

**HRL**
COMPLIANCE
SOLUTIONSP.O. Box 1708 • Artesia, NM 88211
www.hrlcomp.com

October 23, 2020

Ms. Amanda Davis
Devon Energy Production Company
6488 Seven Rivers Highway
Artesia, New Mexico 88210
Email: Amanda.davis@dvn.com

Subject: Liner Inspection and Closure Report
Mean Green 23 Federal #1 Battery
Lea County, New Mexico
Incident # - NOY1823231809

Dear Ms. Davis:

Devon Energy Production Company (Devon) (Client) retained HRL Compliance Solutions, Inc. (HRL) to conduct a liner inspection and prepare this closure report for the release at the Mean Green 23 Federal #1 Battery pad (Site). The Site is located in Eddy County, New Mexico (Figure 1).

Release Summary and Initial Response

On July 27th, 2018, a power outage caused a water transfer pump to go down on high discharge. This caused a water tank to overflow and release produced water into the lined, secondary containment. Approximately 62 bbls of produced water was released, and all fluid was recovered via a vacuum truck. The liner was inspected for holes/rips and none were found. A 24-hour notification of this event was emailed to the NMOCD and the BLM on July 29th, 2018 at 9:42p.m. On August 2nd, 2018 the C-141 (Attachment A) was submitted to the New Mexico Oil Conservation Division (NMOCD).

Item	Discussion
Site Name	Mean Green 23 Federal #1 Battery
Latitude	32.0216446
Longitude	-104.4332657
Township/Range/Section	Township 26 South/ Range 34 East/ Section 23
Date Release Discovered	July 27, 2018
Cause of Release	Water tank overflowed
Type of Material Released	Produced Water
Volume Release	62 barrels

INNOVATIVE SOLUTIONS DELIVERED



Ms. Amanda Davis
Page 2

New Mexico Administrative Code (NMAC) Site Characterization Criteria

Title 19, Chapter 15, Part 29, Section 11 of the New Mexico Administrative Code (NMAC) provides requirements for release characterization once the free liquids and recoverable materials have been removed from the Site.

Site Map

A scaled diagram depicting the site and nearby significant features has been prepared (Figure 1).

Depth to Groundwater

Based on research from the New Mexico Office of the State Engineer (NMOSE) and United States Geological Survey (USGS), the depth to groundwater is estimated to range from 51 to 100 feet below ground surface (bgs) (Figure 2).

Wellhead Protection Area

There are no sources of water, including springs, wells, or other sources of fresh water, within one-half mile of the release.

Distance to Nearest Significant Watercourse

A significant watercourse is defined as "...a watercourse with a defined bed and bank either named or identified by a dashed blue line on a USGS 7.5-minute quadrangle map or the next lower order tributary with a defined bed and bank" (19.15.17.7 NMAC). There are no significant watercourses within one-half mile of the Site.

Additional Site Characterization Criteria

The following additional site characterization criteria were evaluated for the release.

Additional Site Characterization Criteria	Response/Discussion
Is the Site within 300 feet of a continuously flowing water or other significant watercourse?	No
Is the Site within 200 feet of a lakebed, sinkhole, or playa lake?	No
Is the Site within 300 feet of an occupied permanent residence, school, hospital institution, or church?	No

Mean Green 23 Federal #1 Battery
February 2020



Ms. Amanda Davis
Page 3

Additional Site Characterization Criteria	Response/Discussion
Is the Site within 500 feet of a spring or private, domestic fresh water well used by less than five households for domestic or stock watering purposes?	No
Is the Site within 1,000 feet of any fresh water well or spring?	No
Is the Site within 300 feet of a wetland?	No
Is the Site within the area overlying a subsurface mine?	No
Is the Site within an unstable area?	No
Is the Site within the 100-year floodplain?	No

Conclusions and Recommendations

The July 27, 2018 release of 62 barrels of produced water at the Site remained within the lined containment area. HRL has determined that the liner integrity remains intact and had the ability to contain the release; therefore, additional characterization of the soil and/or groundwater at the Site is not necessary. HRL recommends closure of this release.

