

GW - 28

**Reuse
Recycling
Requests**

2018 - Present

Chavez, Carl J, EMNRD

From: Chavez, Carl J, EMNRD
Sent: Friday, January 18, 2019 4:06 PM
To: 'Combs, Robert'
Cc: Denton, Scott (Scott.Denton@HollyFrontier.com); Holder, Mike (Mike.Holder@hollyfrontier.com); Boans, Robert (Robert.Boans@HollyFrontier.com); Griswold, Jim, EMNRD; Brancard, Bill, EMNRD
Subject: RE: [EXT] RE: Artesia Refinery (GW-28 and UICI-8-1): Notification Letter for Equipment Changes Associated with Treated Waste Water Sales by HollyFrontier Navajo Refining LLC October 4, 2018 (OCD COMMUNICATION COMMUNIQUE ONLY)

Robert:

The New Mexico Oil Conservation Division is in re-receipt of Navajo's 10.18.18 e-mail msg. below.

Since the Artesia Refinery wastewater disposition is not onto land surface or into injection wells, it would appear this notification does not rise to a "Modification" under the GW-28 Discharge Permit requiring public notice under 20.6.2.3108 NMAC, but it is still regarded to be a "minor" modification under the permit (GW-28) by OCD.

OCD recently informed the Permittee that Item No. 4 below developed by OCD may not be correct, and OCD is currently working with the New Mexico Environment Department (NMED) to resolve the issue of any applicable regulations and jurisdiction(s) which may apply to Navajo's sale of wastewater to a "third party" for use in the Oilfields of NM only. Jim Griswold informed me he is working to meet with NMED to determine the above. OCD will notify Navajo of the Agencies determination. Navajo also responded to Jim on the intended use of the wastewater, i.e., oilfield vs. non-oilfield. Navajo recently responded they are making sure the third party uses the wastewater for oilfield activities only. Navajo also indicated there will be no sale of refinery wastewater until OCD resolves this matter.

OCD updated the admin. record "Reuse, Recycling Requests" thumbnail today.

Please contact me if you have questions or wish to communicate further.

Thank you.

From: Combs, Robert <Robert.Combs@HollyFrontier.com>
Sent: Tuesday, December 18, 2018 8:31 AM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>; Denton, Scott <Scott.Denton@HollyFrontier.com>; Holder, Mike <Michael.Holder@hollyfrontier.com>; Boans, Robert <Robert.Boans@HollyFrontier.com>
Cc: Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Brancard, Bill, EMNRD <bill.brancard@state.nm.us>
Subject: [EXT] RE: Artesia Refinery (GW-28 and UICI-8-1): Notification Letter for Equipment Changes Associated with Treated Waste Water Sales by HollyFrontier Navajo Refining LLC October 4, 2018

Carl,
Please see below for Navajo's responses to your comments (italicized, blue). We have also attached several documents per your request.

If you have any questions or would like to discuss, please let us know.

Thanks,
Robert

Robert Combs

Environmental Specialist
The HollyFrontier Companies
P.O. Box 159
Artesia, NM 88211-0159
office: 575-746-5382
cell: 575-308-2718
fax: 575-746-5451
Robert.Combs@hollyfrontier.com

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Scott, et al.:

The New Mexico Oil Conservation Division (OCD) has completed its review of the above subject notification letter (letter), which it considers to be a modification request from Navajo Refining, LLC (Navajo).

OCD comments and/or requirements based on the modification letter are as follows:

1. A Standard Operating Procedure(s) (SOP) is required for OCD approval to verify Navajo has proper control(s) to prevent and/or stop any and all hazardous fluids from leaving Navajo property. This has been conveyed to Navajo before.

Attached is a narrative of Navajo's Hazardous Fluid Prevention/Management.

2. A Contingency Plan(s) for releases of refinery wastewater under the control of Navajo.

Navajo has prepared a focused contingency plan that explains the steps taken in the event of a pipeline release. Please see the attached plan.

3. An engineering design drawing(s) is required to assess any construction associated with the sale of refinery wastewater, i.e., at the refinery and WDW-1.

A piping and instrumentation diagram (P&ID, 80-V-02-D-08) is attached for review. This is a preliminary markup which shows the installation of a meter and a pressure control device, not yet specified, to control the pressure delivered to the purchaser.

OCD notices the sequence of Navajo disposal wells has changed to show WDW-4 as the first well to receive wastewater effluent from the refinery.

The sequence of the injection wells along the pipeline has not changed. The wells are located along the pipeline easement and branch off by order of location along the pipeline. Please see the attached figure for reference.

There does not appear to be any planned construction at WDW-4 related to the sale of wastewater.

Correct; only facilities at WDW-1 will be modified as a result of this change. This location provided an available tie-point that would not impact continuous operation of the pipeline for installation.

4. The third party shall comply with OCD 19.15.34 NMAC (Produced Water, Drilling Fluids and Liquid Oil Field Waste) permitting. By Part 34 Permit, OCD regards refinery wastewater to be waste fluids. However, the New Mexico Environment Department (NMED) may view the fluids to be a product used by the oil industry; therefore, releases by the third party could be subject to NMED Jurisdiction. OCD and NMED (agencies) are currently in communication on this matter and releases by the third party may be subject to communications between the agencies for the lead under the Water Quality Control Commission (WQCC) Regulations and/or oil and gas environmental regulations.

Navajo agrees with OCD. Navajo will continue to manage the waste water in accordance with applicable regulations. However, beyond the point of sale/ownership, the purchaser assumes ownership of the material, its use, and ultimate management as a waste or for further treatment and reuse in accordance with all applicable regulations.

Please contact me if you have questions. Thank you.

Mr. Carl J. Chavez, CHMM (#13099)
New Mexico Oil Conservation Division
Energy Minerals and Natural Resources Department
1220 South St Francis Drive
Santa Fe, New Mexico 87505
Ph. (505) 476-3490
E-mail: CarlJ.Chavez@state.nm.us

“Why not prevent pollution, minimize waste to reduce operating costs, reuse or recycle, and move forward with the rest of the Nation?” (To see how, go to: <http://www.emnrd.state.nm.us/OCD> and see “Publications”)

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Attachments: Hazardous Fluid Prevention.pdf; Refinery Waste Water Release Contingency Plan - Draft r1.pdf; 80-V-02-D-08 PID markup - sales meter.pdf; WDW locations map - markup.pdf

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Hazardous Fluid Prevention/Management

Navajo has two constituents of concern in the refinery waste water effluent – selenium and benzene.

Selenium:

- Managed by a primary process (SeRT). High selenium water streams are routed through this filtration unit.
- This unit treats water prior to introduction to the waste water treatment plant (WWTP).
- Ferric chloride is a secondary or backup for any operational issues with the SeRT. This is a simple chemical addition (small chemical pump) that is located upstream of the secondary clarifier unit in the WWTP.
- From quarterly monitoring of the waste water effluent data [Se], the waste water effluent selenium concentration is generally 10% of the hazardous toxicity characteristic value (1.0 mg/L).
- Saturation of the SeRT media occurs very slowly, and Navajo believes that the current monitoring program is sufficient to prevent the release of selenium hazardous waste water.

Benzene:

- Navajo is currently batch treating waste water in two aggressive biological treatment units (ABTs).
- Waste water is tested during treatment and is retained until the effluent benzene concentration is below the hazardous toxicity characteristic value (0.5 mg/L).
- Navajo utilizes carbon filtration as needed for backup (awaiting lab data).

Navajo also utilizes internal notification processes to mitigate WWTP upsets.

Refinery Waste Water Release Contingency Plan

In the event of a pipeline release of refinery waste water, the following steps are followed. These steps are generally sequential, but can overlap, as needed.

