) 〇 R R П CA T O Z U Z 0

MISC.

From:

Price, Wayne

Sent:

Friday, March 07, 2003 3:46 PM

To:

Mike Griffin (E-mail)

Subject:

Skelly-Penrose OCD Case # 1R026

To: Prize Energy in care of Whole Earth 3500 William D. Tate Suite 200 Grapevine, Tx 76051

OCD is in receipt of the final monitor well P&A report and hereby approves of the final closure of this site.

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

Sincerely:

Wayne Price

New Mexico Oil Conservation Division

1220 S. Saint Francis Drive Santa Fe, NM 87505

Maps Pin

505-476-3487

fax:

505-476-3462

E-mail: WPRICE@state.nm.us

A TKINS ENGINEERING A SSOCIATES INC.

July 10, 2002

1ROZ6

Mr. Wayne Price Oil Conservation Division 1220 S. Saint Francis Drive Santa Fe, New Mexico 87505

Dear Mr. Price:

Pursuant to our phone conversation, I am enclosing the plugging report, along with the Boring Logs.

This is all we have, on the two monitor wells, MW-2 and MW-3. We cannot find a log for MW-1 and may not have drilled MW-1.

If we can be of any further assistance, please do not hesitate to call.

evely WEXinney

Sincerely,

Beverly McKinney

Enclosures

Xc: Mike Griffin

April 16, 2002

Randy Ray 3300 N. A Street Building 8, Suite 120 Midland, Texas 79705

RE: Apache Skelly Penrose well plugging

Dear Mr. Ray:

On April 15, 2002, Atkins Engineering Associates, Inc. plugged 3 monitor wells on the old Apache Skelly Penrose location southeast of Eunice, New Mexico.

The 2 inch casings had previously been grouted in place, therefore no removal of casing was possible without collapse of the holes.

The work was accomplished on all 3 wells as follows:

1. Each monitor well total depth was measured as below:

North Monitor Well – 62 feet

South Monitor Well - 66 feet

East Monitor Well - 61.5 feet

- 2. A cement slurry of 15 lbs./gal. was pumped down each hole to flow through the screen and plug the screen and casing.
- 3. Well heads were removed to below land surface.
- 4. Cement grout was applied to each well head to fill to land surface.

Sincerely,

Jackie D. Atkins, PE, PS, ES

xc: Mike Griffin, Whole Earth Environmental

2904		Ass	socia	ngineering ates, Inc. swell, NM 88202-3156	LO	G OF BC	RING	Apach	ne Cor	p. MW-2 (Page 1 of 2)
	-	Hou Con	606 S iston, tact:	Environmental an Gabriel TX 77084 Mike Griffin ETH MWD.01	Date Orill Start/Drill End Boring Location	: 02-21-01 : 0930/1145 : 230'E of tank : E. Fence	batteries,	Site Loo Auger T Logged	уре	: Lea Co. Well #64 : Sec.3, T23S, R37E : Hollow stem : Mort Bates
Depth in Feet	GRAPHIC	uscs	Samples		SCRIPTION		19 19 19 19	PID ppm-v	Well: M	W-2
5-	9	SM	Ö	Sand w/ caliche, tan, loo Caliche w/ sand, tan, loo			Lab			- 4" x 4" x 5' Well Cover
20 -		SM		Sand w/ caliche, tan, loo	se, dry					Grout 2" PVC casing
30 -		SM		Caliche, tan, firm, dry Sand w/ caliche, tan, loo Sandstone, light tan, firm						─ Bentonite seal

Atkins Engineering LOG OF BORING Apache Corp. MW-2 Associates, Inc. 2904 W. 2nd St., Roswell, NM 88202-3156 (Page 2 of 2) Whole Earth Environmental Date : 02-21-01 Site Location : Lea Co. Well #64 19606 San Gabriel Orill Start/Drill End : 0930/1145 : Sec.3, T23S, R37E Houston, TX 77084 **Boring Location** : 230'E of tank batteries, Auger Type : Hollow stem Contact: Mike Griffin : E. Fence Logged By : Mort Bates Job#: WHOLETH.MWD.01 Well: MW-2 Depth PID DESCRIPTION in ppm-v Feet Lab 40 Sandstone, light tan, firm, dry SS 2" .020 Slot screen Sandy clay, red, soft, moist Sand pack Clay, red, stiff, damp 55 Sandstone, light tan, firm, dry SS 60 Total depth 60' 65 C:\MTECH46\EARTH\mw-2.bor 70 75 80

