

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

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

Form C-101
Revised July 18, 2013

☐ AMENDED REPORT

APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

¹ Operator Name and Address Navajo Refining Company, L.L.C. 501 E. Main Artesia NM 88210		² OGRID Number 15694
³ Property Code 313986		⁴ Property Name Waste Disposal Well
		⁵ Well No. WDP-4

Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet from	E/W Line	County
H-	28	17S	27E	—	2,310	FNL	1,100	FEL	Eddy

Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet from	E/W Line	County
—	28	17S	27E	—	2,310	FNL	1,100	FEL	Eddy

Pool Information

⁶ Pool Name SWD, Devonian (Undifferentiated)	⁷ Pool Code 96101
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Additional Well Information

¹¹ Work Type N	¹² Well Type I	¹³ Cable/Rotary R	¹⁴ Lease Type S	¹⁵ Ground Level Elevation 3,450'±
¹⁶ Multiple N	¹⁷ Proposed Depth 10,800'	¹⁸ Formation Devonian	¹⁹ Contractor TDB	²⁰ Spud Date TDB
Depth to Ground water 500'±		Distance from nearest fresh water well Unknown		Distance to nearest surface water 3 miles ±

☒ We will be using a closed-loop system in lieu of lined pits

Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
Conductor	24"	20"	129.33	80'	3 cu yd	Surface
Surface	17 1/2"	13 3/8"	54.5	1,500'	1,298 cu ft	Surface
Protection	12 1/4"	9 5/8"	47	10,800	4,063 cu ft	Surface

Casing/Cement Program: Additional Comments

See attached Construction Procedure and Proposed Well Schematic

Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
TDB	TDB	TDB	TDB

²¹ I hereby certify that the information given above is true and complete to the best of my knowledge and belief.

I further certify that I have complied with 19.15.14.9 (A) NMAC ☐ and/or 19.15.14.9 (B) NMAC ☐ if applicable.

Signature: *Robert E. Boens*

Printed name: Robert E. Boens

Title: Operations Manager

E-mail Address: robert.boens@hollyfrontier.com

Date: 11-21-2014

Phone: 505-746-5248

OIL CONSERVATION DIVISION

Approved By:

[Signature]

Title:

Dist. II Supervisor

Approved Date: 12-16-2014

Expiration Date: 12/16/2016

Conditions of Approval Attached

Financial Assurance needed

District I
 1625 N. French Dr., Hobbs, NM 88241
 Phone: (575) 393-6164 Fax: (575) 393-6720
 District II
 811 S. First St., Artesia, NM 88210
 Phone: (575) 748-1283 Fax: (575) 748-9720
 District III
 1000 Rio Brazos Road, Aztec, NM 87610
 Phone: (505) 334-6178 Fax: (505) 334-6170
 District IV
 1220 S. St. Francis Dr., Santa Fe, NM 87505
 Phone: (505) 476-1460 Fax: (505) 476-1462

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

Form C-102
 Revised August 1, 2011
 Submit one copy to appropriate
 District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1. Well Number 30-015-42872		2. Pool Code 96101		3. Pool Name SWD's Devonian (undifferentiated)		4. Well Number <96101>	
5. Property Code 313986		6. Property Name Waste Disposal Well				7. Well Number WDW-4	
8. OGRID No. 15694		9. Operator Name Navajo Refining Company, L.L.C.				10. Elevation 3,430'	

11. Surface Location

11.1. or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	28	17S	27E		2,310'	FNL	1,100'	FEL	Eddy

12. Bottom Hole Location If Different From Surface

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

13. Dedicated Acres	14. Joint or Infill	15. Consolidation Code	16. Order No.
2.500	N		

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

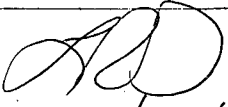
	<p>17. OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this is genuine, either owns a working interest or unless a mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with the owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order hereafter entered by the division.</p> <p> <u>Robert L. Kern</u> <u>11-21-2011</u> Signature Date <u>Robert F. Boers</u> Printed Name <u>robert.boers@hollyfrontrier.com</u> E-mail Address </p>
	<p>18. SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p> <u>7-08-2011</u> Date of Survey <u>[Signature]</u> Signature and Seal of Professional Surveyor <u>21207</u> Certificate Number </p>

Permit Conditions of Approval

API: 30-015-42872

OCD Reviewer	Condition
CSHAPARD	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string

Financial Assurance will need to be in place
prior to beginning drilling operations