1. If an alarm sounds indicating an increase in pipeline effluent flow or for low pipeline pressure, utilize the pipeline shutdown procedure.
2. Close MOVs located along the pipeline in order to isolate the pipeline and decrease the volume of water released.
3. Identify the leak location.
4. Internal notifications:
 - a. Maintenance Department to repair the line.
 - b. Environmental Department for release reporting, including verbal notifications and C-141 forms (as applicable).
5. Permitting:
 - a. 1-call to initiate excavation for pipeline repairs
 - b. Excavation permitting and Safe Work Permitting (confined space, as applicable)
6. Commence and complete pipeline repairs.
7. Pre-startup Safety Review
8. Start up the effluent pipeline using the startup procedure to place the line back in service.
9. Address surface impacts as applicable.

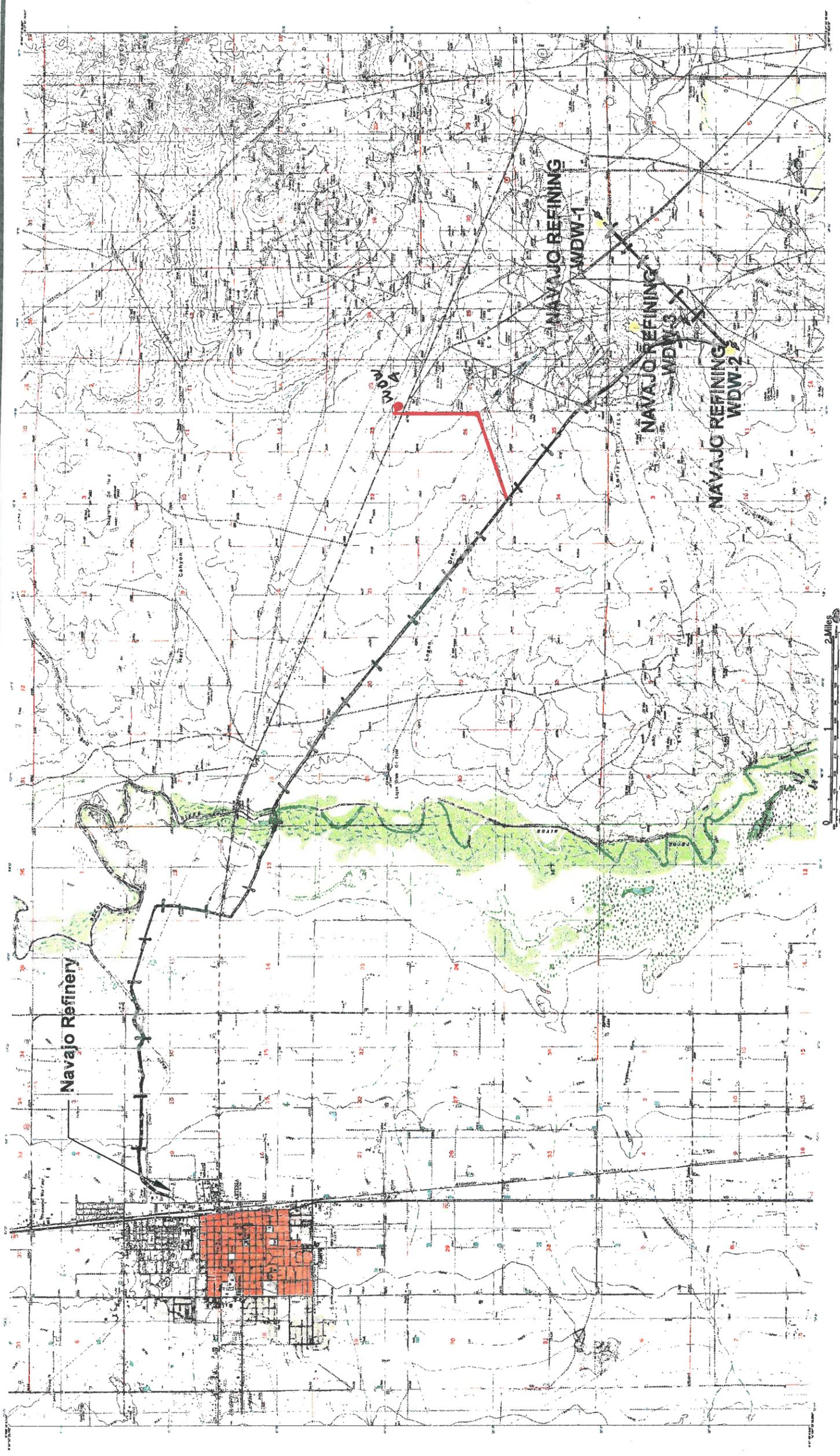


FIGURE 1

HOLLYFRONTIER NAVAJO REFINING LLC
ARTESIA, NEW MEXICO

SITE LOCATION MAP

Maps compiled from USGS Quads: Artesia, NM; Spring Lake, NM;
Red Lake, NM; Illinois Camp,
NM; Dayton, NM; Lake
McMillan N, NM

DATE: 01/19/17	CHECKED BY:	JOB NO: 50904D
DRAWN BY: WDD	APPROVED BY:	DWG. NO:

T-0891
WELL MONITOR TANK
SIZE: 20 FT. X 16 FT. gallons
DESIGN: _____
OPER: _____
MATERIAL: _____
CODE: _____

P-0891/M-0891
WELL MONITOR PUMP
MFR: _____
MOTOR SIZE: _____
OPER. FLOW: _____
MATERIAL: _____
CODE: _____

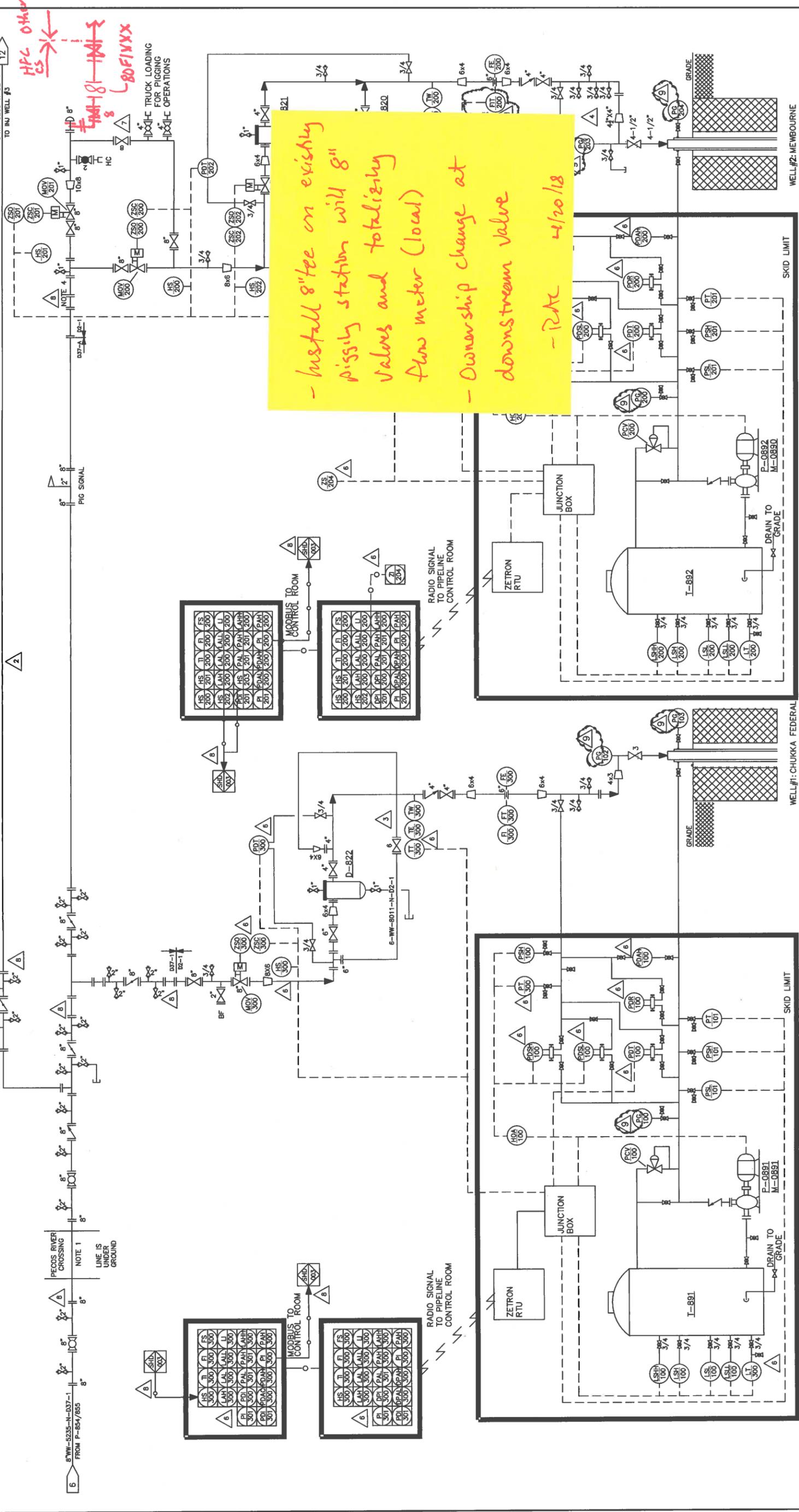
D-820
MEW BOURNE WELL
FILTER

D-821
MEW BOURNE WELL
FILTER

D-822
CHUKKA FEDERAL
FILTER

T-0892
WELL MONITOR TANK
SIZE: _____ gallons
DESIGN: _____
OPER: _____
MATERIAL: _____
CODE: _____

P-0892/M-0890
WELL MONITOR PUMP
MFR: _____
MOTOR SIZE: _____
OPER. FLOW: _____
MATERIAL: _____
CODE: _____



NOTES:

- 1.) RIVER AT REFERENCE 27.250', ELEVATION 3268'
- 2.) CHUKKA BRANCH REFERENCE 64.458', ELEVATION 3606'
- 3.) CHUKKA BRANCH REFERENCE 66.424', ELEVATION 3612'
- 4.) MEWBOURNE REFERENCE 78.440', ELEVATION 3680'
- 5.) SHD003 WILL ONLY ALARM WHEN PIPELINE SHUTDOWN CONDITIONS ARE MET. WHEN THE SHUTDOWN ALARMS PUMPS P-857/856/854/849 ARE TO BE SHUTDOWN.
- 6.) NOTE: UNLESS OTHERWISE NOTED, BULL PLUGS ARE REQUIRED FOR ALL 3" AND 4" DRAIN, VENT AND BLEEDER VALVES PER NRC POLICY AND ARE NOT SHOWN.

REFERENCE DRAWINGS:
DOCUMENT UNCONTROLLED IF PRINTED

NO.	CHK.	DATE	APPR.	NO.	REVISIONS
8	AS-BUILT PER M2011807-001 (JDE)				
7	AS-BUILT PER M2011578-001				
6	REVISED PER MSW RED LINES				
5	AS-BUILT PER M2010457-001				
4	M2010335-001 AS-BUILT PER JDE				
3	REVISED PER MOC M2009089-001				
2	UPDATED PER RFC 26180 INJ WELL #3				
1	ISSUED FOR REVIEW AND COMMENTS				

BY	CHK.	DATE	APPR.	NO.
JLM	JLM	5/23/99	DBK	10
JLM	JLM	8/04	JLM	9
JLM	JLM	11/17/11	JLM	8
JLM	JLM	8/14/14	JLM	7
JLM	JLM	8/14/14	JLM	6
JLM	JLM	8/14/14	JLM	5
JLM	JLM	8/14/14	JLM	4
JLM	JLM	8/14/14	JLM	3
JLM	JLM	8/14/14	JLM	2
JLM	JLM	8/14/14	JLM	1

DRAWING TITLE:
MECHANICAL FLOW SHEET
WASTEWATER TREATMENT

SCALE:
DRAWN BY: JLM
CHK'D BY: DBK
DATE: 5/23/99
DRAWING NUMBER: 80-V-02-D-08

NAVJO REFINING CO.
ENGINEERING DEPARTMENT
P.O. DRAWER 159
ARTESIA, NEW MEXICO

From: Griswold, Jim, EMNRD
Sent: Thursday, October 4, 2018 9:28 AM
To: Chavez, Carl J, EMNRD <CarlJ.Chavez@state.nm.us>
Subject: FW: Navajo Water Sales Letter to OCD

From: Aguilar, Susie <Suzanne.Aguilar@HollyFrontier.com>
Sent: Thursday, October 4, 2018 8:33 AM
To: Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Holder, Mike <Michael.Holder@hollyfrontier.com>; Boans, Robert <Robert.Boans@HollyFrontier.com>; Denton, Scott <Scott.Denton@HollyFrontier.com>; Combs, Robert <Robert.Combs@HollyFrontier.com>
Subject: [EXT] Navajo Water Sales Letter to OCD

Submitted on behalf of Scott Denton. Hard copy mailed to addressee only.

Thank you,
Susie

Susie Aguilar
Environmental Administrative Assistant, Lead
HollyFrontier Navajo Refining LLC
501 E. Main Street / P.O. Box 159
Artesia, NM 88210 / 88211-0159
Office: (575) 746-5488
Cell: (575) 703-4926
Fax: (575) 746-5451
Email: Suzanne.Aguilar@HollyFrontier.com

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- 3) An engineering design drawing(s) is required to assess any construction associated with the sale of refinery wastewater, i.e., at the refinery and WDW-1. OCD notices the sequence of Navajo disposal wells has changed to show WDW-4 as the first well to receive wastewater effluent from the refinery. There does not appear to be any planned construction at WDW-4 related to the sale of wastewater.
- 4) The third party shall comply with OCD 19.15.34 NMAC (Produced Water, Drilling Fluids and Liquid Oil Field Waste) permitting. By Part 34 Permit, OCD regards refinery wastewater to be waste fluids. However, the New Mexico Environment Department (NMED) may view the fluids to be a product used by the oil industry; therefore, releases by the third party could be subject to NMED Jurisdiction. OCD and NMED (agencies) are currently in communication on this matter and releases by the third party may be subject to communications between the agencies for the lead under the Water Quality Control Commission (WQCC) Regulations and/or oil and gas environmental regulations.

Please contact me if you have questions. Thank you.

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October 4, 2018

Mr. Carl Chavez
Oil Conservation Division
New Mexico Energy, Minerals & Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Certified Mail/Return Receipt
7015 0640 0006 6577 7104

RE: Notification Letter for Equipment Changes Associated with Treated Waste Water Sales
by HollyFrontier Navajo Refining LLC
Discharge Permit GW-028
Discharge Permit WDW-1, UICI-8-1

Dear Mr. Chavez:

As previously discussed by phone on August 28, 2018, the HollyFrontier Navajo Refining LLC (Navajo) is making changes to the piping near the WDW-1 wellhead. The purpose of the modifications is to allow Navajo to make the necessary equipment changes to divert some of its treated wastewater (WW) from the injection wells for reuse by a third party at oil and gas exploration and production facilities. As discussed separately with the New Mexico Oil Conservation Division (OCD), Navajo is currently in the process of soliciting interest for the sale of its treated effluent.