Atkins Engineering LOG OF BORING Apache Corp. MW-3 Associates, Inc. 2904 W. 2nd St., Roswell, NM 88202-3156 (Page 1 of 2) Whole Earth Environmental Date : 02-21-01 Site Location : Lea Co. Well #64 19606 San Gabriel Drill Start/Drill End : 1200/1530 : Sec.3, T23S, R37E Houston, TX 77084 **Boring Location** : 92'S of tank batteries, Auger Type : Hollow stem Contact: Mike Griffin : S. Fence Logged By : Mort Bates Job#: WHOLETH.MWD.01 Well: MW-3 Samples Depth PID DESCRIPTION ppm-v Feet Lab 4" x 4" x 5' Well Cover Sand, tan, loose, dry SP Sand w/ caliche, tan, loose, dry SM 10 Sand, tan, loose, dry 15 SP Grout 20 2" PVC casing Caliche w/ sand, tan, loose, dry 25 C:\MTECH46\EARTH\mw-3.bor 30 Sand, tan, loose, dry SP Sandstone, light tan, firm, dry 35 Bentonite seal SS Sand pack

Atkins Engineering LOG OF BORING Apache Corp. MW-3 Associates, Inc. 2904 W. 2nd St., Roswell, NM 88202-3156 (Page 2 of 2) Whole Earth Environmental Date : 02-21-01 : Lea Co. Well #64 Site Location 19606 San Gabriel Drill Start/Drill End : 1200/1530 : Sec.3, T23S, R37E Houston, TX 77084 **Boring Location** : 92'S of tank batteries. Auger Type : Hollow stem Contact: Mike Griffin : Mort Bates ; S. Fence Logged By Job#: WHOLETH.MWD.01 Well: MW-3 GRAPHIC Depth PID DESCRIPTION ppm-v Feet Lab Sandstone, light tan, firm dry SS 2" PVC casing Sand, tan, loose, damp SP 50 Clayey sand, red, soft, moist SC Sand pack Sandy clay, red, soft, damp CL 55 2" .020 Slot screen Clay, red, stiff, damp 60 CL 65 Total depth 65' 70 75

From:

Mike Griffin [whearth@iamerica.net] Tuesday, March 05, 2002 12:06 PM

Sent: To:

Price, Wayne

Subject:

RE: Skelly-Penrose Monitor Well Closure

O.K., then try:

Prize Energy 3500 William D. Tate Suite 200 Grapevine, Tx. 76051

Mort called back late yesterday and advised that his dance card is full through mid-April. He will put us in to his schedule and will provide us a plugging report.

Mike

----Original Message----

From: Price, Wayne [mailto:WPrice@state.nm.us]

Sent: Tuesday, March 05, 2002 11:52 AM

To: 'Mike Griffin'

Subject: RE: Skelly-Penrose Monitor Well Closure

The web site does not work for me. Please provide another or physical address.

----Original Message----

From: Mike Griffin [mailto:whearth@iamerica.net]

Sent: Monday, March 04, 2002 3:40 PM

To: Price, Wayne

Subject: RE: Skelly-Penrose Monitor Well Closure

As Homer Simpson would say, "Doh!"

Send to Randy Ray @ Prize Energy www.rray@prizeenergy.com.

Also, I spoke to Atkins again and was advised that it may be mid April before he finds a hole in his schedule.

Mike

----Original Message----

From: Price, Wayne [mailto:WPrice@state.nm.us]

Sent: Monday, March 04, 2002 3:46 PM

To: 'Mike Griffin'

Subject: RE: Skelly-Penrose Monitor Well Closure

I need the name of person, company name and address of current operator in order to send closure approval!

----Original Message-----

From: Mike Griffin [mailto:whearth@iamerica.net]

Sent: Monday, March 04, 2002 10:40 AM

To: Wayne Price Cc: Randy Ray Subject: Skelly-Penrose Montor Well Closure

Dear Wayne:

After I got off of the phone with you this morning, I did contact Mr. Ray & obtained approval for the plugging of all three wells at the Skelly-Penrose site. Each well will be grouted to surface by Atkins Engineering during the month of March.

Do you need anything from Atkins to confirm the activity?

From:

Price, Wayne

Sent:

Monday, March 04, 2002 2:43 PM

To:

'Mike Griffin'

Subject:

RE: Skelly-Penrose Monitor Well Closure

Please provide the plugging report.

----Original Message----

From: Mike Griffin [mailto:whearth@iamerica.net]

Sent: Monday, March 04, 2002 10:40 AM

To: Wayne Price Cc: Randy Ray

Subject: Skelly-Penrose Monitor Well Closure

Dear Wayne:

After I got off of the phone with you this morning, I did contact Mr. Ray & obtained approval for the plugging of all three wells at the Skelly-Penrose site. Each well will be grouted to surface by Atkins Engineering during the month of March.

