

Termination Report

November 28, 2016

Re: Apache State SWD # 3 API# 30-015-38978 Case 2RP-2923

To: Mike Bratcher

Environmental Specialist-New Mexico Oil Conservation Division Energy, Minerals and

Natural Resources Department 811 S. First St. Artesia, NM 88210

Beginning on May 11, 2015 through August, 2015 a total of 2,595 yards of contaminated soil was washed using 9,310 barrels of fresh water. The contaminated water however could not be used in oilfield activities due to fine soil particles in the water. All contaminated water was disposed of at a NMOCD approved SWD. All the washed material was placed into 7 cells and 5 point composite samples of each cell were taken to a commercial laboratory for analysis. Cells 2, 4, and 5 laboratory results showed elevated chlorides over the 1,000 chloride threshold.

An economic decision was made to stop soil washing and beginning on 9/14/2015 the remaining contaminated soil was hauled to a NMOCD approved facility and backhauled clean imported top soil. Some of the clean imported soil was blended with Cells 2, 4, and 5 and resampled and submitted to a commercial laboratory for analysis in which the results came back less than 1,000 ppm chlorides. The staging area south in the pasture was also excavated due to cross contamination to chloride values less than 1,000 ppm.

The area inside the facility was scraped down to levels less than 1,000 chlorides except above the liner which the highest concentration were removed to a depth that would not jeopardize the integrity of the buried liner. The area around the source of the release was delineated to a depth of 10 feet and ceased delineation when clay was encounter and the 9 foot sample was taken to a commercial laboratory for analysis for chloride. The area around the pipeline was excavated were possible to a depth of the natural occurring clay barrier. Beginning on December 3, 2015 the pasture was backfilled utilizing washed top soil and clean imported top soil and contoured to the surrounding area. The facility was backfilled with clean

imported caliche and caliche was also utilized to build berms around the facility.

Enclosed: Amended Path Forward, Approvals of Path Forward, Map, Laboratory analysis, Photos, and final C-141.

Apache has completed the approved amended path forward and respectfully request termination of release.

Submitted by;

Bruce Baker
Environmental Technician

larry.baker@apachecorp.com

Cell# 432-631-6982

Off# 575-393-7106

From:

Jacob Kamplain

To:

"Bratcher, Mike, EMNRD"; "Patterson, Heather, EMNRD"

Cc:

"Baker, Larry"; "Hack Conder"; "Laura Flores"; "Lara Weinheimer"; "Catherine Ursanic"

Subject:

Apache State SWD #3

Date:

Thursday, March 26, 2015 9:47:28 AM

Attachments:

Appendix.pdf

Apache State SWD #3 UL/E sec. 30 T17S R31E

Path Forward

Apache Corporation (Apache) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site.

Background and Previous Work

The site is located approximately 3.9 miles east of Loco Hills, New Mexico at UL/E sec. 30 T17S R31E. The site is in an area of no known groundwater.

RECS personnel were on site beginning on March 4th, 2015, to assess the site. The release covered 24,937 square feet of lease pad and 20,289 square feet of pasture land (Figure 1). The wet material was scraped up from the battery pad and taken to a spoil pile. Six surface samples from the release were taken and field tested for chlorides and organic vapors. All samples returned elevated field chloride readings and low organic vapor readings. Four verticals were installed throughout the release to determine the depth of contamination. Vertical 1 was installed to 6 inches bgs, and the field test of the sample returned low chloride and organic vapor readings. Vertical 2 was installed to 2 ft bgs and was halted when a liner was discovered at 2.5 ft bgs. The verticals in the pasture were sampled every 6 inches until field chloride readings indicated that the bottom sample from each vertical would returned laboratory chloride readings below 250 mg/kg. The bottom samples from these two verticals were taken to a commercial laboratory for analyses. The analyses returned laboratory chloride readings below 250 mg/kg (Appendix A).

The release area in the pasture to the west was scraped down to 1 ft bgs, and the pasture area to south was scraped down to 1.5 ft bgs (Figure 2). Once the scrapes were completed, wall samples and a 5 point bottom composite sample of the west area and a 3 point bottom composite of the south area were taken and field tested for chlorides and organic vapors. The samples were then taken to a commercial laboratory for analyses. All samples returned laboratory chloride reading near or below 1,000 mg/kg, except for West Wall 4 located at the battery fence, which returned a chloride value of 1,680 mg/kg.

Path Forward

A large spoil pile remains at the site. Once the scrapes in the pasture have been approval to be

backfilled, the spoil pile will be washed. The contaminated water will be evaluated for use in future oilfield activities. A sample of the washed soil will be taken to a commercial laboratory to confirm that the chloride reading is near or below 1,000 mg/kg. The cleaned soil will be used to backfill the scrapes in the pasture. The remaining area in the pasture will then be scraped down to 1 ft bgs. Once the scrape is completed, bottom grab samples and wall samples from the scrape will be taken and field tested for chlorides and organic vapors. If the field data indicates that the grab samples will not achieve chloride readings below 1,000 mg/kg, the scrape will be deepened until field testing indicates that all samples from the bottom and wall samples will return chloride values below 1,000 mg/kg. The grab samples will then be taken to a commercial laboratory to confirm that the chloride readings are below 1,000 mg/kg.

The release area in the lease pad is partially located over the facility liner. In areas where the liner exists, the pad will be scraped down 6 inches. In areas where the liner does not exist, the pad will be scraped down as possible. There are known buried electrical lines in the area and scraping in this area will be completed so as not to endanger facility operations or field personnel. Once these scrapes are completed, the soil will be washed and backfilled into the scrapes.

Photo documentation of the initial release can be found in Appendix B.