Pursuant to Condition 1.G of the Discharge Permit GW-028 and UICI-8-1, Navajo is required to notify the OCD of any facility expansion, production increase, or process modification that would result in any significant modification in the discharge of water contaminants. Though this planned modification will not change the quality or increase the quantity of the waste water effluent above permitted levels, Navajo is, per your request, hereby notifying OCD of the planned changes.

No equipment modifications will be made to the wastewater treatment facility at the refinery. Additional piping will be added to the existing pigging station near the WDW-1 wellhead. The piping equipment will include a totalizing flow meter and pressure controls. The meter will serve as the point of transfer of ownership of the water. Additional piping equipment will also be installed downstream of the new pressure controls, but will not be owned or installed by Navajo. This additional piping will allow transfer of the treated wastewater by the buyer to its oil and gas exploration and production customers. A simplified block flow diagram is provided in Attachment A and the location of the new equipment is provided in Attachment B.

Navajo Refining Company, L.L.C.
501 East Main • Artesia, NM 88210
(575) 748-3311 • <http://www.hollyfrontier.com>

Only the piping associated with WDW-1 will be physically modified. The operation of WDW-1, WDW-2 and WDW-3 will continue to meet the requirements of the UIC permits. No change in effluent contaminants or quality is expected due to the proposed modifications.

Historical effluent sampling shows that the two primary constituents of concern for potentially causing the effluent to exhibit a hazardous characteristic are benzene and selenium. Navajo has implemented, and will continue to implement, benzene and selenium operational monitoring and controls to ensure that discharged effluent does not meet the definition of hazardous waste. The benzene monitoring includes sampling to verify that the wastewater concentration in the effluent to be discharged is below 0.5 mg/L and therefore non-hazardous. Similarly, the selenium monitoring procedure includes sampling to ensure that discharged effluent has less than 1.0 mg/L of selenium present and is non-hazardous. In addition, the refinery will continue to follow the monitoring requirements contained in Section 2.A. of the UICI-8-1 Permit. No listed hazardous wastes are introduced to the Refinery's wastewater treatment system, thus the effluent is not a listed hazardous waste.

Navajo appreciates the continued cooperation of the OCD. Should you have questions, please do not hesitate to contact me at (575) 746-5487 or scott.denton@hollyfrontier.com. Thank you for your assistance in this matter.

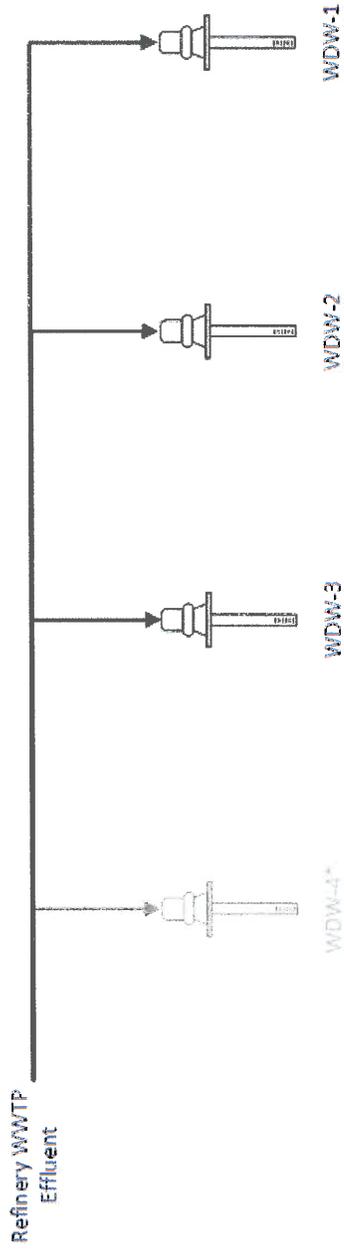
Sincerely,



Scott M. Denton
Environmental Manager
HollyFrontier Navajo Refining LLC

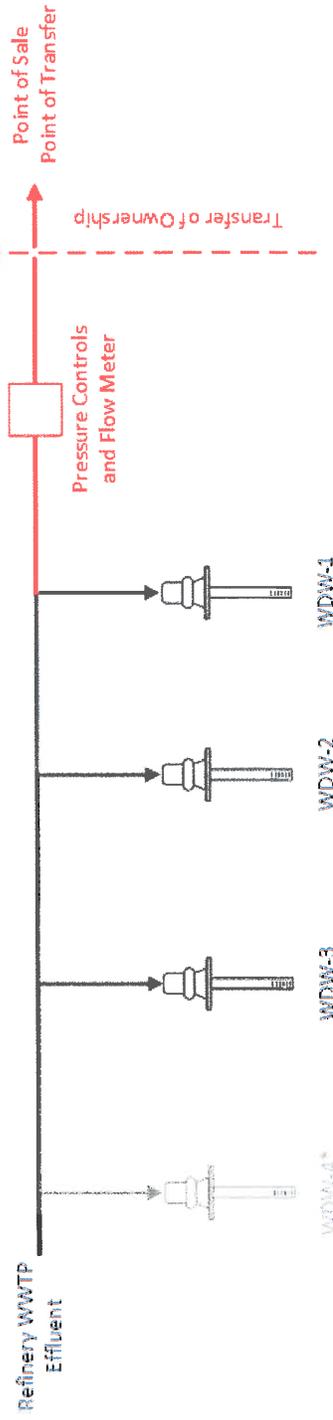
Attachment A
Process Schematic

Figure 1: Existing Wells Configuration



*Well constructed but not yet in service.

Figure 2: Modified Wells Configuration (modifications are shown in red)



*Well constructed but not yet in service.

Attachment B
Equipment Modifications Location

Meter Location, Delivery Point

Located east of 226/Hilltop Rd., south of Arco Rd.
AP# 30-015-27592

Legend

Feature 1

WDW-1 Wellhead

Mewbourne - $32^{\circ}47'6.82''N$, $104^{\circ}12'50.23''W$

Approximate Meter Location, Delivery Point

Current pigging station
(location of future equipment associated with water sales)

Google earth

© 2018 Google



80 ft

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Cell: (575) 703-4926
Fax: (575) 746-5451
Email: Suzanne.Aguilar@HollyFrontier.com

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October 4, 2018

Mr. Carl Chavez
Oil Conservation Division
New Mexico Energy, Minerals & Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Certified Mail/Return Receipt
7015 0640 0006 6577 7104

RE: Notification Letter for Equipment Changes Associated with Treated Waste Water Sales
by HollyFrontier Navajo Refining LLC
Discharge Permit GW-028
Discharge Permit WDW-1, UICI-8-1

Dear Mr. Chavez:

As previously discussed by phone on August 28, 2018, the HollyFrontier Navajo Refining LLC (Navajo) is making changes to the piping near the WDW-1 wellhead. The purpose of the modifications is to allow Navajo to make the necessary equipment changes to divert some of its treated wastewater (WW) from the injection wells for reuse by a third party at oil and gas exploration and production facilities. As discussed separately with the New Mexico Oil Conservation Division (OCD), Navajo is currently in the process of soliciting interest for the sale of its treated effluent.

Pursuant to Condition 1.G of the Discharge Permit GW-028 and UICI-8-1, Navajo is required to notify the OCD of any facility expansion, production increase, or process modification that would result in any significant modification in the discharge of water contaminants. Though this planned modification will not change the quality or increase the quantity of the waste water effluent above permitted levels, Navajo is, per your request, hereby notifying OCD of the planned changes.