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Sent: Monday, March 04, 2002 3:46 PM

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Do you need anything from Atkins to confirm the activity?

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Price, Wayne

Sent:

Monday, March 04, 2002 2:46 PM

To:

'Mike Griffin'

Subject:

RE: Skelly-Penrose Monitor Well Closure

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Sent: Monday, March 04, 2002 10:40 AM

To: Wayne Price Cc: Randy Ray

Subject: Skelly-Penrose Monitor Well Closure

Dear Wayne:

After I got off of the phone with you this morning, I did contact Mr. Ray & obtained approval for the plugging of all three wells at the Skelly-Penrose site. Each well will be grouted to surface by Atkins Engineering during the month of March.

Do you need anything from Atkins to confirm the activity?

From:

Price, Wayne

Sent:

Thursday, February 08, 2001 10:38 AM

To:

'Urbanski, David'

Subject:

RE: Skelly-Penrose

Dear David:

I failed to tell you these monitor wells should be constructed as permanent wells!

From:

Urbanski, David[SMTP:David.Urbanski@usa.apachecorp.com]

Sent:

Wednesday, February 07, 2001 1:31 PM

To:

'Wayne Price'

Subject:

Skelly-Penrose

<<File: MW2&3 location.doc>><<File: skelly-penrose draw2.xls>>

<<MW2&3 location.doc>> <<skelly-penrose draw2.xls>>

David E. Urbanski

Environmental Coordinator

Apache Corporation

713-296-6555

713-296-7250 fax

1R0026

From:

Price, Wayne

Sent:

Thursday, February 08, 2001 8:15 AM

To:

'Urbanski, David'

Subject:

RE: Skelly-Penrose

The location of the two new proposed monitor wells is hereby approved! Please submit your findings by March 30, 2001.

From:

Urbanski, David[SMTP:David.Urbanski@usa.apachecorp.com]

Sent:

Wednesday, February 07, 2001 1:31 PM

To:

'Wayne Price'

Subject:

Skelly-Penrose

<<File: MW2&3 location.doc>><<File: skelly-penrose draw2.xls>>

<<MW2&3 location.doc>> <<skelly-penrose draw2.xls>>

David E. Urbanski

Environmental Coordinator

Apache Corporation

713-296-6555

713-296-7250 fax



2000 POST OAK BOULEVARD / SUITE 100 / HOUSTON, TEXAS 77056 4400 DIVE



WWW.APACHECORP.COM [713] 296-6000

February 7, 2001

180026

RECEIVED

FEB 1 3 2001 Environmental Bureau Oil Conservation Division

Mr. Wayne Price NMOCD 2040 South Pacheco Street Santa Fe. New Mexico 87505

Sent Via Fax and U.S. Postal Service

Subject:

Additional Monitor Well Locations

Skelly Penrose "A" CTB Pit SE/4SE/4 Sec 4-T23S-R37E

Dear Mr. Price:

Enclosed please find a drawing illustrating the proposed locations of two additional temporary monitor wells at the subject property.

Apache proposes to install MW2 approximately 300'-400' southeast of the former pit. The exact location of MW2 will be decided in the field since it is Apache's desire to place the monitor well at a location that is easily accessible but not disruptive to the surrounding pastureland, i.e. an existing well pad.

MW3 will be installed within the boundaries of the well pad that is due east of the former tank battery facility. This will place MW3 approximately 200'-300' feet from the former CTB pit.

Once the wells have been installed and completed, a survey crew will be contracted to survey in the locations and the casing elevations. Depth to water will be measured once sufficient time has passed after development to allow the water to return to static level. The depth to water data will be utilized to calculate a groundwater flow map for the CTB area.

Mr. Wayne Price February 7, 2001 Page 2

Apache is prepared to start installation of the additional temporary monitor wells shortly after obtaining written NMOCD approval of the proposed well locations. Water samples collected and the subsequent analytical results will be used to determine the necessity of further remedial or investigative actions.

If you have any questions or comments, please contact me at 713-296-6555, or email your written approval, referencing this proposal, to david.urbanski@apachecorp.com.

Thank you for your time and consideration.

Sincerely,

APACHÉ CORPORATION

David E. Urbanski

Enc.

CC: OCD Hobbs Office

Doug O'Neil, Southern Region Manager

Paul Griesedieck, Manager EH&S

Well Location 300' - 400' 480, Skelly-Penrose "A" CTB MW1 © 75, 75' 450 80, 200

0

6

From: Price, Wayne

Sent: Tuesday, February 06, 2001 11:10 AM

To: 'Urbanski, David'

Subject: RE: Skelly Penrose CTB Former Pit

Dear David:

You really need to propose at least two monitor wells so you can tri-angleulate and obtain the groundwater flow direction gradient! Please submit a drawing showing the location for OCD approval!