Scope and Limitations

The scope of HRL's services consists of performing a liner integrity inspection and preparation of this closure report. All work has been performed in accordance with generally accepted professional environmental consulting practices for oil and gas releases in the Permian Basin.

If you have any questions or concerns, please do not hesitate to contact Annie McCawley at (970) 259-0926 Ext. 414 or via email at amccawley@hrlcomp.com.

Sincerely,

HRL Compliance Solutions, Inc.

Annie McCawley
Environmental Scientist

Copy: Julie Linn, PG, RG, HRL Compliance Solutions, Inc.

Mean Green 23 Federal #1 Battery
February 2020



Ms. Amanda Davis
Page 4

Figures:

Figure 1: Site Location Map
Figure 2: Depth to Groundwater Map

Attachments:

Attachment A: NMOCD Form C-141
Attachment B: Photographs
Attachment C: Liner Inspection Field Form

Mean Green 23 Federal #1 Battery
February 2020

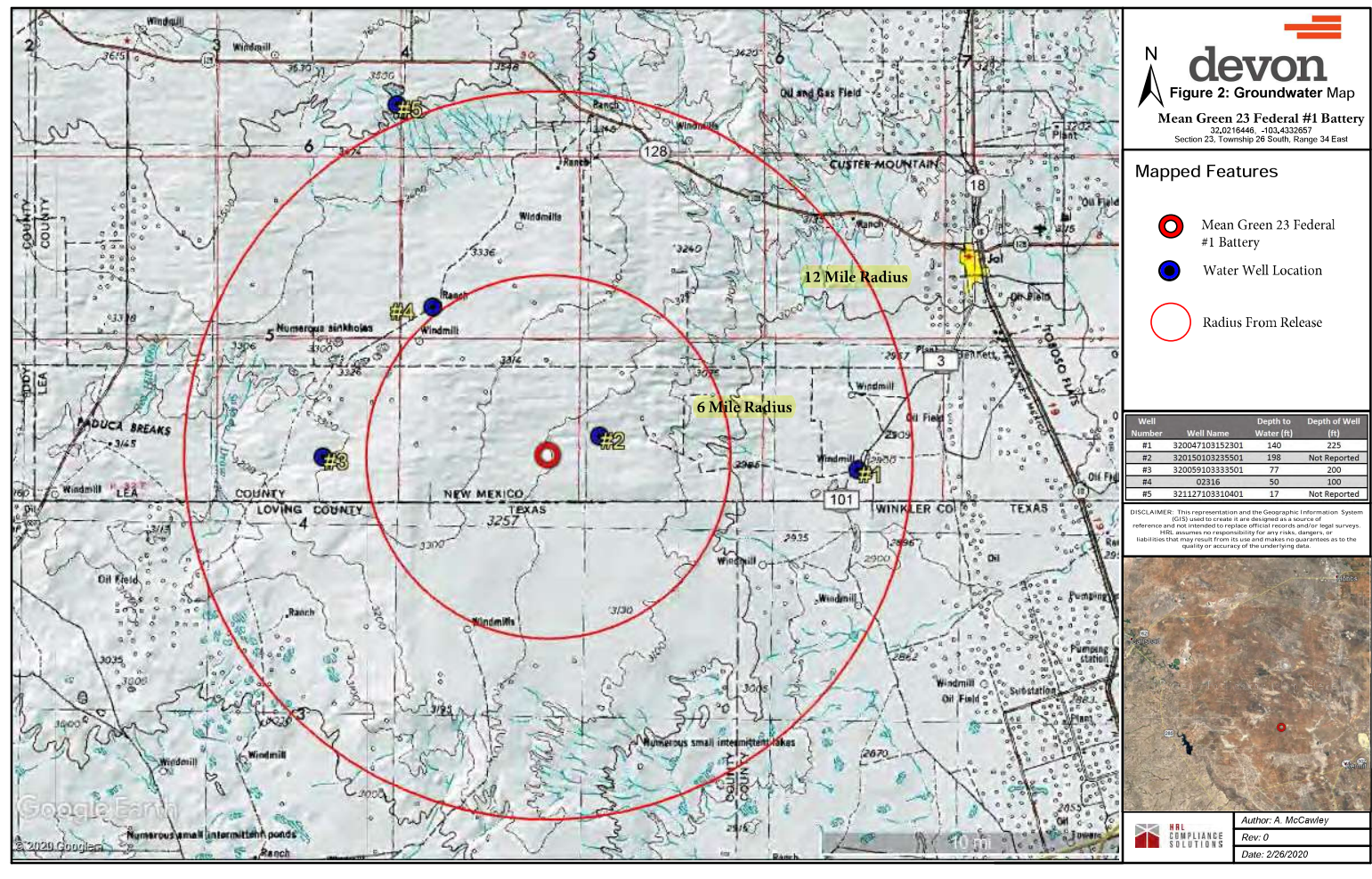


Figures



Received by OCD: 10/23/2020 9:31:34 AM

Page 7 of 17





Attachment A
NMOCD Form C-141

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

Form C-141
Revised April 3, 2017

Submit 1 Copy to appropriate District Office in
accordance with 19.15.29 NMAC.

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☒ Final Report

Name of Company Devon Energy Production Company	Contact Aaron Pina, Production Foreman
Address 6488 Seven Rivers Hwy Artesia, NM 88210	Telephone No. 575-748-3371
Facility Name Mean Green 23 Fed 1H Battery	Facility Type Battery