No equipment modifications will be made to the wastewater treatment facility at the refinery. Additional piping will be added to the existing pigging station near the WDW-1 wellhead. The piping equipment will include a totalizing flow meter and pressure controls. The meter will serve as the point of transfer of ownership of the water. Additional piping equipment will also be installed downstream of the new pressure controls, but will not be owned or installed by Navajo. This additional piping will allow transfer of the treated wastewater by the buyer to its oil and gas exploration and production customers. A simplified block flow diagram is provided in Attachment A and the location of the new equipment is provided in Attachment B.

Navajo Refining Company, L.L.C.
501 East Main • Artesia, NM 88210
(575) 748-3311 • <http://www.hollyfrontier.com>

Only the piping associated with WDW-1 will be physically modified. The operation of WDW-1, WDW-2 and WDW-3 will continue to meet the requirements of the UIC permits. No change in effluent contaminants or quality is expected due to the proposed modifications.

Historical effluent sampling shows that the two primary constituents of concern for potentially causing the effluent to exhibit a hazardous characteristic are benzene and selenium. Navajo has implemented, and will continue to implement, benzene and selenium operational monitoring and controls to ensure that discharged effluent does not meet the definition of hazardous waste. The benzene monitoring includes sampling to verify that the wastewater concentration in the effluent to be discharged is below 0.5 mg/L and therefore non-hazardous. Similarly, the selenium monitoring procedure includes sampling to ensure that discharged effluent has less than 1.0 mg/L of selenium present and is non-hazardous. In addition, the refinery will continue to follow the monitoring requirements contained in Section 2.A. of the UICI-8-1 Permit. No listed hazardous wastes are introduced to the Refinery's wastewater treatment system, thus the effluent is not a listed hazardous waste.

Navajo appreciates the continued cooperation of the OCD. Should you have questions, please do not hesitate to contact me at (575) 746-5487 or scott.denton@hollyfrontier.com. Thank you for your assistance in this matter.

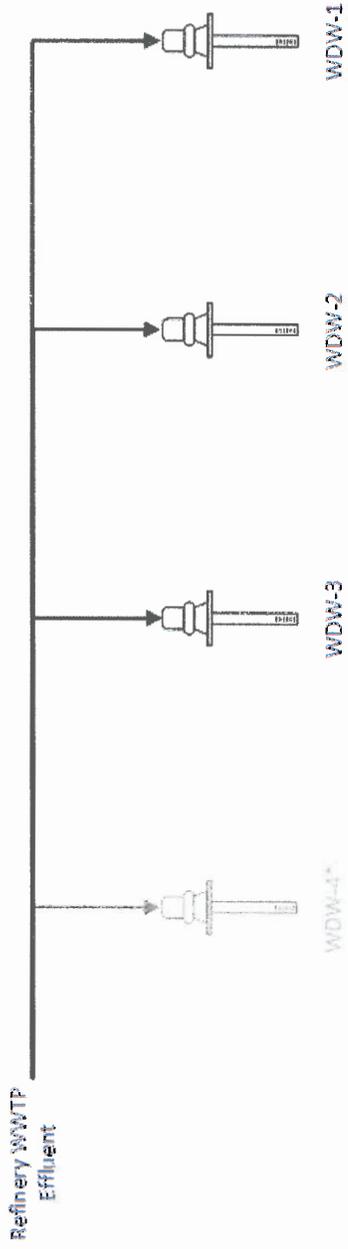
Sincerely,



Scott M. Denton
Environmental Manager
HollyFrontier Navajo Refining LLC

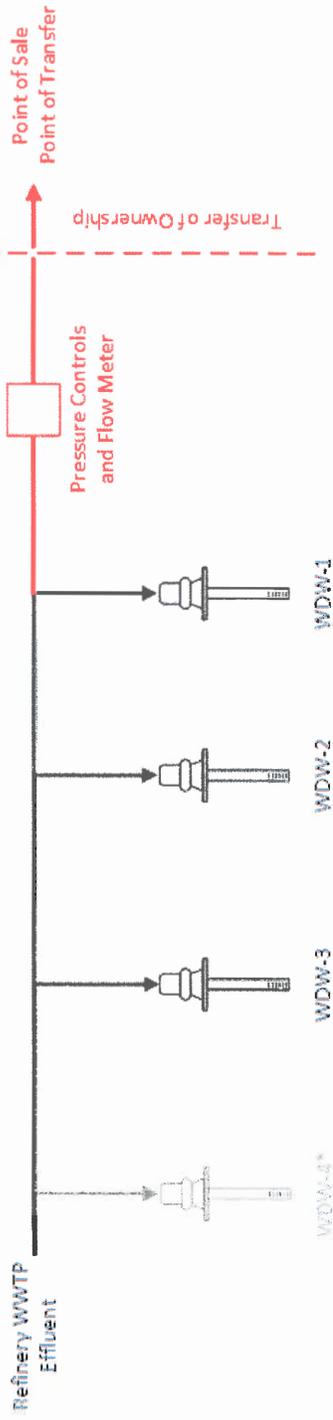
Attachment A
Process Schematic

Figure 1: Existing Wells Configuration



*Well constructed but not yet in service.

Figure 2: Modified Wells Configuration (modifications are shown in red)



*Well constructed but not yet in service.

Attachment B
Equipment Modifications Location

Meter Location, Delivery Point

Located east of 226/Hilltop Rd., south of Arco Rd.
AP# 30-015-27592

Legend
Feature 1

WDW-1 Wellhead

Mewbourne - $32^{\circ}47'6.82''N$, $104^{\circ}12'50.23''W$

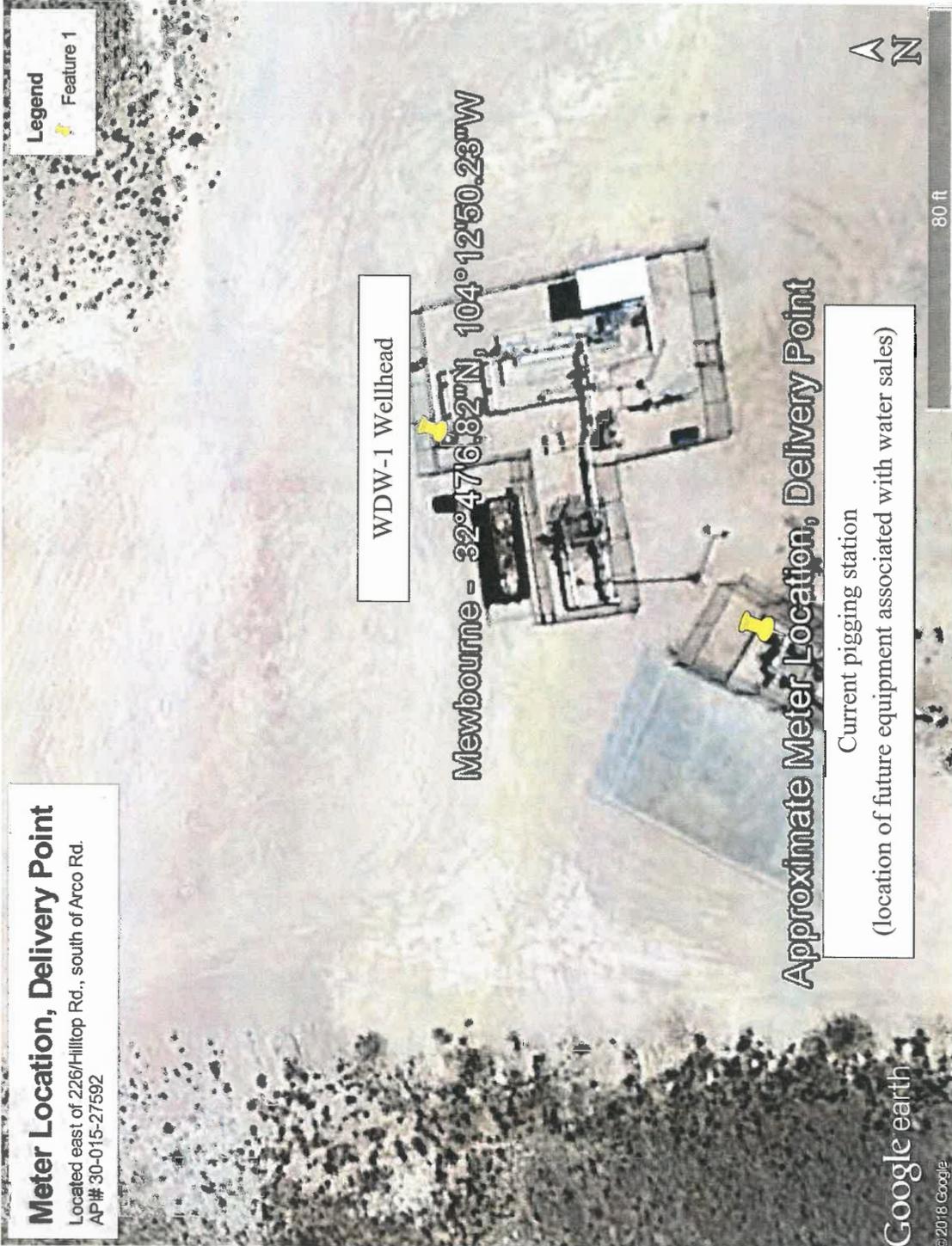
Approximate Meter Location, Delivery Point

