

**From:** [Billings, Bradford, EMNRD](#)  
**To:** [Yu, Olivia, EMNRD](#)  
**Subject:** FW: EMSU B  
**Date:** Friday, March 2, 2018 8:47:51 AM  
**Attachments:** Schematic- Drawing of Proposed Recovery Station.pdf

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**From:** Mark Larson [mailto:Mark@laenvironmental.com]  
**Sent:** Wednesday, February 28, 2018 7:35 AM  
**To:** Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>  
**Cc:** 'Askin, David' <David\_Askin@xtoenergy.com>; 'Lansdown, Scott' <Scott\_Lansdown@xtoenergy.com>; 'Hutton, Nina' <Nina\_Hutton@xtoenergy.com>; 'Keith\_Underwood@xtoenergy.com' <Keith\_Underwood@xtoenergy.com>; 'Meadows, Derrick' <Derrick\_Meadows@xtoenergy.com>; 'Patricia\_Donald@xtoenergy.com' <Patricia\_Donald@xtoenergy.com>  
**Subject:** FW: EMSU B

Bradford,  
Please find the revised drawing attached for changing the three (3) recovery wells from alternate to permanent. I will forward the revised containment drawing to show containment for the total volume of the tanks. Please contact me if you have questions.  
Mark

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**From:** Mark Larson  
**Sent:** Tuesday, February 27, 2018 12:13 PM  
**To:** 'Billings, Bradford, EMNRD'  
**Cc:** 'Hutton, Nina'; 'Askin, David'; 'Lansdown, Scott'; 'Keith\_Underwood@xtoenergy.com'; 'Meadows, Derrick'; 'Patricia\_Donald@xtoenergy.com'  
**Subject:** RE: EMSU B

Bradford,  
Per your email below I have corrected the drawing to show the three (3) additional recovery wells. Per your email below I've requested Robert Bassom, engineering, to review the containment design to meet the requirement to hold the total volume assuming the three tanks are interconnected. I will forward the drawings to you once engineering gets back to me. Also, I will forward the email from BLM approving installing the remediation system. I have arranged for a monitor (archeologist) to be on location while the recovery trench is installed as requested by BLM. The XTO representative for submitting the approval to is as follows:

Ms. Nina Hutton, V.P.  
Environmental, Health & Safety  
XTO Energy, Inc.  
810 Houston Street  
Fort Worth, Texas 76102-6298  
(817) 870-2800  
[Nin\\_Hutton@xtoenergy.com](mailto:Nin_Hutton@xtoenergy.com)

Please contact me if you have questions.

Respectfully,

Mark J. Larson, P.G.  
President/Sr. Project Manager  
507 N. Marienfeld St., Suite 205  
Midland, Texas 79701  
Office – 432-687-0901  
Cell – 432- 556-8656  
Fax – 432-687-0456  
[mark@laenvironmental.com](mailto:mark@laenvironmental.com)



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**From:** Billings, Bradford, EMNRD [<mailto:Bradford.Billings@state.nm.us>]

**Sent:** Tuesday, February 27, 2018 10:52 AM

**To:** Mark Larson

**Subject:** EMSU B

Hi Mark,

So am getting ready to send out an approval for the trench remedial efforts for this site. Will include condition to place the additional recovery wells on the down slope side  
As we discussed. I believe it was three of them?

Also, and it may already be indicated in your submittal, but I will reiterate the need for appropriate berm control about the storage tanks for water collection prior to piping water to disposal. It is 1.3 times the total possible release volume. It would be per tank if not connected, but if possibility exists in plumbing that if one leaks all leak, then it would be total volume. Just as reminder.

So, the other question, which person(s) in control (operator) do I headline the approval too?

Thanks.