Surface Owner Federal	Mineral Owner Federal
API No. 30-025-41292	

LOCATION OF RELEASE

Unit Letter P	Section 23	Township 26S	Range 34E	Feet from the 25'	North/South Line FSL	Feet from the 330'	East/West Line FEL	County Lea
------------------	---------------	-----------------	--------------	----------------------	-------------------------	-----------------------	-----------------------	---------------

Latitude_32.0216446_ Longitude_103.4332657_ NAD83

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 62bbbls	Volume Recovered 62bbbls
Source of Release Produced Water Tank	Date and Hour of Occurrence July 27, 2018 @ 8:00 PM	Date and Hour of Discovery July 27, 2018 @ 8:00 PM
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Olivia Yu, OCD Chistina Hernandez, BLM	
By Whom? Brett Fuls, EHS Representative	Date and Hour July 29, 2018 @ 9:42 PM	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		


RECEIVED

By Olivia Yu at 8:56 am, Aug 20, 2018

Describe Cause of Problem and Remedial Action Taken.*
Power outage caused pump to go down on high discharge, wells were shut in but this well auto started and ran tank levels over. Truck arrived on site and immediately started pulling tank levels down.

Describe Area Affected and Cleanup Action Taken.*
Approximately 62bbbls produced water was released into lined containment. All 62bbbls produced water was recovered from lined containment. Containment liner was inspected for holes and none were found.