12/16/2014

Copy of
Pending

STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL
RESOURCES DEPARTMENT

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

FORM C-108
Revised June 10, 2003

APPLICATION FOR AUTHORIZATION TO INJECT

I. PURPOSE: _____ Secondary Recovery _____ Pressure Maintenance X Disposal _____ Storage
Application qualifies for administrative approval? _____ Yes _____ No

II. OPERATOR: Navajo Refining Company, L.L.C.

ADDRESS: 501 E. Main, Artesia, New Mexico 88210

CONTACT PARTY: Mike Holder PHONE: (214) 954-6536

III. WELL DATA: Complete the data required on the reverse side of this form for each well proposed for injection.
Additional sheets may be attached if necessary.

IV. Is this an expansion of an existing project? _____ Yes X No
If yes, give the Division order number authorizing the project: _____

V. Attach a map that identifies all wells and leases within two miles of any proposed injection well with a one-half mile radius circle drawn around each proposed injection well. This circle identifies the well's area of review.

Please refer to Section 7(a) Area of Review of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

VI. Attach a tabulation of data on all wells of public record within the area of review which penetrate the proposed injection zone. Such data shall include a description of each well's type, construction, date drilled, location, depth, record of completion, and a schematic of any plugged well illustrating all plugging detail.

Please refer to Section 7(a) Area of Review of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

VII. Attach data on the proposed operation, including:

1. Proposed average and maximum daily rate and volume of fluids to be injected;
2. Whether the system is open or closed;
3. Proposed average and maximum injection pressure;
4. Sources and an appropriate analysis of injection fluid and compatibility with the receiving formation if other than reinjected produced water; and,
5. If injection is for disposal purposes into a zone not productive of oil or gas at or within one mile of the proposed well, attach a chemical analysis of the disposal zone formation water (may be measured or inferred from existing literature, studies, nearby wells, etc.).

Please refer to Section 7 of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

*VIII. Attach appropriate geologic data on the injection zone including appropriate lithologic detail, geologic name, thickness, and depth. Give the geologic name, and depth to bottom of all underground sources of drinking water (aquifers containing waters with total dissolved solids concentrations of 10,000 mg/l or less) overlying the proposed injection zone as well as any such sources known to be immediately underlying the injection interval.

Please refer to Section 7(e) Geology of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

IX. Describe the proposed stimulation program, if any.

Please refer to Section 7(i) Stimulation Program of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

- *X. Attach appropriate logging and test data on the well. (If well logs have been filed with the Division, they need not be resubmitted).

Please refer to Section 7r Logging and Testing of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

- *XI. Attach a chemical analysis of fresh water from two or more fresh water wells (if available and producing) within one mile of any injection or disposal well showing location of wells and dates samples were taken.

A diligent search of public records did not located any groundwater quality data in the area of the location where WDW-4 will be installed.

- XII. Applicants for disposal wells must make an affirmative statement that they have examined available geologic and engineering data and find no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

Navajo Refining Company, L.L.C. has examined available geologic and engineering data and has found no evidence of open faults or any other hydrologic connection between the disposal zone and any underground sources of drinking water.

- XIII. Applicants must complete the "Proof of Notice" section on the reverse side of this form.

Please refer to Section 13 Draft Public Notice of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

- XIV. Certification: I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

NAME: Robert E. Boars TITLE: Operation Manager

SIGNATURE: Robert E. Boars DATE: 11-21-2014

E-MAIL ADDRESS: _____

- * If the information required under Sections VI, VIII, X, and XI above has been previously submitted, it need not be resubmitted. Please show the date and circumstances of the earlier submittal: _____

DISTRIBUTION: Original and one copy to Santa Fe with one copy to the appropriate District Office

III. WELL DATA

- A. The following well data must be submitted for each injection well covered by this application. The data must be both in tabular and schematic form and shall include:

(1) Lease name; Well No.; Location by Section, Township and Range; and footage location within the section.

Please refer to Sections 3.0 Location and 4.0 Landowner(s) Geology of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

(2) Each casing string used with its size, setting depth, sacks of cement used, hole size, top of cement, and how such top was determined.

Please refer to Section 7(l) Construction Procedures of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

(3) A description of the tubing to be used including its size, lining material, and setting depth.

Please refer to Section 7(l) Construction Procedures of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

(4) The name, model, and setting depth of the packer used or a description of any other seal system or assembly used.