From: Urbanski, David[SMTP:David.Urbanski@usa.apachecorp.com]

Sent: Tuesday, February 06, 2001 10:00 AM

To: 'Wayne Price'

Subject: Skelly Penrose CTB Former Pit

Wayne,

Apache Corporation requests your approval of the following proposal concerning the subject property.

After much consideration, Apache has abandoned the idea of placing a monitor well up-gradient from the CTB pit, and is now proposing to place a well 300' down-gradient from the most southeasterly corner of the pit. The well will be developed and sampled according to proper protocol, and the sample will be analyzed for chloride content.

Once the chloride content has been determined, Apache will consult with NMOCD to determine if natural attenuation will be considered a sufficient method of remediation or if it will be necessary to conduct "pump and

February 5, 2001

Mr. Wayne Price NMOCD 2040 South Pacheco Street Santa Fe. New Mexico 87505

Sent Via Fax and U.S. Postal Service

Subject: Proposed Up-gradient Monitor Well

Skelly Penrose "A" CTB Pit SE/4SE/4 Sec 4-T23S-R37E

Dear Mr. Price:

In a letter dated December 19, 2000, Apache Corporation proposed to install an up-gradient temporary monitor well at the subject site. Apache's first step toward accomplishing this goal was to measure and sketch the facility and then submit a drawing with the proposed well location for your approval.

Enclosed please find the aforementioned drawing with the pertinent details included. As proposed in the December letter, Apache wishes to place the temporary monitor well within the boundary of the CTB yard to prevent disruption of the surrounding pastureland. If placed as shown on the sketch, the well will be approximately 110'-115' from the closest corner of the former pit. I believe this distance is sufficient for retrieval of a representative up-gradient sample.

Apache is prepared to start installation of the up-gradient temporary monitor well shortly after obtaining written NMOCD approval of the proposed well location. Water samples collected and the subsequent analytical results will be used to determine the necessity of further remedial or investigative actions.

Mr. Wayne Price February 5, 2001 Page 2

If you have any questions or comments, please contact me at 713-296-6555, or email your written approval, referencing this proposal, to david.urbanski@apachecorp.com.

Thank you for your time and consideration.

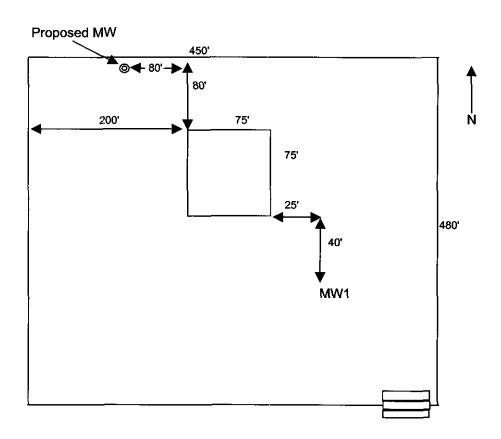
Sincerely, APACHE CORPORATION

David E. Urbanski

CC: OCD Hobbs Office

Doug O'Neil, Southern Region Manager Paul Griesedieck, Manager EH&S

Skelly-Penrose "A" CTB

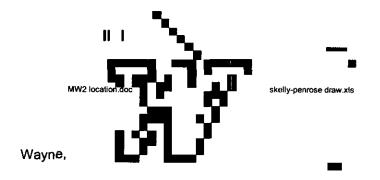


From: Urbanski, David[SMTP:David.Urbanski@usa.apachecorp.com]

Sent: Monday, February 05, 2001 1:08 PM

To: 'Wayne Price'

Subject: Skelly-Penrose



I attempted to fax this earlier with unfavorable results. Hard copy will be mailed as well, but I wanted to submit this proposal to you as soon as possible.

Please call or reply with questions or comments.

Thanks,

David E. Urbanski

Environmental Coordinator

Apache Corporation

713-296-6555

713-296-7250 fax

<<MW2 location.doc>> <<skelly-penrose draw.xls>>

From:

Urbanski, David[SMTP:David.Urbanski@usa.apachecorp.com]

Sent:

Tuesday, February 06, 2001 10:00 AM

To:

'Wayne Price'

Subject:

Skelly Penrose CTB Former Pit

Wayne,

Apache Corporation requests your approval of the following proposal concerning the subject property.

After much consideration, Apache has abandoned the idea of placing a monitor well up-gradient from the CTB pit, and is now proposing to place a well 300' down-gradient from the most southeasterly corner of the pit. The well will be developed and sampled according to proper protocol, and the sample will be analyzed for chloride content.