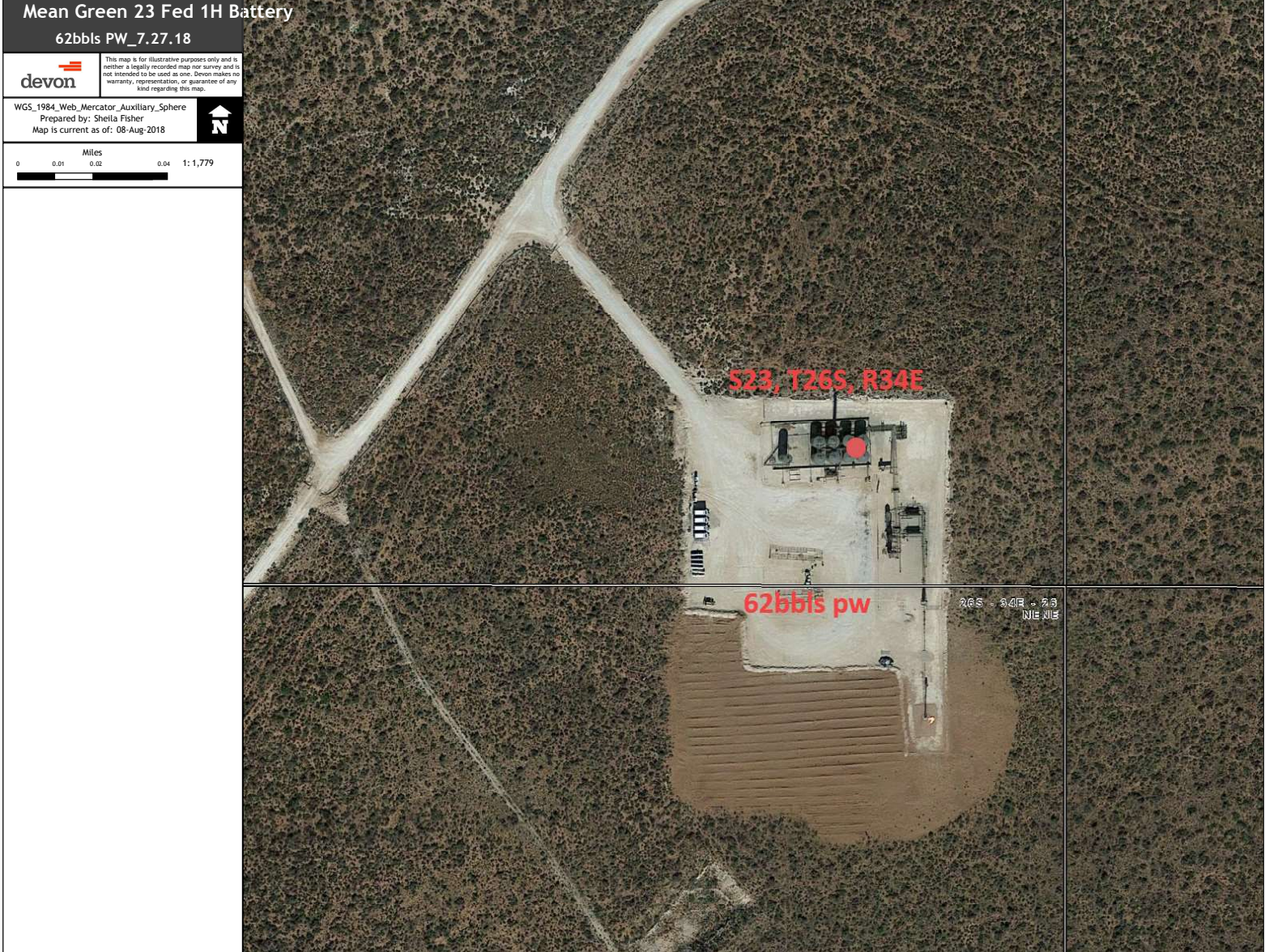
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.


Signature: <i>Sheila Fisher</i>		OIL CONSERVATION DIVISION 	
Printed Name: Sheila Fisher			
Title: Field Admin Support	Approval Date: 8/20/2018	Expiration Date:	
E-mail Address: Sheila.Fisher@dmn.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 8/2/18	Please inspect liner in question. Provide NMOCD with a concise report of the inspection with affirmation the liner has and will continue to contain liquids.		nOY1823231809

* Attach Additional Sheets If Necessary

Received by OCD: 10/23/2020 9:31:34 AM

Page 10 of 17



TBYNUM (EHS SHARED SAFETY CONTR

Searches ▾ Operate

OCD Permitting

Home > Searches > Incidents > Incident Details

NOY1823231809 2018 MAJOR A SWS @ 30-025-41292

General Incident Information

Site Name:

Well: [\[30-025-41292\]](#) MEAN GREEN 23 FEDERAL #001H

Facility:

Operator: [\[6137\]](#) DEVON ENERGY PRODUCTION COMPANY, LP

Status: Closure Not Approved

Type: Produced Water Release

District: Hobbs

Severity: Major

Surface Owner:

County: Lea (25)

Incident Location: P-23-269-34E 25 FSL 330 FEL

Lat/Long: 32.0216446,-103.4332657 NAD83

Directions:

Notes

Source of Referral: Industry Rep

Action / Escalation:

Resulted in Fire: ☐

Will or Has Reached Watercourse: ☐

Endangered Public Health: ☐

Property Or Environmental Damage: ☐

Contact Details

Contact Name:

Contact Title:

Event Dates

Date of Discovery: 08/20/2018

Extension Date: 11/15/2018

OCD Notified of Major Release: 07/29/2018

Cancelled Date:

Initial C-141 Received:

Characterization Report Received:

Remediation Plan Received:

Closure Report Received:

Characterization Report Approved:

Remediation Plan Approved:

Remediation Due:

Closure Report Approved:

Incidents Materials

Cause	Source	Material	Volume				Units
			Unk.	Spilled	Recovered	Lost	
Overflow - Tank, Pit, Etc.	Tank (Any)	Produced Water	<input type="checkbox"/>	62	62	0	BBL

Incident Events

Date	Detail
08/20/2018	No RP issued. Incident only. Lined facility. Power outage caused pump to go down on high discharge, wells were shut in, but this well auto-started and ran tank levels over. Truck arrived on site and immediately started pulling tank levels down. Approx. 62 bbls produced water was released into lined containment. All 62 bbls produced water was recovered from lined containment. Containment was inspected for holes and none were found.

Orders

No Orders Found

State of New Mexico
Oil Conservation Division

Page 6

Incident ID	NOY1823231809
District RP	
Facility ID	
Application ID	

Closure

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (electronic submittals in .pdf format are preferred) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☐ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☐ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☐ Description of remediation activities

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

Printed Name: Tom Bynum Title: EHS Consultant
Signature: Tom Bynum Date: 10/23/2020
email: tom.bynum@dvn.com Telephone: 575-748-2663

OCD Only

Received by: Chad Hensley Date: 02/16/2021

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Chad Hensley Date: 02/16/2021
Printed Name: Chad Hensley Title: Environmental Specialist Advanced



Attachment B

Photographs



View of standing water and snow within the secondary containment.



View of standing water and snow within the secondary containment.





View of standing water in the secondary containment.



View of standing water between the tanks and rust on the bottom of the tank.





Attachment C
Liner Inspection Field Form


HRL
COMPLIANCE
SOLUTIONS
Liner Inspection Form

Client Devon Energy

Date of Inspection 2/5/20

Site Name Mean Green 23 Federal IH ~~Sign says 26 Fed IH~~ AM 2/28/20

Latitude 32.021746

Longitude -103.433279

Observations	Yes	No	Comments
Is the liner present?	✓		
Is the liner torn?		✓	
Are there visible holes in the liner?		✓	
Is the liner retaining any liquids?	✓		
Does it appear the liner had the ability to contain the leak?	✓		

Type of Liner: Poly Earthen Metal Other (describe below):

Other Concerns or Observations:

Metal Secondary Containment

Snoring

Rust on metal → evidence of liner holding water

Photos 1-13

Inspector Name Annie McCawley

Inspector Signature A M

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 10822

CONDITIONS OF APPROVAL

Operator:	OGRID:	Action Number:	Action Type:
PIMA ENVIRONMENTAL SERVICES, L Suite 500 Hobbs, NM88240	329999	10822	C-141
1601 N. Turner			
OCD Reviewer	Condition		
chensley	None		