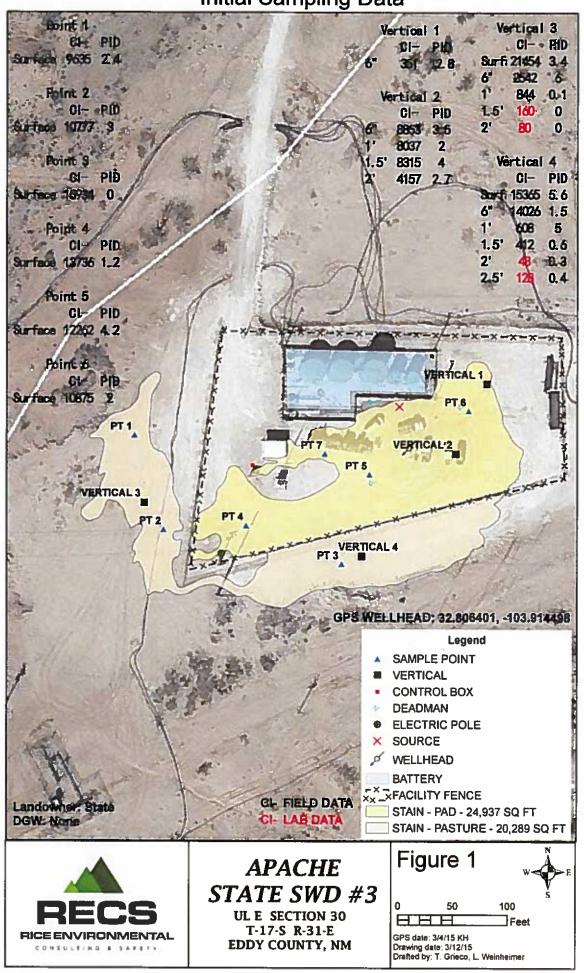
Jacob Kamplain

Project Leader 419 W. Cain Hobbs, NM 88240 (575)942-8221

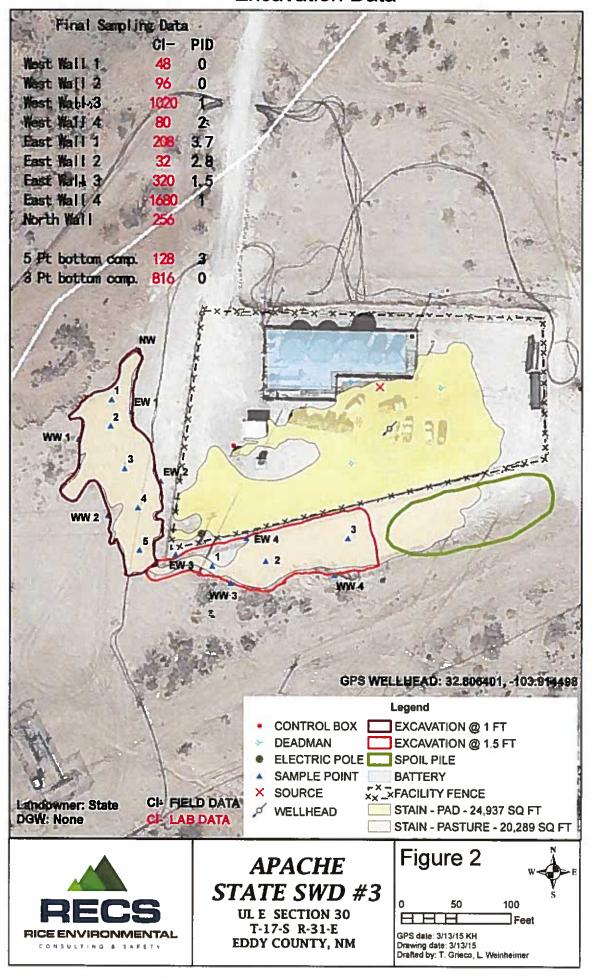


RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948, Hobbs, NM 88241
Phone 575.393.2967

Initial Sampling Data



Excavation Data





RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948 Hobbs, NM 88241
Phone 575.393.2967



March 23, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: STATE SWD #3

Enclosed are the results of analyses for samples received by the laboratory on 03/20/15 16:30.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab-accredited certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg D. Keine

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

03/20/2015

Reported:

03/23/2015

Project Name:

STATE SWD #3 NONE GIVEN

Project Number: Project Location:

NOT GIVEN

Sampling Date:

03/05/2015

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Celey D. Keene

Sample ID: VERT 3 @ 1.5 FT (H500765-01)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyte

Chloride

Chloride

Chloride

Chloride

Result

160

Result

80.0

Reporting Limit

16.0

Reporting Limit

16.0

Analyzed 03/23/2015

Analyzed

03/23/2015

Method Blank ND

BS

416

BS

416

416

% Recovery 104

True Value OC 400

RPD

3.77

Qualifier

Sample ID: VERT 3 @ 2 FT (H500765-02)

Chloride, SM4500CI-B

Analyte

Analyte

Analyte

Analyzed By: AP

Method Blank

% Recovery

True Value QC

400

RPD 3.77

Qualifier

Sample ID: VERT 4 @ 2 FT (H500765-03)

Chloride, SM4500CI-B

mg/kg

Result

48.0

Result

128

Analyzed By: AP

Reporting Limit 16.0

Reporting Limit

16.0

Analyzed 03/23/2015 Method Blank ND

ND

BS

% Recovery

104

104

True Value QC

RPD Qualifier

3.77

Sample ID: VERT 4 @ 2.5 FT (H500765-04)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Analyzed 03/23/2015

Method Blank ND

BS 416 % Recovery 104

True Value OC 400

400

RPD **Oualifier** 3.77

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

Page 2 of 4



ND

Notes and Definitions

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

Insufficient time to reach temperature.

Chloride by SM4500CI-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Analyte NOT DETECTED at or above the reporting limit

Cardinal Laboratories

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Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES 101 East Marland, Hobbs, NM 88240 2111 Beachwood, Abilene, TX 79603 (505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020

Project Manager Address: City: Hobbs Phone #: Project #: Project Name: Project Location: Sampler Name:	A Pechy Bruco BARR State: NM Zip: 88240 Fax#: Project Owner: Project Owner: St-+P Sulf #3	P.O. #: Company: Attn: Address: City: State: Zip: Phone #: Fax #:	PARS TO STORY OF THE STATE OF T	REQUEST
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Delivered By: (Circle One)		Comp Intert (Initials)	cursanic@rice-ecs.com
Sampler-UPS - Bus - Other:			Environmental Tech: @rice-ecs.com
	9		

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476

Kus# //



March 20, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: STATE SWD #3

Enclosed are the results of analyses for samples received by the laboratory on 03/18/15 10:12.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accredited certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg D. Keine

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager

APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. **HOBBS NM, 88240**

Fax To:

(575) 393-2432

Received:

03/18/2015

Reported:

03/20/2015

Project Name:

STATE SWD #3 NONE GIVEN

Project Number: Project Location:

Analyte

Analyte

Analyte

Analyte

NOT GIVEN

Sampling Date:

03/13/2015

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: WEST WALL 1 (H500733-01)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Method Blank

% Recovery

True Value QC 400

Chloride

Result 48.0 Reporting Limit 16.0

Reporting Limit

16.0

Reporting Limit

16.0

Analyzed 03/19/2015

Analyzed

Analyzed

03/19/2015

ND

416

BS

BS

416

104

RPD 0.00 Qualifier

Sample ID: WEST WALL 2 (H500733-02)

Chloride, SM4500Cl-B

Analyzed By: AP

Method Blank

ND

% Recovery

True Value QC

RPD

Chloride

Chloride

Chloride

96.0

Result

1020

Result

80.0

Result

03/19/2015

104

400

Qualifier 0.00

Sample ID: WEST WALL 3 (H500733-03)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

% Recovery

True Value OC

RPD

Sample ID: WEST WALL 4 (H500733-04)

Chloride, SM4500CI-B

Analyzed By: AP

Method Blank

ND

416

BS

104

400

0.00

0.00

Reporting Limit

16.0

Analyzed

03/19/2015

Method Blank

ND

BS 416 % Recovery 104

True Value QC

400

RPD Qualifier

Qualifier

Cardinal Laboratories

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All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in wrong and received by Cardinal within thirty (30) days after con including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, as autoclames, affiliates or successors

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Celey D. Keene, Lab Director/Quality Manager

Page 2 of 7



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. **HOBBS NM, 88240**

Fax To:

(575) 393-2432

Received:

03/18/2015

Reported:

03/20/2015

Project Name:

STATE SWD #3 NONE GIVEN

Project Number: Project Location:

Analyte

NOT GIVEN

Sampling Date:

03/13/2015

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: EAST WALL 1 (H500733-05)

Chloride, SM4500CI-B

Chloride

Chloride

Chloride

Chloride

Chloride

mg/kg

Reporting Limit

16.0

16.0

Reporting Limit

16.0

Reporting Limit

16.0

Reporting Limit

16.0

Result

208

32.0

Result

320

Result

1680

Result

128

Analyzed By: AP

Analyzed

03/19/2015

03/19/2015

Analyzed

03/19/2015

Method Blank

ND

BS

416

BS

416

% Recovery True Value QC

104

RPD

0.00

Qualifier

Sample ID: EAST WALL 2 (H500733-06)

Chloride, SM4500CI-B

Analyzed By: AP

Analyte

Result

Reporting Limit Analyzed Method Blank ND

% Recovery

104

True Value QC

400

400

RPD

Qualifier 0.00

Sample ID: EAST WALL 3 (H500733-07)

Chloride, SM4500CI-B

Analyte

Analyte

Analyte

mg/kg

Analyzed By: AP

Method Blank

BS

% Recovery True Value OC

RPD Qualifier

Chloride, SM4500CI-B

ND

416

104

400

0.00

Sample ID: EAST WALL 4 (H500733-08)

Analyzed By: AP Analyzed

03/19/2015

Method Blank

ND

BS

416

416

True Value QC

RPD

Qualifier

Sample ID: 5 PT. BOTTOM COMP (H500733-09)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

ND

% Recovery

104

400

400

0.00

Analyzed

03/19/2015

Method Blank

BS

% Recovery

104

True Value QC

RPD Qualifier

0.00

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Celey D. Keene, Lab Director/Quality Manager

Page 3 of 7

APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. **HOBBS NM, 88240**

Fax To:

(575) 393-2432

Received:

03/18/2015

Reported:

03/20/2015

Project Name: Project Number: STATE SWD #3 NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

03/13/2015

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: 3 PT. BOTTOM COMP (H500733-10)

Chloride, SM4500CI-B

Chloride

Chloride

mg/kg

Analyzed By: AP

Analyte

Result

816

Result

256

Reporting Limit Analyzed

16.0

Reporting Limit

16.0

Method Blank

ND

Method Blank

ND

% Recovery

104

True Value QC 400

Qualifier

0.00

RPD

0.00

Sample ID: NORTH WALL (H500733-11)

Chloride, SM4500CI-B

Analyte

Analyzed By: AP

03/19/2015

Analyzed

03/19/2015

BS

416

B\$

416

% Recovery

104

True Value QC 400

RPD

Qualifier

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Celey D. Keene, Lab Director/Quality Manager

Page 4 of 7



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Notes and Definitions

Analyte NOT DETECTED at or above the reporting limit RPD Relative Percent Difference Samples not received at proper temperature of 6°C or below. Insufficient time to reach temperature. Chloride by SM4500CI-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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27/18	any Name: APColuD
(605) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020	(505) 393-2326 FAX (505) 393-2476
2111 Beechwood, Abilene, TX 79603	101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abitene, TX 79603
	A ARDINAL LABORATORIES
CHAIN-OF-CUSTO	

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† Cardinal c	Cardinal cannot accept verbal changes. Please fax written changes to 505-393	e fax written changes to	505-393-476								

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

101 East Mariand, Hobbs, NM 88240 2111 Beechwood, Abilene, 1X 79603	(505) 393-2326 FAX (505) 393-2476 (325) 673-7001 FAX (325)673-7020
101 East Mariand, Hobbs, NM 88240	(505) 393-2326 FAX (505) 393-2476

Company Name:	A.1. P.		TENSO	QL 77/8	551			Š	\LYSi	ANALYSIS REQUEST	7
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City: Hobbs	State: NM	Zip: 88240	Attn:						101		
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@rice-ecs.com email: hconder@riceswd.com; Iflores@rice-ecs.com; Iweinheimer@rice-ecs.com; knorman@rice-ecs.com; jkamplain@rice-ecs.com; sedwards@rice-ecs.com; C Yes O No Add1 Phone#: cursanic@rice-ecs.com Environmental Tech: Phone Result: Fax Result: REMARKS: Sample Condition
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† Cardinal cannot accept verbal changes. Please fax written changes to 505-395/2476



RICE Environmental Consulting and Safety (RECS)
P.O. Box 2948 Hobbs, NM 88241
Phone 575.393.2967

Apache State SWD #3 Unit Letter E, Section 30, T17S, R31E



Initial release area, facing west



Initial release area, facing northwest



Initial release area, facing east

3/4/15



Initial release area, facing west



Initial release area, facing northwest





Moving contaminated soil to spoil pile, facing southeast 3/5/15

2015/03/05



Scraping west of battery, facing east

From:

Bratcher, Mike, EMNRD

To:

Jacob Kamplain: Patterson, Heather, EMNRD

Cc:

"Baker, Larry"; "Hack Conder"; "Laura Flores"; "Lara Weinhelmer"; "Catherine Ursanic"

Subject:

RE: Apache State SWD #3

Date:

Wednesday, April 08, 2015 12:49:15 PM

RE: Apache Corp. * Apache St SWD 3 * 30-015-38978 * E-30-17s-31e * Eddy County, NM NMOCD Tracking Number: 2RP-2923 * Date of release: 3/4/15

Greetings,

Your proposal for remediation of the above referenced release, by means of a soil washing technique, is approved subject to the following conditions of approval, and notations.