Brad

**From:** [Billings, Bradford, EMNRD](#)  
**To:** [Yu, Olivia, EMNRD](#)  
**Subject:** FW: EMSU B Drawings  
**Date:** Friday, March 2, 2018 8:48:01 AM  
**Attachments:** image003.png

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**From:** Mark Larson [mailto:Mark@laenvironmental.com]  
**Sent:** Tuesday, February 27, 2018 11:16 AM  
**To:** Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>  
**Cc:** 'Hutton, Nina' <Nina\_Hutton@xtoenergy.com>; 'Askin, David' <David\_Askin@xtoenergy.com>; 'Lansdown, Scott' <Scott\_Lansdown@xtoenergy.com>; 'Keith\_Underwood@xtoenergy.com' <Keith\_Underwood@xtoenergy.com>; 'Meadows, Derrick' <Derrick\_Meadows@xtoenergy.com>; 'Patricia\_Donald@xtoenergy.com' <Patricia\_Donald@xtoenergy.com>  
**Subject:** FW: EMSU B Drawings

Bradford,  
Please find email below from Shelly Tucker (BLM) granting approval to proceed with the remediation.  
Please contact me if you have questions.  
Respectfully,

Mark J. Larson, P.G.  
President/Sr. Project Manager  
507 N. Marienfeld St., Suite 205  
Midland, Texas 79701  
Office – 432-687-0901  
Cell – 432- 556-8656  
Fax – 432-687-0456  
[mark@laenvironmental.com](mailto:mark@laenvironmental.com)



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**From:** Tucker, Shelly [mailto:[stucker@blm.gov](mailto:stucker@blm.gov)]  
**Sent:** Thursday, February 22, 2018 1:07 PM  
**To:** Mark Larson  
**Subject:** Re: EMSU B Drawings

**Based on the submitted archaeological report, XTO is cleared to proceed with remedial activities. The BLM will require an archaeological monitor onsite during these activities.**

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

*Shelly J Tucker*

Environmental Protection Specialist  
O&G Spill/Release Coordinator

Bureau of Land Management  
620 E. Greene St  
Carlsbad, NM 88220

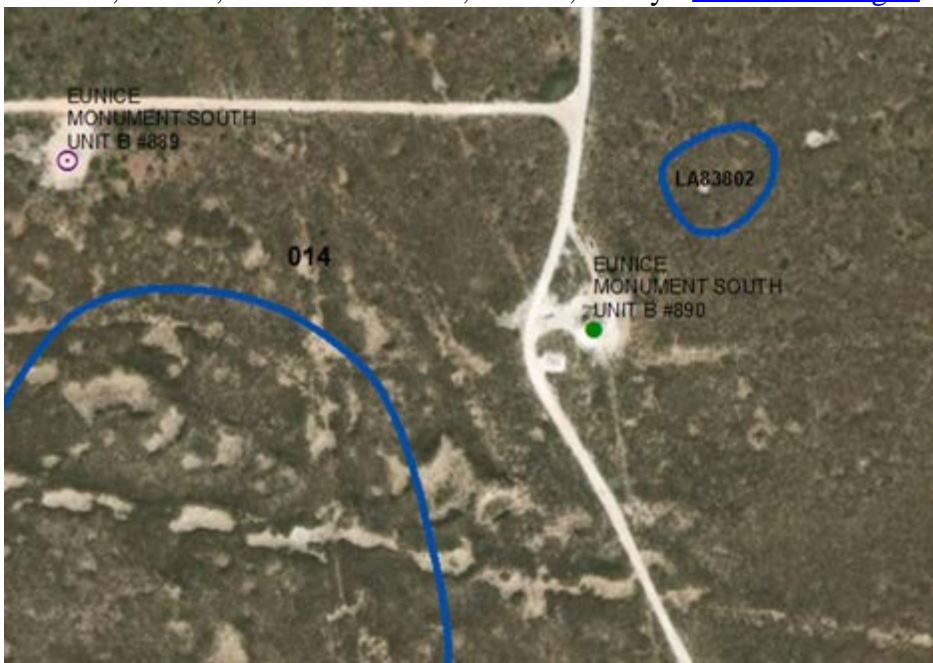
575.234.5905 - Direct  
575.361.0084 - Cellular  
575.234.6235 - Emergency Spill Number

[stucker@blm.gov](mailto:stucker@blm.gov)

The **BLM acceptance/approval does not** relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

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On Wed, Feb 14, 2018 at 12:16 PM, Tucker, Shelly <[stucker@blm.gov](mailto:stucker@blm.gov)> wrote:



Based on the diagram you sent me...the release is within the boundaries of an arch site. XTO is going to need to have a survey done to assess damages to the site and an arch monitor will be required for excavation and other onsite activities near or within the arch site. Even though this is private surface, it is still federally protected and since federal minerals were involved in this release, I am required to request the aforementioned arch survey and monitor.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