Once the chloride content has been determined, Apache will consult with NMOCD to determine if natural attenuation will be considered a sufficient method of remediation or if it will be necessary to conduct "pump and disposal" from the first monitor well.

Please call to discuss this proposal, or reply with your approval or rejection.

Sincerely,

1R0026

2000 POST OAK BOULEVARD / SUITE 100 / HOUSTON, TEXAS 77056-4400



DEC 2 6 2000

December 19, 2000

Mr. Wayne Price NMOCD 2040 South Pacheco Street Santa Fe, New Mexico 87505

Subject:

Skelly Penrose "A" CTB Pit

SE/4SE/4 Sec 4-T23S-R37E

Dear Mr. Price:

Apache respectfully submits the following proposal concerning the installation of an additional temporary monitor well at the subject site.

As you are aware, Apache installed and developed a temporary monitor well at the southeast corner of the remediated pit. Samples were collected from the well on two different occasions and submitted to a lab for analytical testing. Both times the analytical results indicated that the groundwater contained chlorides in the 3200 ppm range. The NMOCD speculated that the pit was the source of the elevated chlorides.

Portions of the Ogallala containing elevated chlorides are known to exist throughout Lea County. Apache suggested that the Skelly-Penrose lease might be located in one of those elevated chloride areas. In order to determine the background chloride content of the groundwater in the vicinity of the pit, Apache proposes to install a second temporary monitor well up-gradient from the pit.

The well will be installed within the boundaries of the CTB yard. An Apache representative will visit the site, select a location for the well, and submit a sketch of the site, including dimensions, for NMOCD approval of the monitor well location. Once approval has been acquired, Apache will install and develop the monitor well according to proper protocol so that a representative sample can be collected.

Mr. Wayne Price December 19, 2000 Page 2

Should the sample results indicate that the water in the up-gradient monitor well contains approximately the same level of chlorides as the first monitor well, Apache will request NMOCD approved final closure of the remediation of the CTB pit. The two temporary monitor wells will be plugged and abandoned according to NM guidelines.

If results indicate that the chloride content of the groundwater in the up-gradient monitor well deviates from the chloride content of the water from the first monitor well, Apache will contact the NMOCD to discuss the necessity of subsequent remedial or investigative actions.

Apache Corporation is prepared to complete the activities delineated in this proposal by January 31, 2001, and will notify the NMOCD 48 hours prior to conducting the well installation.

If you have any questions or comments, please contact me at 713-296-6555.

Sincerely.

APACHÉ CORPORATION

David E. Urbanski

Cc: OCD Hobbs Office

Doug O'Neil, Southern Region Manager

Paul Griesedieck, Manager EH&S

(1RO26)

From:

Price, Wayne

Sent:

Monday, February 05, 2001 1:21 PM

To:

'Urbanski, David'

Subject:

RE: Skelly-Penrose

Dear David:

The staff has reviewed your plan and have determine your proposed up-gradient well is too close to the pit. Please re-submit!

From:

Urbanski, David[SMTP:David.Urbanski@usa.apachecorp.com]

Sent:

Monday, February 05, 2001 1:08 PM

To:

'Wayne Price'

Subject:

Skelly-Penrose

<<File: MW2 location.doc>><<File: skelly-penrose draw.xls>>

Wayne,

I attempted to fax this earlier with unfavorable results. Hard copy will be mailed as well, but I wanted to submit this proposal to you as soon as possible.

Please call or reply with questions or comments.

Thanks,

David E. Urbanski

Environmental Coordinator

Apache Corporation

From:

Price, Wayne

Sent:

Thursday, November 30, 2000 2:09 PM

To:

'Urbanski, David'

Subject:

RE: Skelly-Penrose CTB

Approved!

From:

Urbanski, David[SMTP:David.Urbanski@usa.apachecorp.com] Wednesday, November 29, 2000 2:04 PM 'Wayne Price'

Sent:

To:

Subject:

Skelly-Penrose CTB

Wayne,

We have obtained results from the second sampling of the temporary monitor well at the subject site. The results indicate that the chloride level in the water is slightly above 3200ppm as it was the first time we sampled.

I will be out of the office a considerable amount of time over the next two weeks, so I would like to request a December 22, 2000 deadline to submit my plume delineation and/or remediation proposal.

Please call or reply with questions or comments.

Sincerely,

From:

Urbanski, David[SMTP:David.Urbanski@usa.apachecorp.com] Wednesday, November 15, 2000 7:32 AM

Sent:

To: Subject:

'Wayne Price' Skelly Sampling

Wayne,

Mike Griffin has sampled the Skelly-Penrose temporary well and submitted the sample to the lab for analysis. We should have results by tomorrow or Friday. I realize that we had a Nov. 15 deadline, but scheduling problems caused us to have the two day delay.