Due to the proximity of this SWD to an adjacent playa lake (less than 1000'), chloride level in soils that are to remain at the site are to be 1000 mg/kg or less. This will include material on and off of the facility pad. OCD does request confirmation/delineation samples be obtained in the area identified as PT 4, as well as an investigation, to the extent practicable, on how much of the pad may have a liner installed in the sub-surface. During a field inspection of the site, it was noted that a liner was evident in the area excavated to repair the line. This portion of that liner was breached during repair operations. Impacted areas in the facility location may require deeper excavation than the proposed 6".

In the proposal, WW 4 is referenced as being at the facility fence. The diagram shows this point to be on the south side of the scrape/excavation, away from the fence. Horizontal delineation, as well as vertical, will be required in all impacted areas.

Disposition of fluids and/or solids resulting from the soil washing operation will require OCD review and approval.

Please notify the District 2 office prior to commencement of operations.

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If you have any questions or concerns, and for notification, please contact me and/or Heather Patterson. <u>Heather.Patterson@state.nm.us</u>

Mike Bratcher NMOCD District 2 811 S. First Street Artesia, NM 88210 O: 575-748-1283 X108

C: 575-626-0857 F: 575-748-9720 From: Jacob Kamplain [mailto:jkamplain@rice-ecs.com]

Sent: Thursday, March 26, 2015 9:47 AM

To: Bratcher, Mike, EMNRD; Patterson, Heather, EMNRD

Cc: 'Baker, Larry'; 'Hack Conder'; 'Laura Flores'; 'Lara Weinheimer'; 'Catherine Ursanic'

Subject: Apache State SWD #3

Apache State SWD #3 UL/E sec. 30 T17S R31E

Path Forward

Apache Corporation (Apache) has retained Rice Environmental Consulting and Safety (RECS) to address potential environmental concerns at the above-referenced site.

Background and Previous Work

The site is located approximately 3.9 miles east of Loco Hills, New Mexico at UL/E sec. 30 T175 R31E. The site is in an area of no known groundwater.

RECS personnel were on site beginning on March 4th, 2015, to assess the site. The release covered 24,937 square feet of lease pad and 20,289 square feet of pasture land (Figure 1). The wet material was scraped up from the battery pad and taken to a spoil pile. Six surface samples from the release were taken and field tested for chlorides and organic vapors. All samples returned elevated field chloride readings and low organic vapor readings. Four verticals were installed throughout the release to determine the depth of contamination. Vertical 1 was installed to 6 inches bgs, and the field test of the sample returned low chloride and organic vapor readings. Vertical 2 was installed to 2 ft bgs and was halted when a liner was discovered at 2.5 ft bgs. The verticals in the pasture were sampled every 6 inches until field chloride readings indicated that the bottom sample from each vertical would returned laboratory chloride readings below 250 mg/kg. The bottom samples from these two verticals were taken to a commercial laboratory for analyses. The analyses returned laboratory chloride readings below 250 mg/kg (Appendix A).

The release area in the pasture to the west was scraped down to 1 ft bgs, and the pasture area to south was scraped down to 1.5 ft bgs (Figure 2). Once the scrapes were completed, wall samples and a 5 point bottom composite sample of the west area and a 3 point bottom composite of the south area were taken and field tested for chlorides and organic vapors. The samples were then taken to a commercial laboratory for analyses. All samples returned laboratory chloride reading near or below 1,000 mg/kg, except for West Wall 4 located at the battery fence, which returned a chloride value of 1,680 mg/kg.

Path Forward

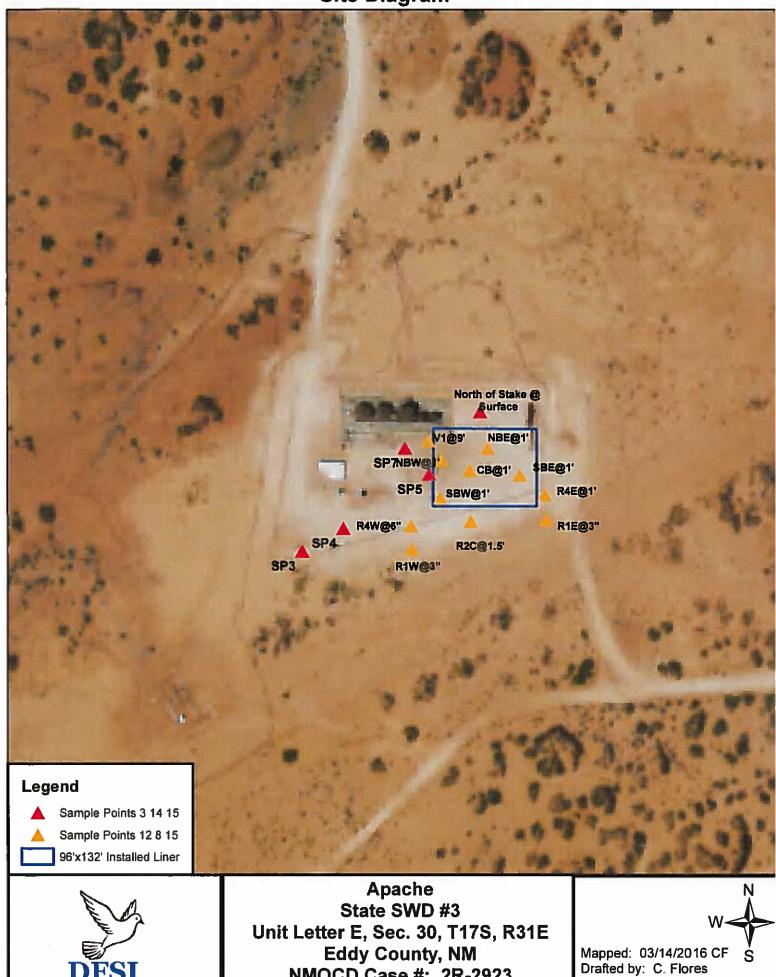
A large spoil pile remains at the site. Once the scrapes in the pasture have been approval to be backfilled, the spoil pile will be washed. The contaminated water will be evaluated for use in future oilfield activities. A sample of the washed soil will be taken to a commercial laboratory to confirm that the chloride reading is near or below 1,000 mg/kg. The cleaned soil will be used to backfill the scrapes in the pasture. The remaining area in the pasture will then be scraped down to 1 ft bgs. Once the scrape is completed, bottom grab samples and wall samples from the scrape will be taken and field tested for chlorides and organic vapors. If the field data indicates that the grab samples will not achieve chloride readings below 1,000 mg/kg, the scrape will be deepened until field testing indicates that all samples from the bottom and wall samples will return chloride values below 1,000 mg/kg. The grab samples will then be taken to a commercial laboratory to confirm that the chloride readings are below 1,000 mg/kg.

