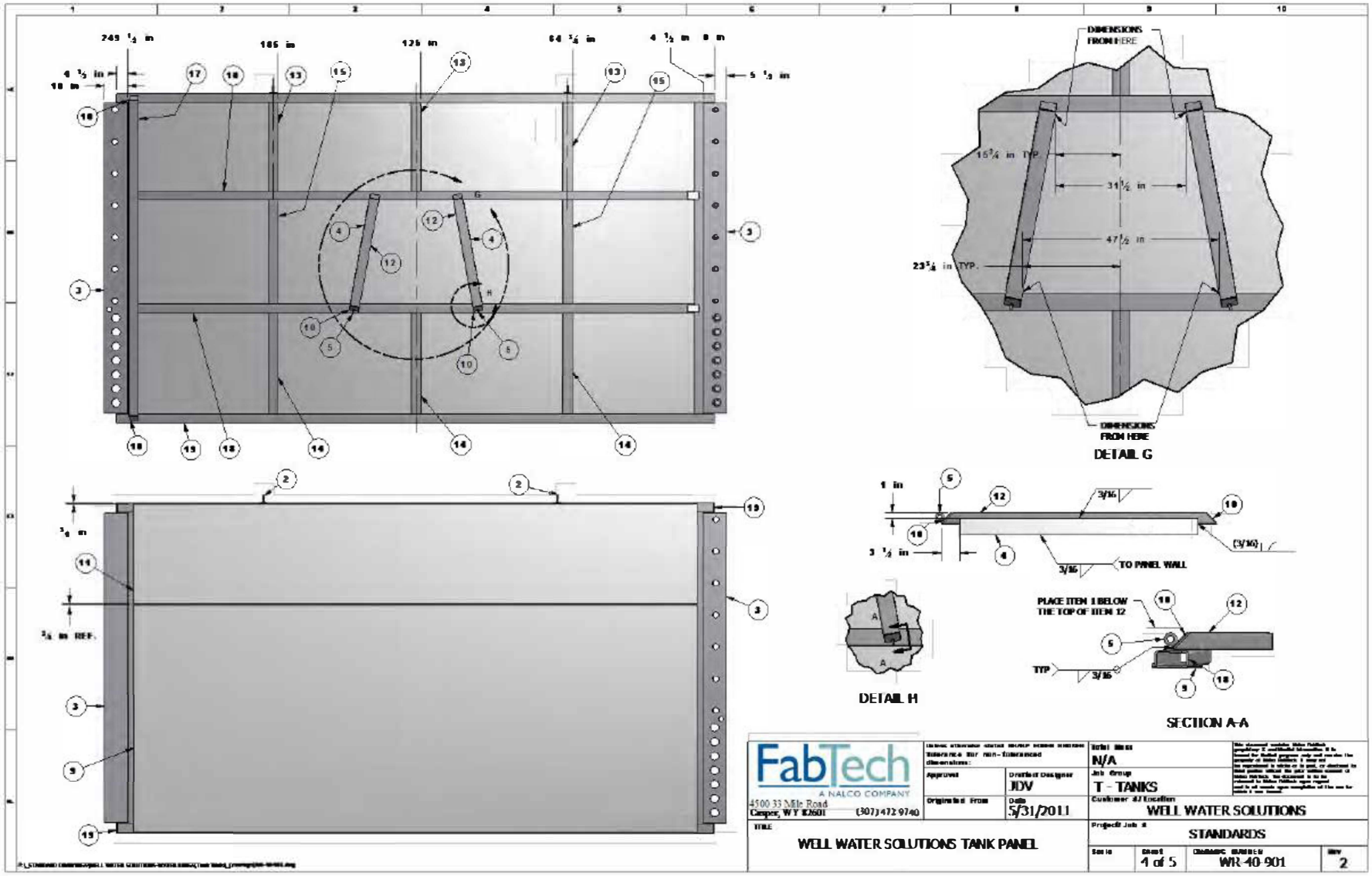
DETAIL F
(x1 TYP)