Current pigging station
(location of future equipment associated with water sales)

Google earth

©2018 Google

80 ft



Refinery Wastewater Reuse and Fresh Water Preservation in New Mexico to Support Oilfield Production

By
R. Combs, R. Boans – HFNR
C. Chavez, E.J.S. Graham – EMNRD OCD

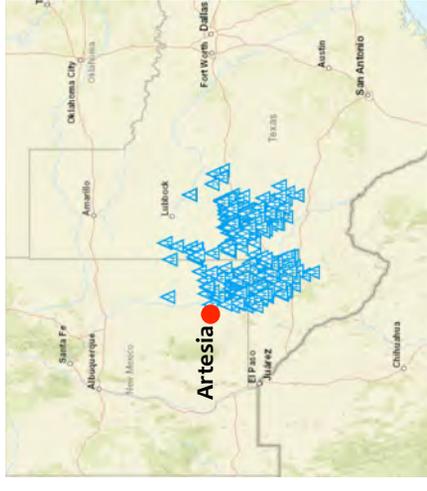
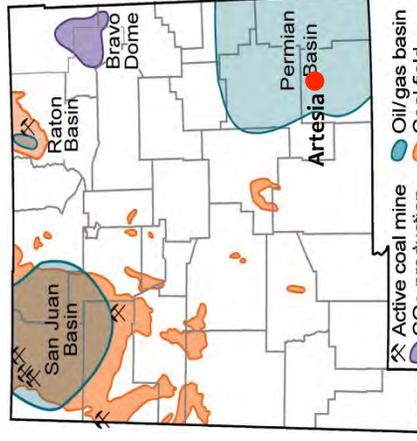
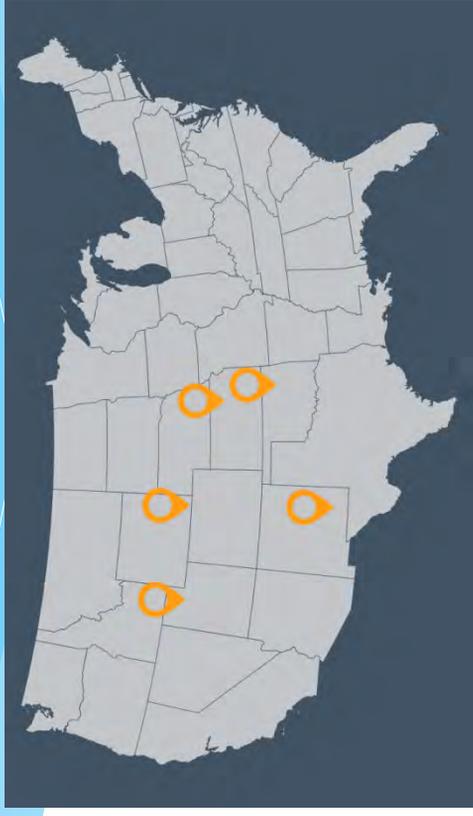
GWPC
New Orleans, LA
September 12, 2018




HOLLYFRONTIER®

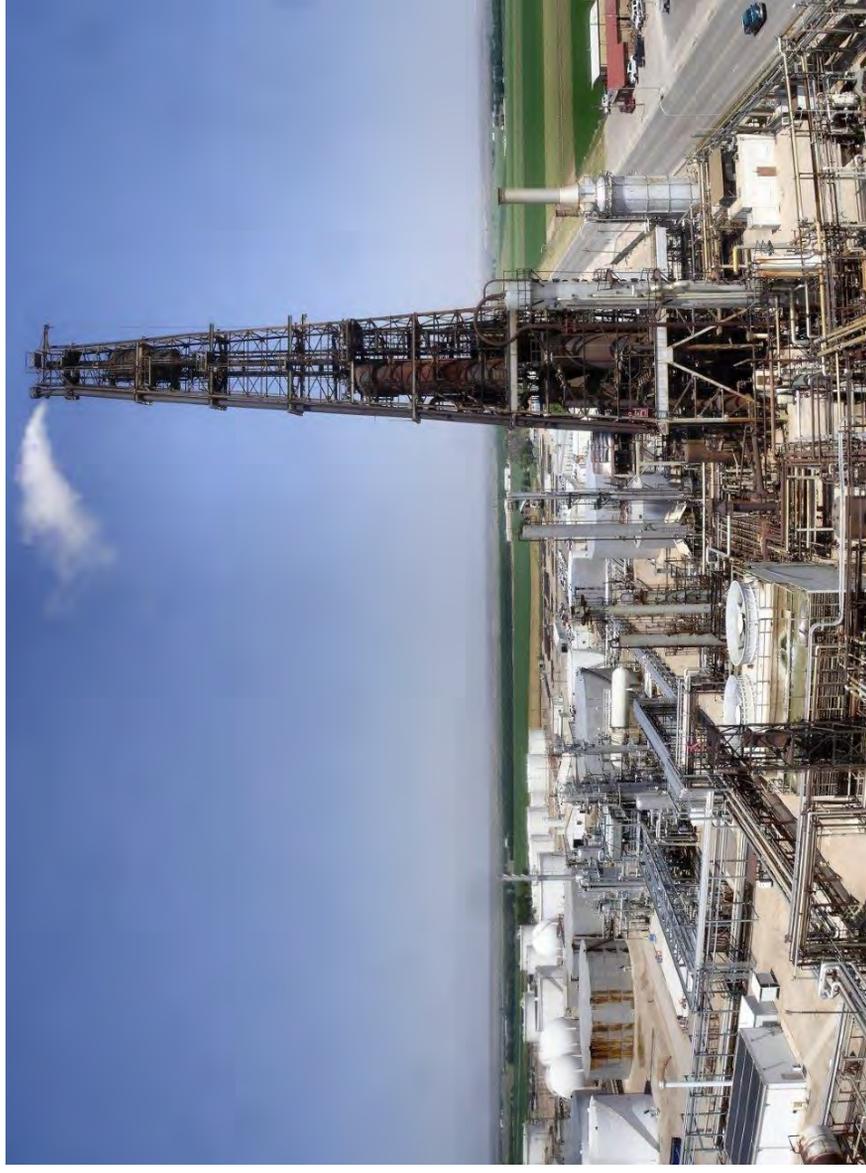
HollyFrontier Navajo Refining

- * HollyFrontier Navajo Refining
 - * Began in 1920s
 - * Holly Corp 1969
- * HollyFrontier Corporation
 - * One of five HollyFrontier refineries
 - * Total refining capacity of 460,000 bpd
 - * Headquartered in Dallas, TX
- * Navajo – Artesia/Lovington
 - * 100,000 bpd crude capacity
 - * Local Permian gathering