Please refer to Section 7(l) Construction Procedures of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

Division District Offices have supplies of Well Data Sheets which may be used or which may be used as models for this purpose. Applicants for several identical wells may submit a "typical data sheet" rather than submitting the data for each well.

- B. The following must be submitted for each injection well covered by this application. All items must be addressed for the initial well. Responses for additional wells need be shown only when different. Information shown on schematics need not be repeated.

(1) The name of the injection formation and, if applicable, the field or pool name.

Please refer to Section 7(e) Geology of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

(2) The injection interval and whether it is perforated or open-hole.

Please refer to Section 7(e) Geology of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

(3) State if the well was drilled for injection or, if not, the original purpose of the well.

WDW-4 is being drilled specifically for injection of liquid wastes originating at the Navajo Artesia Refinery as described in Section 7(f) Proposed Operating Parameters of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

- (4) Give the depths of any other perforated intervals and detail on the sacks of cement or bridge plugs used to seal off such perforations.

Please refer to Section 7(l) Construction Procedures of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

- (5) Give the depth to and the name of the next higher and next lower oil or gas zone in the area of the well, if any.

Oil and gas production in the area where WDW-4 will be installed occurs in the Queen, Grayburg and San Andres Formation at depths of approximately 2,500 feet and the Morrow Formation at a depth of approximately 9,500 feet. The planned Devonian age Injection Interval in the Navajo WDW-4 injection wells is expected to be encountered below 10,000 feet, approximately 10,200 to 10,700 feet. There are no deeper oil or gas zones in the area.

XIV. PROOF OF NOTICE

All applicants must furnish proof that a copy of the application has been furnished, by certified or registered mail, to the owner of the surface of the land on which the well is to be located and to each leasehold operator within one-half mile of the well location.

Where an application is subject to administrative approval, a proof of publication must be submitted. Such proof shall consist of a copy of the legal advertisement which was published in the county in which the well is located. The contents of such advertisement must include:

- (1) The name, address, phone number, and contact party for the applicant;
- (2) The intended purpose of the injection well; with the exact location of single wells or the Section, Township, and Range location of multiple wells;
- (3) The formation name and depth with expected maximum injection rates and pressures; and,
- (4) A notation that interested parties must file objections or requests for hearing with the Oil Conservation Division, 1220 South St. Francis Dr., Santa Fe, New Mexico 87505, within 15 days.

NO ACTION WILL BE TAKEN ON THE APPLICATION UNTIL PROPER PROOF OF NOTICE HAS BEEN SUBMITTED.

Please refer to Section 13 Draft Public Notice of the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

NOTICE: Surface owners or offset operators must file any objections or requests for hearing of administrative applications within 15 days from the date this application was mailed to them.

Side 1

INJECTION WELL DATA SHEET

OPERATOR: Navajo Refining Company, L.L.C.

WELL NAME & NUMBER: Waste Disposal Well No. 4 (WDW-4)

WELL LOCATION: 2,310' FNL and 1,100' FEL of Section 28, Township 17 South Range 27 East

FOOTAGE LOCATION

UNIT LETTER

SECTION

TOWNSHIP

RANGE

Refer to Figure 12 in the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

WELLBORE SCHEMATIC

WELL CONSTRUCTION DATA

Surface Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft³

Top of Cement: _____ Method Determined: _____

Intermediate Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft³

Top of Cement: _____ Method Determined: _____

Production Casing

Hole Size: _____ Casing Size: _____

Cemented with: _____ sx. *or* _____ ft³

Top of Cement: _____ Method Determined: _____

Total Depth: _____

Injection Interval

_____ feet to _____

(Perforated or Open Hole; indicate which)

INJECTION WELL DATA SHEET

Refer to Figure 12 in the document entitled Permit Application, Class I Nonhazardous Waste Injection Well WDW No. 4, Navajo Refining Company, L.L.C., dated November 2014. A copy of this permit application was submitted to the District II office at the same time as the original document was submitted to the main office in Santa Fe.

Tubing Size: _____ Lining Material: _____

Type of Packer: _____

Packer Setting Depth: _____

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

Additional Data

1. Is this a new well drilled for injection? X Yes No

If no, for what purpose was the well originally drilled? _____

2. Name of the Injection Formation: Devonian (undifferentiated)

3. Name of Field or Pool (if applicable): Not applicable

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

5. Give the name and depths of any oil or gas zones underlying or overlying the proposed injection zone in this area: Queen, Grayburg and San Andres (approximately 2,500 feet) and Morrow (approximately 9,500 feet)