*Shelly J Tucker*

Environmental Protection Specialist  
O&G Spill/Release Coordinator

Bureau of Land Management  
620 E. Greene St  
Carlsbad, NM 88220

575.234.5905 - Direct  
575.361.0084 - Cellular  
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The **BLM acceptance/approval does not** relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

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On Mon, Feb 12, 2018 at 4:17 PM, Mark Larson <[Mark@laenvironmental.com](mailto:Mark@laenvironmental.com)> wrote:

Hello Shelly,

Please find the drawings attached for our discussion tomorrow.

Regards,

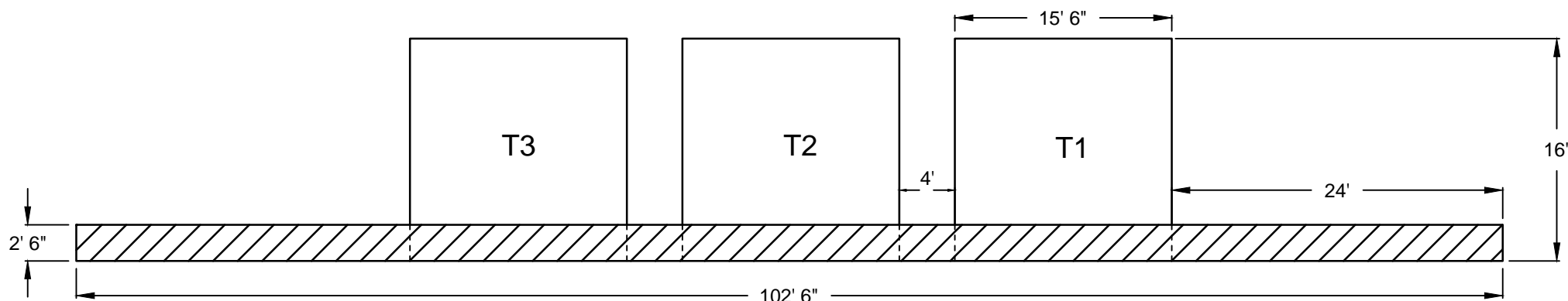
Mark J. Larson, P.G.  
President/Sr. Project Manager  
507 N. Marienfeld St., Suite 205  
Midland, Texas 79701

Office – 432-687-0901  
Cell – 432- 556-8656  
Fax – 432-687-0456  
[mark@laenvironmental.com](mailto:mark@laenvironmental.com)



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# EMSU B Produced Water Recovery Station



## Containment Dimensions

Containment Length : 102' 6"  
 Containment Width : 51' 4"  
 Containment Height : 2' 6"  
 Containment Volume : 1890 bbl (3 Tanks + 25 Yr 24 Hr Rainfall)

## BATTERY DETAILS

JOB NUMBER : XTO EMSU B / 17-0176-01  
 TANK DIAMETER : 15' 6"  
 TANK VOLUME : 500 bbl  
 LOCATION : Lea County, NM  
 ENGINEER : R. Basom  
 BATTERY VOLUME : 1,500 bbl

## Legend



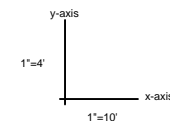
- Tank Wall Concealed Behind  
Prefabricated Lined Containment