Refinery Regulatory

- * Permitting
- * POTW – Cities of Artesia & Lovington
- * NM Environment Department
- * NM Office of State Engineer
- * Oil Conservation Division



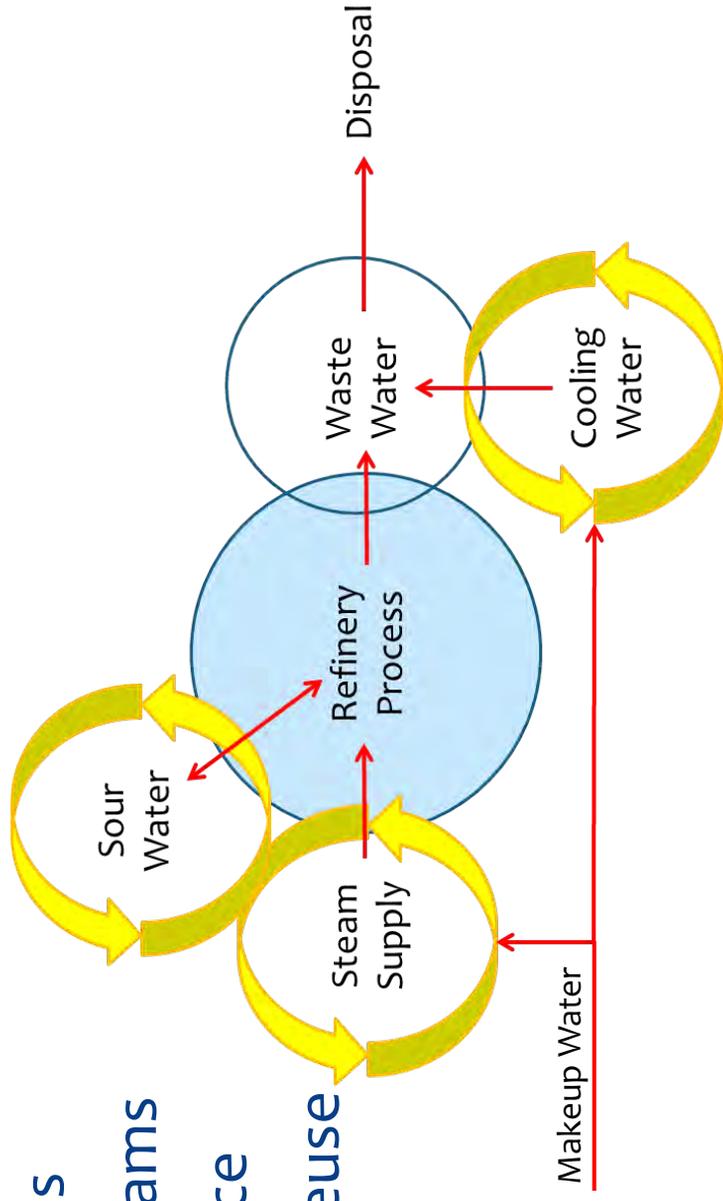
Refinery and Oilfield Activity Location

- * Arid location
- * Annual Average Rainfall
- * Limited surface water for demands
- * Limited fresh water rights
- * Competing demand for water
 - * Municipal
 - * Agriculture
 - * Oilfield

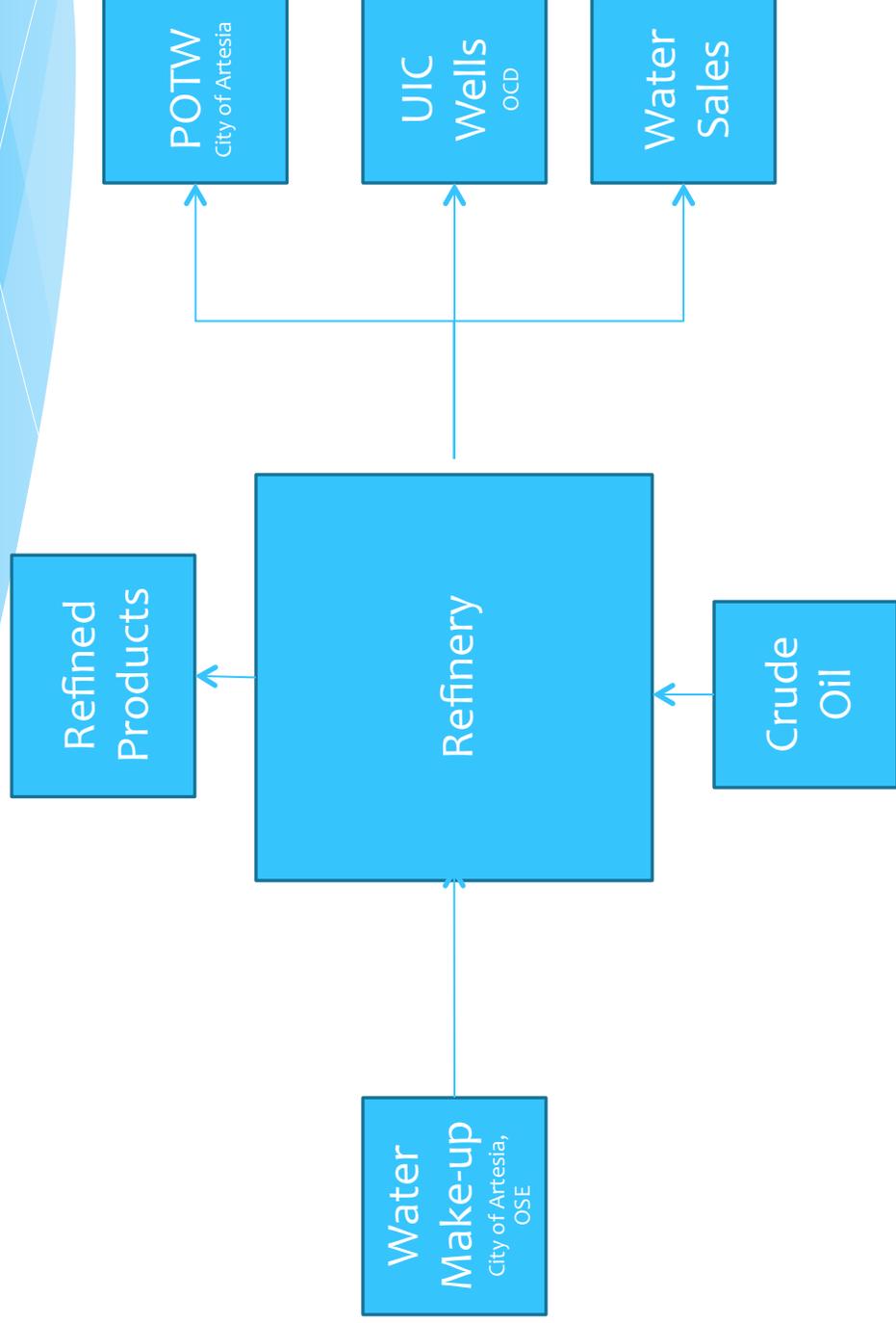


Refinery Water Use

- * Heavily dependent on water
- * Integrated processes
- * Internal recycle streams
- * Refinery Performance
- * Evaluating further reuse options to improve efficiency