I will convey the results to you as soon as we have them.

Call or reply with questions.

Thanks,

From:

Price, Wayne

Sent:

Thursday, October 26, 2000 4:03 PM 'Urbanski, David'

To:

Subject:

RE: Skelly Penrose "A" CTB

Approved!

From:

Urbanski, David[SMTP:David.Urbanski@usa.apachecorp.com]

Sent:

Thursday, October 26, 2000 3:45 PM

To:

Price, Wayne

Subject:

Skelly Penrose "A" CTB

Wayne,

As you are aware, the analytical results from the previous sampling of the temporary monitor well at the subject property indicated a chloride level above the NM standards for drinking water. Before we progress with additional well installation, I would like to propose that Apache re-sample the well in order to rule out the possibility of sample contamination.

If you will allow us to do so, we will re-sample the well and submit results to your office by November 15, 2000. Once we have received the results of the re-sampling, we will contact you to discuss our next step.

Thank you for your time and consideration. I will be awaiting your reply.



WWW.APACHECORP.COM [713] 296-6000

Environmental Bureau
Oil Conservation Division

October 5, 2000

Mr. Wayne Price NMOCD 2040 South Pacheco Street Santa Fe, New Mexico 87505

RE:

Skelly Penrose "A" CTB Pit

SE/4SE/4 Sec 4-T23S-R37E

Dear Mr. Price:

Apache Corporation is in receipt of your letter dated September 6, 2000, pertaining to the above referenced project. I apologize for the tardiness of my response, but I have been quite busy of late with several issues in the Permian Basin.

Apache Corporation proposes to research the geological and hydrogeological components of the area surrounding the Skelly Penrose pit in order to obtain information that would assist us in determining possible sources for the elevated chlorides in the water adjacent to the pit. Coring and excavating activities within the area have revealed salt layers within the soil strata and perched water tables containing water that exceeds the NM Water Quality Standards in more than one of the criteria.

I hope to complete my research by mid-October and submit a report of findings by the end of the month. If you have any questions or comments, please contact me at 713-296-6555.

Sincerely,

APACHE CORPORATION

David E. Urbanski

Cc: OCD Hobbs Office

Paul Griesedieck, Manager EH&S



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

September 6, 2000

Lori Wrotenbery
Director
Oil Conservation Division

CERTIFIED MAIL RETURN RECEIPT NO. 5051 4942

David E. Urbanski Apache Corporation 2000 Post Oak Boulevard Suite 100 Houston, Texas 77056-4400

RE:

Skelly Penrose "A" Central Battery Pit: (Abandoned emergency overflow pit)

Located: SE/4SE/4 Sec 4-Ts23s-R37e

Monitor Well Results

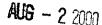
Dear Mr. Urbanski:

The New Mexico Oil Conservation Division (NMOCD) is in receipt of Whole Earth Environmental, Inc.'s letter dated July 31, 2000 concerning the above captioned site. The monitor well results indicate chloride concentrations of 3687 mg/l which exceeds the New Mexico Water Quality Standards of 250 mg/l. The letter is requesting closure of the site due to the lack of any BTEX component within the water and suggest that the chloride contamination is from an off-site source.

In order for OCD to properly evaluate your request, Apache Corporation shall submit an investigation work plan for OCD approval that will demonstrate your claim. The work plan will be submitted to the OCD Santa Fe Office by October 6, 2000 with a copy provided to the OCD Hobbs District Office.

provided to the OCD H	obbs District Office.	
Sincerely;	SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
Wayne Price-Pet. Engr. Cc: OCD Hobbs Of	or on the front if space permits.	A. Aleceived by (Please Print Clearly) C. Signature X Agent Addresser D. Is delivery address different from term 1? Yes If YES, enter delivery address below:
Oil Conservati	HOUSTON, TEXAS 17056-	3. Service Type Certified Mail
Phone: (50	1 O Aldreis N	

Domestic Return Receipt





Whole Earth Environmental, Inc.

19606 San Gabriel, Houston, Texas 77084 281/492-7077 • Fax: 281/646-8996

July 31, 2000

New Mexico Oil Conservation Division 2040 South Pacheco St. Sante Fe, NM 87505

Attn: Wayne Price

Subject: Skelly Penrose Monitor Well Results

Dear Wayne:

Attached, please find a copy of the boring log, chain of custody, and analytical results for the monitor well drilled adjacent to the Skelly – Penrose pit near Eunice, New Mexico.