The release area in the lease pad is partially located over the facility liner. In areas where the liner exists, the pad will be scraped down 6 inches. In areas where the liner does not exist, the pad will be scraped down as possible. There are known buried electrical lines in the area and scraping in this area will be completed so as not to endanger facility operations or field personnel. Once these scrapes are completed, the soil will be washed and backfilled into the scrapes.

Photo documentation of the initial release can be found in Appendix B.

Jacob Kamplain

Project Leader 419 W. Cain Hobbs, NM 88240 (575)942-8221 Site Diagram



NMOCD Case #: 2R-2923

0 25 50

100

150

200

Feet

Environmental



December 11, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: STATE SWD #3

Enclosed are the results of analyses for samples received by the laboratory on 12/04/15 15:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab-accred-certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celey D. Keine

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

APACHE CORP - HOBBS **BRUCE BAKER** 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received: Reported: 12/04/2015

12/11/2015

Project Name:

STATE SWD #3 NONE GIVEN

Project Number: Project Location:

NOT GIVEN

Sampling Date:

12/03/2015

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact

Jodi Henson

Sample ID: VERTICAL 1 @ 9' (H503171-01)

Cilibride, 3M4300CI-B	ing.	/ kg	Allalyze	u by: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	672	16.0	12/08/2015	ND	400	100	400	0.00	

Cardinal Laboratories *=Accredited Analyte

any other cause whatsonver shall be fernised to the amount paid by client for analyses. All can you other cause whatsonver shall be deemed valved unless mide in writing and received by Cerdinal within thirty (30) days after completion of the applicable service. In no event shall Cerdinal be labble including, without himstoon, business incorruptions, loss of use, or loss of profits incurred by Cherk, its subsidiances, efflicits or successors among out of or related to the performance of the services hereunder claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with vertexn accross of Cardinal Laborations.

Celley Theras



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

Chloride by SM4500Cl-8 does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Camages. Cardnal's Bability and client's exclusive remedy for any claim answig, whether based in contract or tort, shall be lemted to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardnal within thirty (30) days after completion of the applicable service. In no event shall Cardnal be Sable for incidental or consequential damages, including, without films above, third to the performance of the services hereunder by Cardnal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardnal Laboratones.

Celley D. Keene

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marfand, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476

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Sampler - UPS - Bus - Other:

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March 18, 2016

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: STATE SWD #3

Enclosed are the results of analyses for samples received by the laboratory on 03/15/16 8:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-15-7. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accredited certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celey D. Keens

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

(575) 393-2432 Fax To:

Received:

Chloride

03/15/2016

Reported: Project Name: 03/18/2016 STATE SWD #3

Project Number: Project Location: NONE GIVEN

NOT GIVEN

976

16.0

Sampling Date:

400

100

03/14/2016

Sampling Type:

Soil

400

0.00

Sampling Condition: Sample Received By:

Cool & Intact Jodi Henson

Sample ID: SAMPLE PT. 4 @ SURFACE (H600568-01)

Chloride, SM4500CI-B	mg	/kg	Analyze	ed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	336	16.0	03/18/2016	ND	400	100	400	0.00	
Sample ID: SAMPLE PT. 5	@ SURFACE ((H600568-02)							
Chloride, SM4500CI-B	mg	/kg	Analyze	ed By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier

03/18/2016

Sample ID: SAMPLE PT. 7 @ SURFACE (H600568-03)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1060	16.0	03/18/2016	ND	400	100	400	0.00	

ND

Sample ID: NORTH OF STAKE @ SURFACE (H600568-04)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	992	16.0	03/18/2016	ND	400	100	400	0.00	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's Adulity and chericle exclusive remedy for any claim ansing, whether based in contract or tord, shall be limited to the amount paid by cheric for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinals be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by cleriful, regardless of whether such claim is based upon eny of the above stated masterns or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratones.

Celengt trans

Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

Analytical Results For:

APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. **HOBBS NM, 88240**

Fax To:

(575) 393-2432

Received: Reported: 03/15/2016

03/18/2016

Project Name:

STATE SWD #3

Project Number: Project Location:

Analyte

Analyte

Analyte

NONE GIVEN

Sampling Date:

03/14/2016

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

NOT GIVEN

Sample ID: NORTH BOTTOM WEST @ 1' (H600568-05)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

BS

% Recovery

True Value QC

Qualifier

RPD

0.00

Chloride

Result 1140 Reporting Limit 16.0

Reporting Limit

Reporting Limit

16.0

Analyzed 03/18/2016

Analyzed

Method Blank ND

400

100

400

Sample ID: SOUTH BOTTOM WEST @ 1' (H600568-06)

Chloride, SM4500Cl-B

mg/kg

Analyzed By: AP

Method Blank

BS % Recovery True Value QC

RPD Qualifier

Chloride

Chloride

Result 560

Result

304

16.0 03/18/2016 ND

100

400

Sample ID: NORTH BOTTOM EAST @ 1' (H600568-07)

Chloride, SM4500CI-B

Analyzed By: AP

Analyzed 03/18/2016 Method Blank ND

BS 400

400

% Recovery 100

True Value OC 400

RPD

0.00

0.00

Qualifier

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's hability and cherc's exclusive ors arrang out of or related to the performance of the services hereunder by Cardinal, recardless of whether

Calley Thomas

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 5



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardnals's habitity and client's exclusive remaily for any claim arising, whether besed in contract or tort, shall be limited to the amount paid by clerk for analyses. All claims, including those for negligence and any other clause whictoriver shall be deemed weived unless made in writing and received by Cardnal within thirty (30) days after completion of the applicable service. In no event shall Cardnal be liable for incidental or consequential damages, including, without himitioum, business interruptions, loss of use, or loss of use, or loss of profits incurred by client, its subsidiance, affiliates or successors arising out of or related to the performance of the services hersunder by Cardnal, regardless of whether such claims to based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardnal Laboratories.