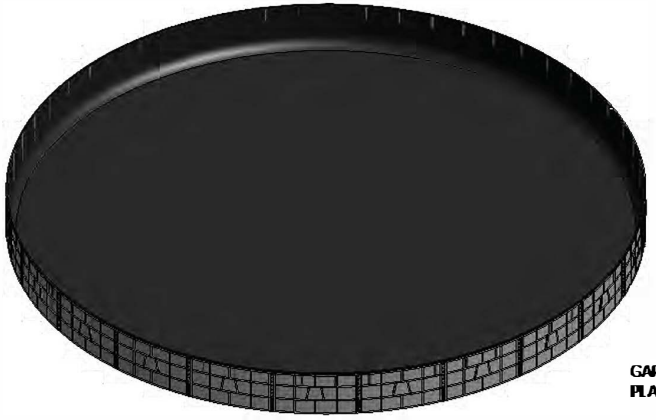


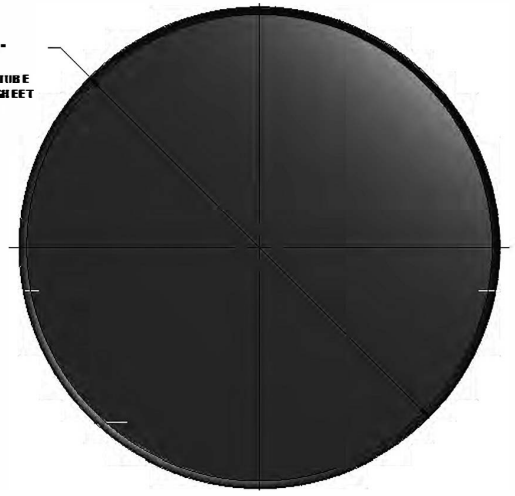
DETAIL D
(x7 TYP)

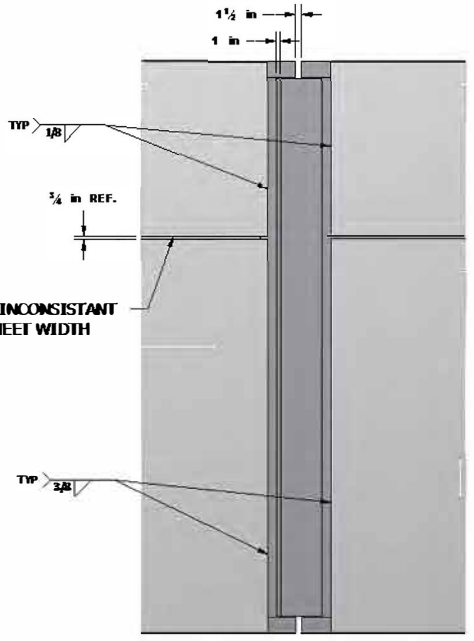



| | | | |
|---|---|---|---|
| FabTech — A NALCO COMPANY<br>4500 33 Mile Road<br>(307) 472 9740 | Approved | Drafted/ Designer: JDV | Total Mass: N/A |
| | Originated From | Date: 5/31/2011 | Job Group: T - TANKS |
| | | | Customer or Location: WELL WATER SOLUTIONS |
| Title: WELL WATER SOLUTIONS TANK PANEL | | | Project/ Job #: STANDARDS |
| | | Scale | Sheet: 3 of 5 |
| | | | Drawing Number: WR-40-901 |
| | | | Rev: 2 |