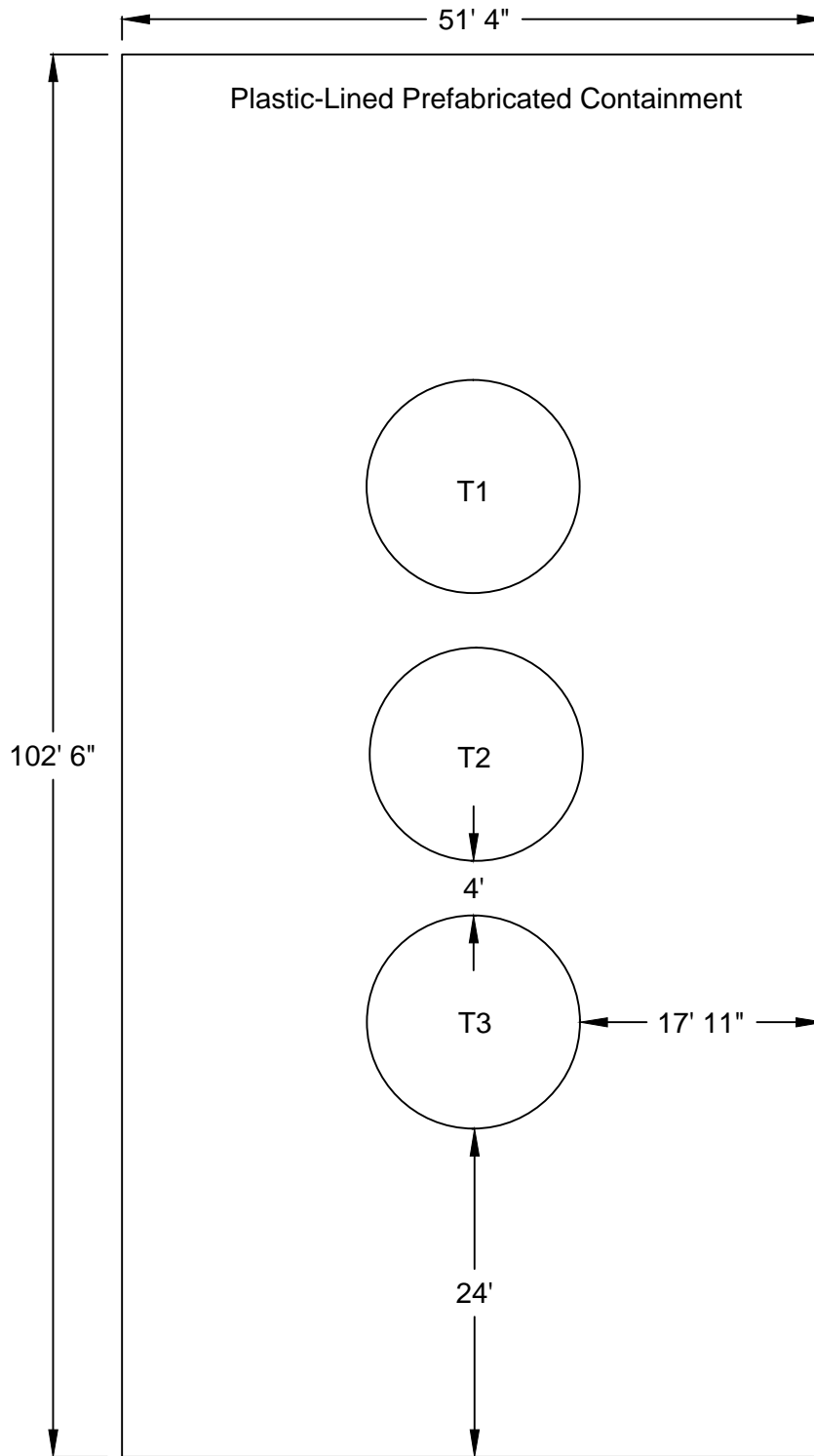
- Prefabricated Lined Containment

**T#**

- Tank

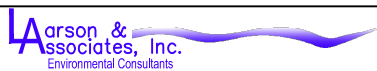


**Diagram for Spill Containment (Top View)**  
**EMSU B Produced Water Recovery Station**



**Containment Dimensions**

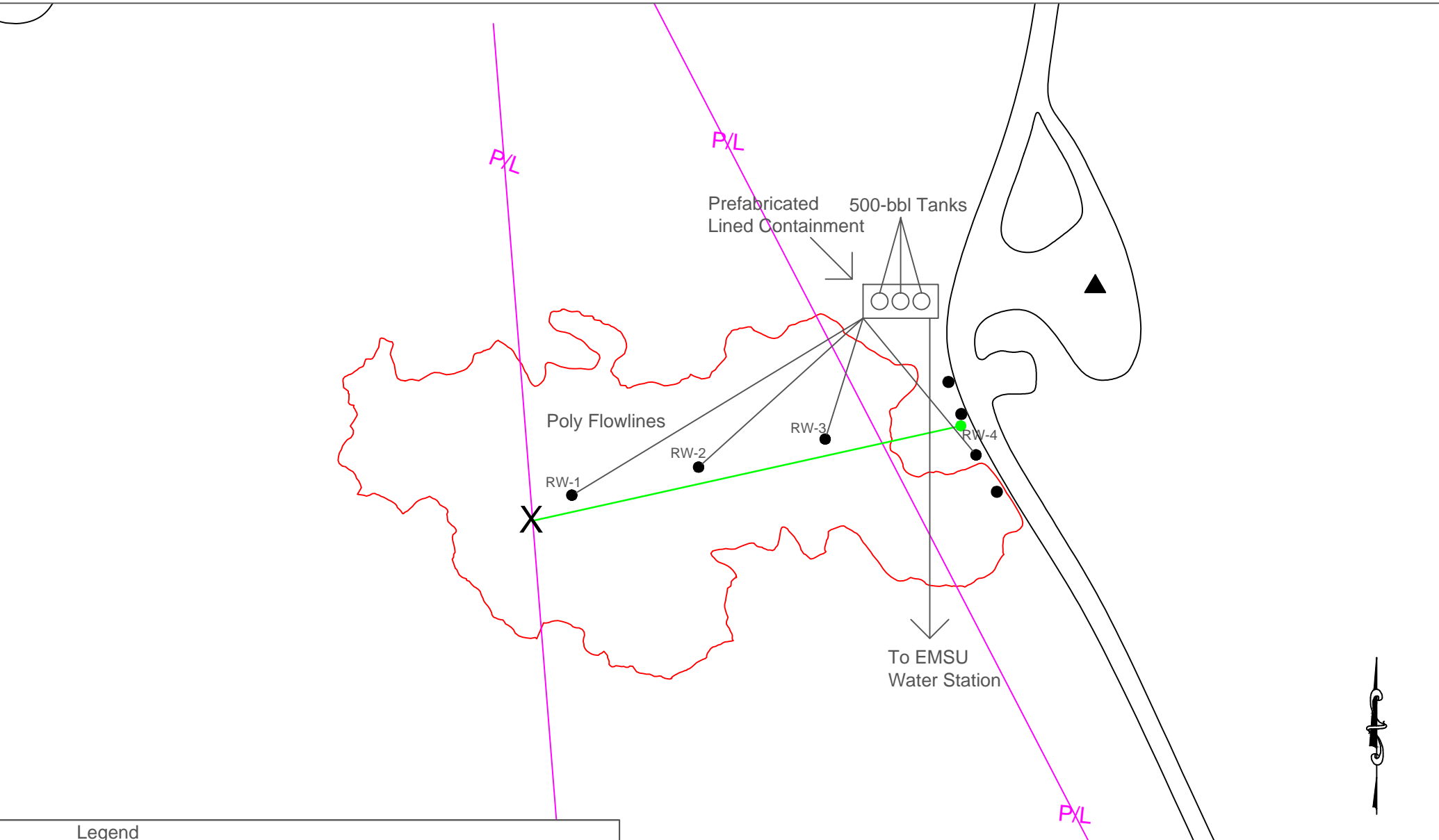
Containment Length : 102' 6"  
Containment Width : 51' 4"  
Containment Height : 2' 6"  
Containment Volume : 1,890 bbl (3 Tanks + 25 Yr 24 Hr Rainfall)



**INSTALLATION DATE : TBD**

**BATTERY DETAILS**

JOB NUMBER : XTO EMSU B / 17-0176-01  
TANK DIAMETER : 15' 6"  
TANK HEIGHT : 16'  
TANK VOLUME : 500 bbl  
LOCATION : Lea County, NM  
ENGINEER : R. Basom  
BATTERY VOLUME : 1,500 bbl



Legend

- Area of Distressed Vegetation

- Proposed Recovery Trench and Recovery Sump Location

- Proposed Recovery Well Location

- Spill Location

- Pipeline

- Fence

125 0 125

Graphic Scale in Feet

**XTO Energy, Inc.**  
EMSU B Produced Water Release  
Unit P (SE 1/4, SE 1/4)  
Sec. 14, T. 20 S., R. 36 E.  
Lea County, New Mexico  
32° 34' 02.07"N  
103° 19' 13.29"W

**Larson & Associates, Inc.**  
Environmental Consultants

Schematic - Drawing of Proposed Recovery Station