Celley D. treens

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (676) 393-2326 FAX (676) 393-2478

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Project #:	Project Owner:		City:			
Project Name: HPACHE	Parte		Starte: Zip:			_
Project Location: < -:A-:E	STATE SWD #3		Phone #:			_
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August 26, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: STATE SWD #3

Enclosed are the results of analyses for samples received by the laboratory on 08/20/15 8:10.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg D. Keena

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene

Analytical Results For:

APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. **HOBBS NM, 88240**

Fax To:

(575) 393-2432

Received:

08/20/2015

Reported:

08/26/2015

Project Name: Project Number: STATE SWD #3

NONE GIVEN

Sampling Date:

08/19/2015

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Project Location:

Analyte

NOT GIVEN

Sample ID: ROW 1 EAST @ 3" (H502184-01)

Chloride, SM4500CI-B

Analyzed By: AP

Method Blank

% Recovery

True Value QC

Qualifier

RPD

7.69

Chloride

Chloride

Chloride

Chloride

Result 432

Result

480

Reporting Limit 16.0

Reporting Limit

16.0

Analyzed 08/21/2015

Analyzed

08/21/2015

ND

BS 432

BS

432

108

400

Sample ID: ROW 1 WEST @ 3" (H502184-02)

Chloride, SM4500CI-B Analyte

mg/kg

Analyzed By: AP

Method Blank

ND

% Recovery

True Value QC

400

Qualifier RPD

Sample ID: ROW 2 CENTER @ 1.5' (H502184-03)

Chloride, SM4500CI-B

Analyte

Analyte

Analyzed By: AP

7.69

Qualifier

Qualifier

Result 32.0

Result

288

Reporting Limit 16.0

Reporting Limit

16.0

Analyzed 08/21/2015

Analyzed

08/21/2015

Method Blank ND

ND

BS 432 % Recovery 108

108

True Value QC

RPD

400 7.69

Sample ID: ROW 4 EAST @ 1' (H502184-04)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Method Blank

BS

432

% Recovery 108

True Value QC 400

RPD

7.69

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardnal's abolicy and client's exclusive remoty for any claim arising, whether based in contract or tort, shall be limited to the amount parany other cause whatsoever shall be deemed waved unless made in writing and received by Cardnal within thirty (30) days after completion of the applicable service. In no including, without limitation, business interruptions, loss of use, or loss of profits incurred by chem, its subsidiaries, affiliates or successors arising out of or related to the perform claim is based upon any of the above stated reasons or otherwise, Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardnal Labourstonies. In no event shall Cardinal be lable for incidental or consequential dam performance of the services hereunder by Cardinal, regardless of whether

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Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

APACHE CORP - HOBBS

BRUCE BAKER

2350 W. MARLAND BLVD.

HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

08/20/2015

Reported:

08/26/2015

Project Name: Project Number: STATE SWD #3 NONE GIVEN

Project Location:

NOT GIVEN

Sampling Date:

08/19/2015

Sampling Type:

Soil

Sampling Condition:

Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: ROW 4 WEST @ 6" (H502184-05)

Chloride, SM4500CI-B

mo /ko

Analyzed By: AP

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	08/21/2015	ND	432	108	400	7.69	

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liabelity and Camages. Cardinal's labelity and chern's exclusive remedy for any claim arising, whether based in contract or toxit, shall be binited to the amount paid by client for analyses. All clients, including those for negligence and any other cause whatsoever shall be deemed veleved unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall cardinal be labele for including, wethout limitation, business interruptions, loss of use, or loss of prints incurred by chern, to subsidiants, effactors or successors among out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results relate only to the services identified above. These

Celany D Kenne

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 5



ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

Chloride by SM4500CI-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remady for any claim arising, whether based in contract or tort, shall be limited to the amount past by client for analyses. All claims, including those for negligence and any other claims what the deemed wered unless mode in writing and netweed by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interrupcions, loss of use, or loss of profits incurred by Cardinal students, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, requiriless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Listoristories.

Celley & Kronn



101 East Marland, Hobbs, NM 88246 (575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Project Manager: R. Ao che	
Address:	P.O. #: ANALYSIS REQUEST
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Phone #: Zip:	Attn:
Project #: Project Owner	Address:
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Project Location: State Such # 2	State: Zip:
Drik Hones	Phone #:
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P (BD billion) susmission of the second of t	

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September 04, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: STATE SWD #3

Enclosed are the results of analyses for samples received by the laboratory on 09/03/15 15:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab_accred_certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celey D. Kuna

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene



Analytical Results For:

APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. **HOBBS NM, 88240**

Fax To:

(575) 393-2432

Received:

09/03/2015

Reported: Project Name: 09/04/2015

Project Number:

STATE SWD #3 NONE GIVEN

Project Location:

Analyte

Analyte

Analyte

Analyte

NOT GIVEN

Sampling Date:

08/27/2015

Sampling Type: Sampling Condition: Soil Cool & Intact

Sample Received By:

Jodi Henson

Sample ID: CELL 1 (H502344-01)

Chloride, SM4500C1-B

mg/kg

Analyzed By: AP

Result Reporting Limit

Reporting Limit

Reporting Limit

16.0

Reporting Limit

16.0

Analyzed

Method Blank

% Recovery

True Value QC 400

RPD Qualifier

Chloride

48.0

16.0 09/04/2015

ND

416

BS

3.92

Sample ID: CELL 2 (H502344-02)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Method Blank

BS % Recovery True Value QC

RPD Qualifier

Chloride

Chloride

Chloride

1330

Result

Result

240

Result

2160

16.0 09/04/2015

Analyzed

Analyzed

09/04/2015

Analyzed

09/04/2015

ND

ND

Method Blank

ND

416

104

104

104

104

400

3.92

Sample ID: CELL 3 (H502344-03)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