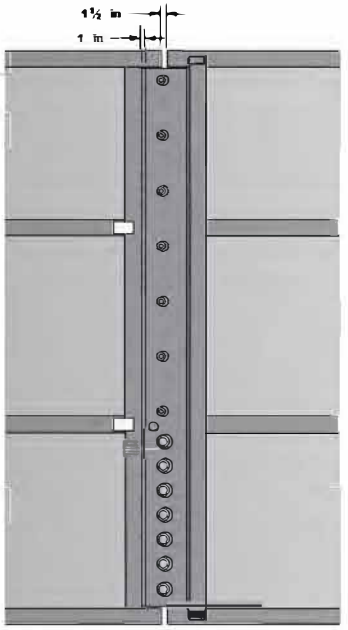

DIMENSIONS FROM HERE
15¾ in TYP.
31½ in
47½ in
23¾ in TYP.
DIMENSIONS FROM HERE
DETAIL G
1 in
3 ½ in
3/16
TO PANEL WALL
DETAIL H
PLACE ITEM 1 BELOW THE TOP OF ITEM 12
TYP
SECTION A-A
FabTech
A NALCO COMPANY
4500 33 Mile Road
Casper, WY 82601
(307) 472-9740
Drafted Designer
JDV
Date
5/31/2011
Job Group
T - TANKS
Customer ID/Location
WELL WATER SOLUTIONS
STANDARDS
TITLE
WELL WATER SOLUTIONS TANK PANEL
Sheet
4 of 5
DRAWING NUMBER
WR-40-901
REV
2






SEAM DETAIL
(INSIDE-OUT)




SEAM DETAIL
(OUTSIDE-IN)

FabTech
A NALCO COMPANY
4500 33 Mile Road
Casper, WY 82601 (307) 472-9740

Unless otherwise stated SHARP EDGES BROKEN
Tolerance for non-toleranced dimensions:

Approval | Drafter/ Designer: JDV | Originated From | Date: 5/31/2011

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Project/ Job #: STANDARDS

TITLE: WELL WATER SOLUTIONS TANK PANEL

Scale | Sheet: 5 of 5 | DRAWING NUMBER: WR-40-901 | Rev: 2

# TANK SIZE CHART

| TANK SIZE BBLS | PANEL COUNT | INSIDE DIAMETER (FEET) | VOLUME BBLS | BBLS/INCH | SECONDARY CONTAINMENT (ADD 2 PANELS) | SECONDARY CONTAINMENT DIAMETER | TOTAL FEET OF CONTAINMENT |
|---|---|---|---|---|---|---|---|
| 6,000 | 9 | 60' 2" | 6,090 | 43.5 | 11 | 75' | 234' |
| 10,000 | 12 | 81' 2" | 10,753 | 76.8 | 14 | 95' | 298' |
| 13,000 | 13 | 87' 10-5/8" | 12,609 | 90.1 | 15 | 101' | 318' |
| 17,000 | 15 | 101.4285 | 16,800 | 120 | 17 | 115' | 361' |
| 20,000 | 16 | 108' 2" | 19,115 | 136.53 | 18 | 122' | 384' |
| 22,000 | 17 | 114' 11-7/16" | 21,564 | 154.03 | 19 | 135' | 426' |
| 27,000 | 19 | 128' 6-1/4" | 26,954 | 192.53 | 21 | 142' | 446" |
| 30,000 | 20 | 135' 3-3/8" | 29,867 | 213.35 | 22 | 149' | 468' |
| 33,000 | 21 | 142' 0-9/16" | 32,928 | 235.2 | 23 | 156' | 489' |
| 36,000 | 22 | 148' 9-11/16" | 36,139 | 258.14 | 24 | 163' | 510' |
| 40,000 | 23 | 155' 6-7/8" | 39,499 | 282.14 | 25 | 170' | 532' |
| 43,000 | 24 | 162' 4-1/16" | 43,008 | 307.2 | 26 | 176' | 553' |
| 47,000 | 25 | 169' 1-3/16" | 46,667 | 333.34 | 27 | 183' | 574' |
| 50,000 | 26 | 175' 10-5/16" | 50,475 | 360.54 | 28 | 190' | 595' |
| 55,000 | 27 | 182' 7-9/16" | 54,433 | 388.8 | 29 | 196' | 617' |
| 60,000 | 28 | 189' 4-11/16" | 58,539 | 418.14 | 30 | 203' | 638' |
| 62,500 | 29 | 196' 1/16" | 62,500 | 446.43 | 31 | 210' | 658' |
| 67,000 | 30 | 202' 10 6/16" | 66,885 | 477.75 | 32 | 216' | 678' |
| 72,000 | 31 | 209' 7-7/16" | 71,705 | 512.18 | 33 | 223' | 701' |
| 77,000 | 32 | 216' 4-9/16" | 76,405 | 545.75 | 34 | 230' | 722' |
| 81,000 | 33 | 223' 1-11/16" | 81,254 | 580.39 | 35 | 237' | 744' |