Refinery Disposal Options



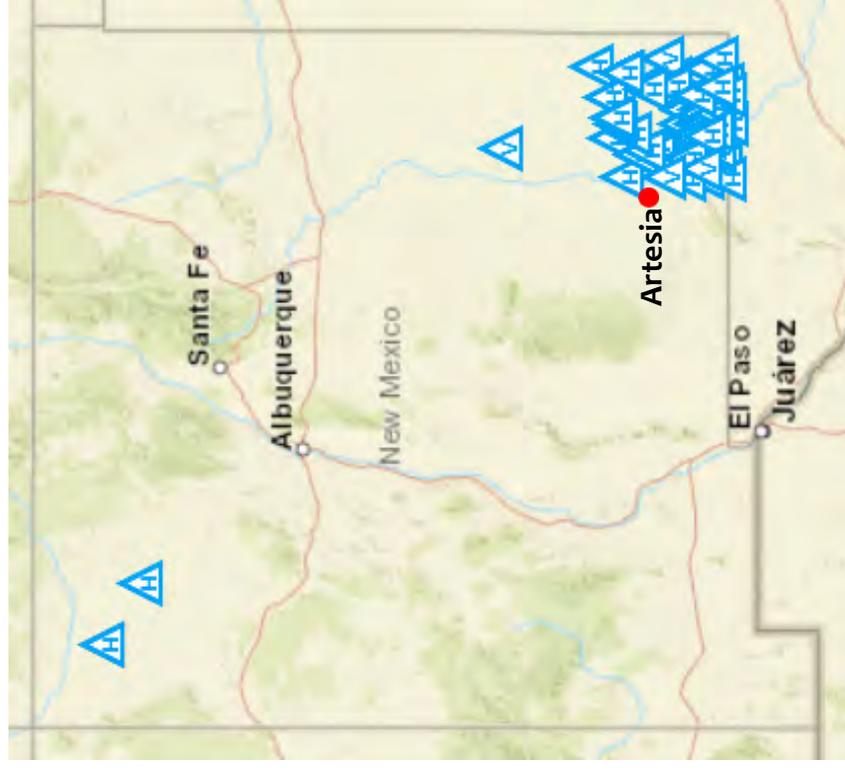
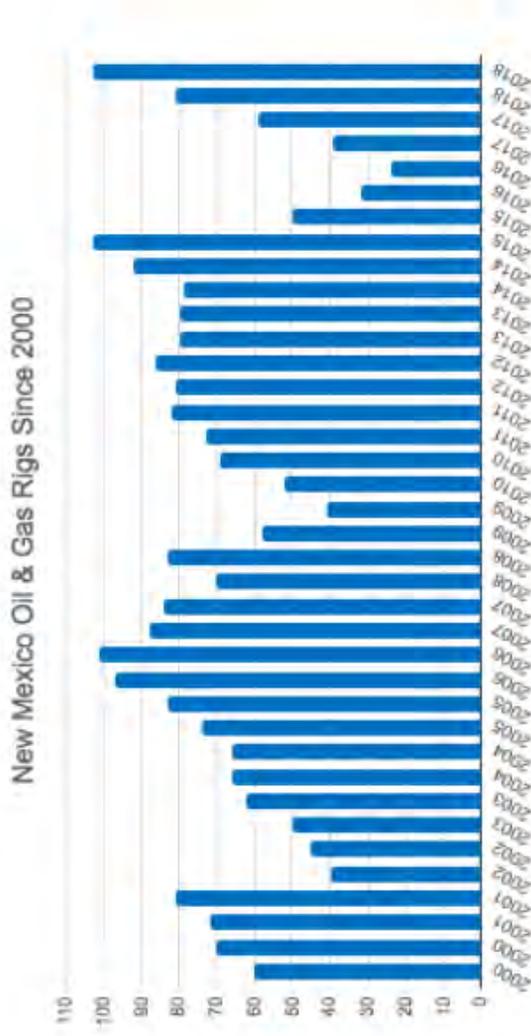
Benefits of Reuse

- * E&P
 - * Reduce costs
 - * Pipeline/Continuous Delivery
 - * Preserve freshwater resources
- * Refinery
 - * Longevity for refinery
 - * New partnerships
 - * Revenue



Oilfield Demand

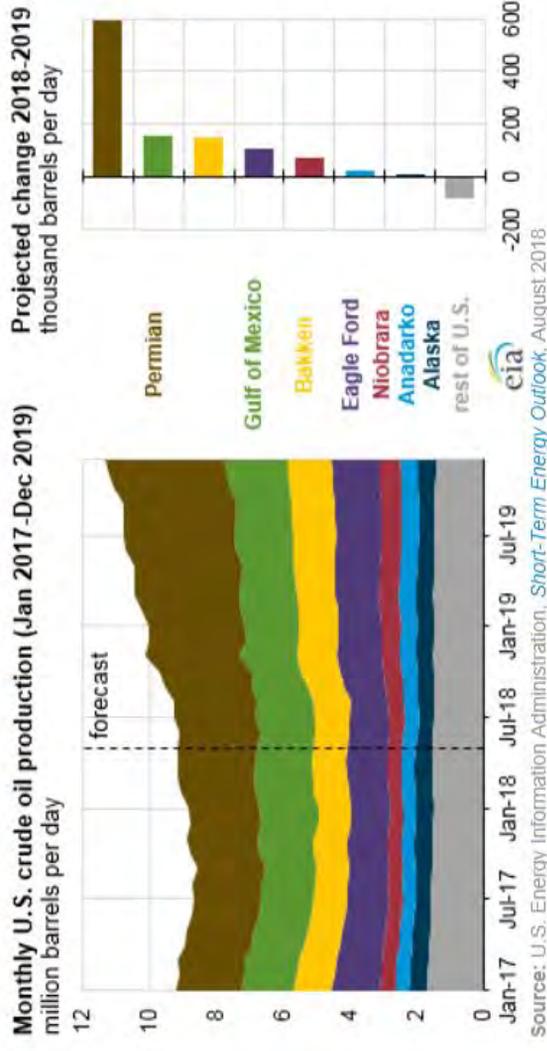
- * Oil and Gas well drilling fluids
- * Hydraulic fracturing
- * Downhole operations
- * Volumes:
 - * 1.1 MG/well (Eddy Cty) – avg frac volume



Reuse Considerations

- * Demand – will the trend continue?
- * Refinery liability
 - * Water quality
 - * Very consistent
 - * Discharge – Batch operation
 - * Regular quality testing
 - * Delivery
 - * Plant upset, mechanical failure, etc.
 - * Weather
 - * Contracts and Procurement
 - * Define purchaser responsibilities
 - * Payment
- * Purchaser Responsibilities
 - * Partners with good practices and financials
 - * Broker to third parties
 - * Commitment

Permian region is expected to drive U.S. crude oil production growth through 2019



Refinery Evaluation and Tasks

- * Due diligence of purchaser
- * Regulatory
 - * NMOCD
 - * Permitting
 - * Oilfield non-exempt non-hazardous waste water stream
- * City of Artesia
- * OSE
- * Contracts



Purchaser Responsibilities

- * Regulatory - Purchaser
 - * Managing refinery waste stream
 - * NMOCD
 - * Permitting – Reuse/Recycling
 - * Reporting
 - * Release Notification
 - * Investigation/cleanup
 - * Disposal
- * Rights of way – surface access
- * Deconstruction/demobilization



In Summary

- * Beneficial reuse program
- * Pollution and waste minimization
- * Implementation

For more info, contact:

Robert Combs – HollyFrontier Navajo Refining LLC
robert.combs@hollyfrontier.com, 575-746-5382

Carl Chavez – EMNR – OCD
CarlJ.Chavez@state.nm.us, 505-476-3490