The well was drilled to a total depth of 65' below ground level approximately 8' into the ground water, temporarily cased, and developed on July 13. Gary Wink with the NMOCD witnessed the additional bailing of 5 gallons of water prior to split samples being removed on July 19th.

The results of laboratory testing reveal significant chloride concentrations however there are no detectable hydrocarbons. The total lack of any BTEX component within the water indicates that the chloride concentrations are not associated with the pit but are either native to the site or the result of other, unrelated brine contamination up-gradient from the pit area. We therefore request final closure of the site.

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If you've any questions or comments, please do not hesitate to call.

Warmest personal regards,

President

Whole Earth Environmental, Inc.

CC: David Urbanski / Apache Corporation
Donna Williams / NMOCD Hobbs



"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL ATTN: MR. ELLIOT WERNER 19606 SAN GABRIEL HOUSTON, TEXAS 77084 FAX: 1-281-646-8996

SampleType: Water

Sample Condition: Intact/ loed/ 36 deg. F

Project#: Apache

Project Name: None Given

Project Location: Eunice Skelly Penrose

Sampling Date: 07/19/00 Receiving Date: 07/19/00

Analysis Date: 07/20/00

ELT#	FIELD CODE	BENZENE _mg/L	TOLUENE mg/L	ETHYLBENZENE mg/l	m.p-XYLENE mg/L	o-XYLENE mg/L	
28314	MW-1	<0.001	<0.001	<0.001	<0.001	<0.001	

% IA	95	94	94	105	95
% EA	93	90	92	103	93
BLANK	< 0.001	<0.001	< 0.001	<0.001	<0.001

METHODS: SW 846-8021B.5030



"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL ATTN: MR. ELLIOT WERNER 19606 SAN GABRIEL HOUSTON, TEXAS 77084 FAX: 1-281-646-8996

Sample Type: Water

Sample Condition: Intact/ load/ 36 deg. F

Project#: Apache

Project Name: None Given

Project Location: Eunice Skelly Penrose

Sampling Date: 07/19/00 Receiving Date: 07/19/00 Analysis Date: 07/20/00

		Chloride
ELT#	FIELD CODE	mg/L
28314	MW-1	3687

QUALITY CONTROL 5211
TRUE VALUE 5000
% PRECISION 104
BLANK <5

Methods: EPA 325.3

Rala Ct Jobers

Raland K. Tuttle

Date

	ļ	(915) 562-1800	•	• · ·	\$ 4	Į Š	20 25	Y RECT	Š	CHALCA-OF-CUSTOOY RECORD AND ANLLYSIS REQUEST	SIS RE	
Project Manager:	Werner	Phone u { }	5 217-1-28 (2008)	ما		}	3	LYSIS	analysis request			
Company Name & A	A Address											
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Project Location	. 1	Sampler Signature:	gnature:									
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Atkins Engineering LOG OF BORING Kelly/Penrose Apache 1 Associates, Inc. 2904 W. 2nd St., Roswell, NM 88202-3156 (Page 1 of 2) Whole Earth Date : 07/13/00 Site Location : 13 mi. S. Eunice 19606 San Gabriel Drill Start : 9:15 a.m. : NM 13 & 1mi. E. Houston, Texas 77084 : 4:00 p.m. Drill End Auger Type : Hollow Stem **Elliot Werner** : 30" SE of SE Pit. Corner **Boring Location** Logged By : Mort Bates WHOLETH.THD.00 Samples Depth PID uscs **DESCRIPTION** ppm-v Feet Lab mg/kg Silty Sand, w/ Caliche Rock, Loose, Dry Silty Sand, Tan, Loose, Damp SM Clayey Sand, Tan, Loose, Damp SC 10 15 Clayey Sand w/Catiche, Tan, Firm, Damp SC Sand, Poorly Graded, Red, Loose, Dry 50' of 2" PVC casing (temporary) 20 SP Clayey Sand, Tan, Loose, Dry Test hole has not been backfilled 25 C:MTECH46\WHOLE\kelly.box 30 SC 35 07-14-2000

Atkins Engineering LOG OF BORING Kelly/Penrose Apache 1 Associates, Inc. 2904 W. 2nd St., Roswell, NM 88202-3156 (Page 2 of 2) Whole Earth Date : 07/13/00 Site Location : 13 mi. S. Eunice 19606 San Gabriel **Drill Start** : 9:15 a.m. : NM 13 & 1mi. E. Houston, Texas 77084 Auger Type Drill End : 4:00 p.m. : Hollow Stem Elliot Werner : 30" SE of SE Pit. Comer Logged By : Mort Bates **Boring Location** WHOLETH.THD.00 Samples Depth PID USCS DESCRIPTION in ppm-v Feet Lab mg/kg 40 Clayey Sand, Tan, Loose, Dry 50' of 2" PVC casing (temporary) SC 45 Test hole has not been backfilled 50 Cemented Sandstone, Well Graded, Hard, Dry SS 55 SP Sand, Poorly Graded, Tan, Soft, Moist Clay, Red, Stiff, Damp 2" 0.020 slot screen (temporary) 60 CL 65 WL=59.86 TD=65" C:MTECH46\WHOLE\kelly.box 70 75 07-14-2000 80