# EXHIBIT H. VARIANCE REQUESTS

ENDURING RESOURCES IV LLC
6300 S Syracuse Way Centennial, CO 80111
Field Office: 505.636.9720 | Main Office: 303.573.1222

Enduring Resources IV, LLC White Crow AST Pad Recycling Containment and Recycling Facility Variance Request for 19.15.34 NMAC

New Mexico Oil Conservation Division
Attn: Victoria Venegas

Enduring Resources is requesting variances to the below listed items as outlined in 19.15.34 NMAC. This Recycling Containment/Facility will consist of self-contained free-standing structures instead of a lined earthen pit. The variances requested below will provide equal or better protection of fresh water, public health, and the environment.

## Variance Requests:

***Inside/Outside Levee Slopes:*** Enduring Resources requests a variance to NMAC 19.15.34.12 (A)(2) which applies to a lined earthen pit. The containment is an AST not an in-ground pond; therefore, will not have inside/outside levee slopes. The AST is a self-contained free-standing structure that will provide equal or better protection than the requirements listed in 19.15.34.12 (A)(2) NMAC.

***Liner Anchoring:*** Enduring Resources requests a variance to NMAC 19.15.34.12 (A)(3) which applies to a lined earthen pit. This statute is not applicable to a circular steel AST with liners clamped to the top of the steel containment panels. We believe this will provide equal or better protection than the requirements listed in 19.15.34.12 (A)(3) NMAC.

***Primary Liner:*** Enduring Resources requests a variance to NMAC 19.15.34.12 (A)(4) which applies to the thickness of the primary liner. Enduring Resources proposes the use of a 40-mil LLDPE primary liner and 30-mil LLPDE secondary liner. The proposed variance will provide equal or better protection of fresh water, public health and the environment, as the proposed liner meets all other requirements of NMAC 19.15.34.12 (A)(4) and meets or exceeds the EPA SW-846 method 9090A or subsequent relevant publication.

***Fencing:*** Enduring Resources requests a variance to NMAC 19.15.34.12 (D)(1) and (2) which applies to fencing or enclosing the containment. With the recycling containments being ASTs with 12-foot wall height, entrance to containments would have to be intentional. There is no risk of accidental entrance into containments by wildlife or the public. The site will be maintained to prevent harm to wildlife and the public. The freestanding above grade ASTs will provide equal or better protection to public health and the environment, as the fencing requirements of NMAC 19.15.34.12 (D)(1) and (2).

Thank you,

Dave Brown
Regulatory Manager
Enduring Resources, LLC.
303.887.3695 – Office
505.636.9731 – Cell

**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 Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
**District IV**
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

# State of New Mexico
# Energy, Minerals and Natural Resources
# Oil Conservation Division
# 1220 S. St Francis Dr.
# Santa Fe, NM 87505

CONDITIONS

Action 393879

## CONDITIONS

| | |
|---|---|
| Operator:<br>DJR OPERATING, LLC<br>200 Energy Court<br>Farmington, NM 87401 | OGRID:<br>371838 |
| | Action Number:<br>393879 |
| | Action Type:<br>[C-147] Water Recycle Long (C-147L) |

**CONDITIONS**

| Created By | Condition | Condition Date |
|---|---|---|
| vvenegas | • 3RF-78 - WHITE CROW UNIT AST PAD FACLITY ID [fVV2429635790] is approved for five years of operation from the date of permit application of October 18, 2024. 3RF-78 - WHITE CROW UNIT AST PAD FACLITY ID [fVV2429635790] permit expires on October 18, 2029. If [371838] DJR OPERATING, LLC wishes to extend operations past five years, an annual permit extension request must be submitted using an OCD form C-147 through OCD Permitting by September 19, 2029. • [371838] DJR OPERATING, LLC shall construct, operate, maintain, close, and reclaim 3RF-78 - WHITE CROW UNIT AST PAD FACLITY ID [fVV2429635790] in compliance with NMAC 19.15.34 NMAC. • [371838] DJR OPERATING, LLC shall comply with 19.15.29 NMAC Releases in the event of any release of produced water or other oil field waste at 3RF-78 - WHITE CROW UNIT AST PAD FACLITY ID [fVV2429635790]. | 10/22/2024 |