Method Blank

BS % Recovery True Value OC

400

400

3.92

3.92

RPD Qualifier

Sample ID: CELL 4 (H502344-04)

Chloride, SM4500CI-B

mg/kg

Analyzed By: AP

BŞ

416

416

% Recovery

True Value QC RPD Qualifier

Cardinal Laboratories

*=Accredited Analyte

ed in contract or tert, shall be limited to the amount paid by chent for analyses. All claims, including those for negligence and any other cause whitesoever shall be deemed waved unless made in writing and received by Cardinal within thin'y (30) days efter completion of the applicable service. In no event shall cardinal be liable for incidental or consequenceal damages, including, without amiliation, business interruptoring, loss of use, or loss of profits incurred by chert, its subsidiance, efficiency arising out of or related to the performance of the services herisunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celegis trong

Celey D. Keene, Lab Director/Quality Manager



Analytical Results For:

APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

09/03/2015

Reported: Project Name: 09/04/2015 STATE SWD #3 NONE GIVEN

Project Number: Project Location:

NOT GIVEN

Sampling Date:

08/27/2015

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

Sample ID: CELL 5 (H502344-05)

Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AP					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	85	% Recovery	True Value QC	RPD	Qualifier
Chloride	1660	16.0	09/04/2015	ND	416	104	400	3.92	

Cardinal Laboratories

*=Accredited Analyte

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Calary & Keene

Celey D. Keene, Lab Director/Quality Manager

Page 3 of 5



ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

Insufficient time to reach temperature.

Chloride by SM4500CI-B does not require samples be received at or below 6°C samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celany & treeme



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240 (676) 393-2328 FAX (676) 393-2476

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September 14, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: STATE SWD #3

Enclosed are the results of analyses for samples received by the laboratory on 09/10/15 8:05.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/ga/lab accred certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celey D. Keine

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene



Analytical Results For:

APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. HOBBS NM, 88240

Fax To:

(575) 393-2432

Received:

09/10/2015

Reported:

09/14/2015 STATE SWD #3

Project Name: Project Number:

NONE GIVEN

Project Location:

Analyte

Sampling Date:

09/09/2015

Sampling Type:

Soil

Sampling Condition: Sample Received By: Cool & Intact Jodi Henson

NOT GIVEN

Sample ID: CELL 6 (H502385-01)

Chloride, SM4500CI-B

mg/kg

Reporting Limit

16.0

Result

96.0

48.0

Analyzed By: AP

09/14/2015

Analyzed Method Blank

BS 400

% Recovery 100

True Value QC 400

RPD 3.92

Qualifier

Chloride

Chloride, SM4500CI-8

mg/kg

Analyzed By: AP

Analyte Chloride

Sample ID: CELL 7 (H502385-02)

Result Reporting Limit

Analyzed 16.0 09/14/2015 Method Blank ND

ND

BS 400 % Recovery 100

True Value QC 400

RPD Qualifier

3.92

Cardinal Laboratories

*=Accredited Analyte

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Callery T. Korna

Celey D. Keene, Lab Director/Quality Manager



ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

*** Insufficient time to reach temperature.

Chloride by SM4500CI-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Cellery & Korne

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

ARDINAL LABORATORIES

101 East Marland, Hobbs, NM 88240 2111 Beechwood, Abilene, TX 79603

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September 18, 2015

BRUCE BAKER

APACHE CORP - HOBBS

2350 W. MARLAND BLVD.

HOBBS, NM 88240

RE: STATE SWD #3

Enclosed are the results of analyses for samples received by the laboratory on 09/17/15 16:35.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-13-5. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab accred certif.html.

Cardinal Laboratories is accreditated through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2

Haloacetic Acids (HAA-5)

Method EPA 524.2

Total Trihalomethanes (TTHM)

Method EPA 524.4

Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

Celeg D. Keene

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene



Analytical Results For:

APACHE CORP - HOBBS BRUCE BAKER 2350 W. MARLAND BLVD. **HOBBS NM, 88240**

Fax To:

(575) 393-2432

Received:

09/17/2015

Reported: Project Name:

Chloride, SM4500CI-B

09/18/2015 STATE SWD #3

Project Number:

NONE GIVEN

Project Location:

NOT GIVEN

mg/kg

Sampling Date:

09/17/2015

Sampling Type:

Soil

Sampling Condition:

** (See Notes)

Sample Received By:

Jodi Henson

Sample ID: BLENDED CELL 2 (H502453-01)

Chloride, 5M450DCI-B	mg	/kg	Analyze	ed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	09/18/2015	ND	432	108	400	3.77	
Sample ID: BLENDI	ED CELL 4 (H502453	3-02)							

Analyzed By: HM

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD
Chloride	592	16.0	09/18/2015	ND	432	108	400	3.77

Sample ID: BLENDED CELL 5 (H502453-03)

Chloride, SM4500CI-B	mg	/kg	Analyze	d By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	544	16.0	09/18/2015	ND	432	108	400	3.77	

Cardinal Laboratories

*=Accredited Analyte

Qualifier

PLEASE NOTE: Liablety and Damages. Cardnal's liablety and clere's exclusive remedy for any claim amining, whether based in concrect or tort, shall be limited to the amount paid by clere for enalyses. All claims, including those for negligence and any other crace whitscover shall be idearmed viewed unless made in writing and inscerned by Cardnal within thirty (30) days after completion of the applicable service. In no event shall Cardnal be liable for inscinital damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by clerent, its subsidiaries, attiliates or successions arising out of or related to the performance of the services hereunder by Cardnal, regardless of whether such claims is based upon any of the above stated reasons or otherwise. Results retain only to the samples identified above. The report shall not be reproduced except in full with written approval of Cardnal Laboratories.

Calango trans

Celey D. Keene, Lab Director/Quality Manager



ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

** Samples not received at proper temperature of 6°C or below.

Insufficient time to reach temperature.

Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and cheric's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by cherk for analyses. All claims, including those for negligence and any other clause whitstoever shall be deemed wewed unless made in writing and received by Cardinal wetten that (20) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiance, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celleng & Kenne



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88246 (676) 393-2328 FAX (676) 393-2476

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	Phone #:	(+-+ SVD #J	on:
	State: Zip:		Project Name:
	City:	Project Owner:	Project #:
	Address:	Tax *	Phone #:
	Attn:	State: Zip:	City:
	Company:		Address:
	P.O. #:	Baker	Project Manager: Bruce
ANALYSIS REQUEST	ereti'le. Ceth	ore	Company Name: A Packy

Sampler - UPS - Bus - Other:

Apache State SWD # 3 Photo Page



Photo of Soil Washing Set-Up Facing North

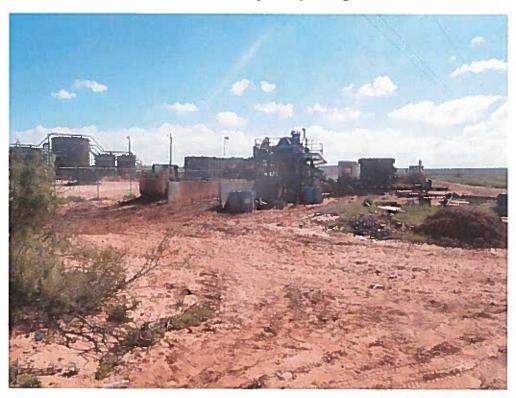


Photo of Soil Washing Facing North-East



Photo of Stock Pile Facing North-West

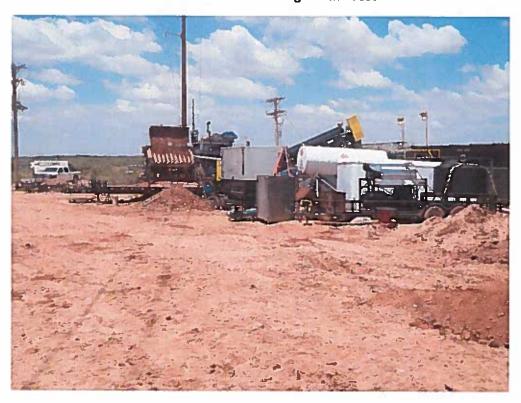


Photo of Soil Washing Facing West



Photo of Vertical Delineation Facing East

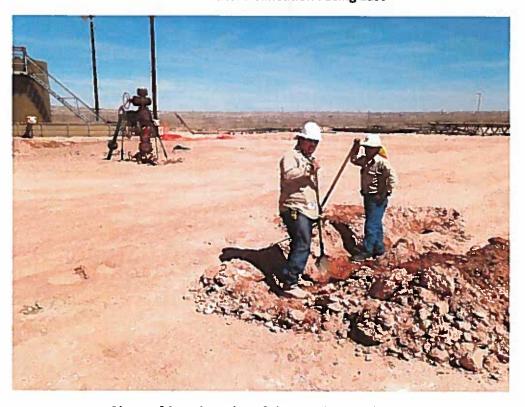


Photo of Spotting Edge of Liner Facing North-East



Photo of Pasture Backfilled Facing East



Photo of Pasture Backfilled Facing North-East

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

* Attach Additional Sheets If Necessary

State of New Mexico **Energy Minerals and Natural Resources**

Form C-141 Revised August 8, 2011

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

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

	Release Notification and Corrective Action													
						OPERA T	TOR		☐ Initia	l Report	\boxtimes	Final Repo		
Name of Co				4 00240		Contact Bru		008						
Address: 23 Facility Nan			iobbs, Ni	M 88240			No. (432) 631-6 e: Injection We							
		110 11 5				active Typ	c. Injection we	211						
Surface Own	ner State			Mineral O	wner				API No. 30-015-38978					
						OF REI	LEASE							
Unit Letter E	Section 30	Township 17S	Range 31E	Feet from the 2300	North/S FNL	South Line	Feet from the 725	East/W FWL	Vest Line	County Eddy				
						_	<u>W103.914498</u>							
TCD-1		1 .		NAT	URE (OF RELI								
Type of Relea	ase: produc	red water				of produce	Release 300 bar d water	rels	Volume R produced	lecovered 20	60 barı	rels of		
Source of Rel	lease: steel	discharge line	2			Date and H	lour of Occurrenc	e	Date and	Hour of Disc	overy			
Was Immedia	ste Notice C	Given?				3/4/2015 If YES, To	Whom?	1	3/4/2015					
			Yes [No 🗌 Not Re	quired		ther (NMOCD)							
By Whom?							Iour 3/4/2015							
Was a Watero			Yes 🗵	*		If YES, Vo	olume Impacting t	he Wate	rcourse.					
If a Watercou	irse was Im	pacted, Descri	ibe Fully.											
Describe Cau	ra of Droble	om and Dame	dial Astic	n Tokon *				_						
				n Taken." ispatched to pick (ıp standi	ng fluid. A i	new line was insta	ılled.						
					•	-								
Describe Are					T1									
Approximates to a depth of	ly 44,000 so 1 foot. On 1	quare leet with March 26, 20	n 20,000 s 15 a path i	quare feet in pastt forward was subm	ire. The itted and	pasture has t I approved by	been delineated at v NMOCD on Ap	nd the m ril 8, 20	ajority of the	he pasture hi vash excavat	as been ed soil	i excavated Anache		
Corporation h	nas complet	ed the work is	accordar	ice of the path for	ward app	roved of Ap	ril 8, 2015 and res	spectfull	y request to	ermination o	f this e	event.		
I hereby certi	fy that the i	nformation gi	ven above	is true and completed in the complete is the control of the certain records in the certain	ete to th	e best of my	knowledge and u	nderstan	d that purs	uant to NMC	OCD n	iles and		
public health	or the envir	ronment, The	acceptano	e of a C-141 repo	rt by the	NMOCD ma	arked as "Final Re	eport" de	oes not reli	eve the oner	ator of	liability		
should their o	perations h	ave failed to a	idequately	investigate and re	emediate	contamination	on that pose a thre	eat to gr	ound water.	, surface wat	ter, hui	man health		
federal, state,	or local lav	adition, NIVIC vs and/or regi	oco accep llations,	tance of a C-141	report ac	es not relieve	e the operator of i	responsi	bility for co	ompliance w	ith any	other		
			_				OIL CONS	SERV	ATION	DIVISIO	N			
Signature:	Bruck	Rah	er								_			
Printed Name					T A	Approved by	Environmental S ₁	pecialist	:					
Title: Enviro	nmental Te	chnician				Approval Dat	e:		Expiration I	Date:				
E-mail Addre	ess: larry.ba	iker@apached	corp.com			Conditions of				Attached				
Date: 11/28/	/2016		Phone	e (432) 631-6982							_			