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

June 5, 2000

Lori Wrotenbery
Director
Oil Conservation Division

<u>CERTIFIED MAIL</u> RETURN RECEIPT NO. 5051 5673

David E. Urbanski Apache Corporation 2000 Post Oak Boulevard Suite 100 Houston, Texas 77056-4400

RE:

Skelly Penrose "A" Central Battery Pit: (Abandoned emergency overflow pit)

Located: SE/4SE/4 Sec 4-Ts23s-R37e

Pit Closure Report

Dear Mr. Urbanski:

The New Mexico Oil Conservation Division (NMOCD) is in receipt of Apache Corporation's (Apache) letter dated May 23, 2000 concerning the above captioned site. Apache proposed to place permanent markers around the pit and investigate vadose zone contamination under the closed pit area by installing a boring adjacent to the pit area.

The previous reports reviewed by OCD have indicated that Apache has delineated the lateral contamination but the vertical component was not fully delineated. While Apache's approach of checking for transverse dispersion has merit, OCD has experienced that preferential pathways may exist directly below pits and in very small corridors leading to substantial groundwater contamination. Therefore, OCD feels the borehole should be completed into the underlying groundwater table. The OCD hereby approves of the submitted proposal subject to the following additional conditions:

- 1. Apache shall complete the borehole at least 10 feet into the underlying groundwater table. The borehole shall be located adjacent and near the southeast corner of the pit.
- 2. Groundwater samples shall be collected and analyzed for BTEX (EPA method 8021) and General Chemistry (EPA 40 CFR 136.3). The borehole shall remain open for a minimum of 24 hours and then purged five (5) well bore volumes of groundwater before collecting samples.
- 3. Apache will notify OCD 48 hours in advance so OCD may witness the drilling activity and/or split samples during OCD's normal business hours.

4. Apache shall have the option to plug the borehole with cement grout or complete as a monitor well. If Apache chooses to complete the borehole as a monitor well then it must be pre-approved and completed pursuant to OCD standards.

Apache shall submit the results of their investigation by July 15, 2000. If you have any questions please contact me at 505-827-7155.

Sincerely;

Wayne Price-Pet. Engr. Spec.

Cc: OCD Hobbs Office

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
 Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. Article Addressed to: 	A. Received by (Please Print Clearly) B. Date of Delivery C. Signature C. Signature Agent Addressee D. Is delivery address different from item Yes If YES, enter delivery address below:
APACKE CORPORATION 2000 POST OAK BLUD. SUITE 100	3. Seprice Type A Certified Mail □ Express Mail
HOUSTON, TEXAS 77056-4400 Att: DAVID E. UR DAUSKI	☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D.
ALL: DAVID E. UNDIAGRA	4. Restricted Delivery? (Extra Fee) Yes
2. Article Number (Copy from service label) 5 05 / 5 6 7 3	
PS Form 3811, July 1999 Domestic Ret	urn Receipt 102595-99-M-1789



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WWW.APACHECORP.COM [713] 296-6000

May 23, 2000

Mr. Wayne Price NMOCD 2040 South Pacheco Street Santa Fe, NM 87505

Re:

Skelly Penrose "A" Central Battery Pit Closure

SE/4,SE/4 Sec 4-T23S-R37E

Dear Mr. Price:

Apache Corporation is in receipt of your letter dated April 19, 2000 concerning the above referenced pit closure. You requested that Apache submit a plan to determine if groundwater had been impacted by the pit and documentation that the buried liner in the pit will be protected in the future.

In reference to the groundwater issue, Apache proposes to drill one 65' deep borehole directly adjacent to the backfilled pit. The boring will be drilled as close to the pit as possible without interfering with the integrity of the pit liner. Samples will be collected at 5' intervals starting at 40' and ending at the 65' total depth, and can be split with NMOCD personnel at your request. The samples will be preserved and transported utilizing proper protocol, and analyzed for TPH and chloride content.

Should the analytical results prove that the chloride and TPH concentrations dissipate to background levels or lower before reaching the 65' depth, then an impact to groundwater did not occur and the borehole will be grouted to the surface and no further investigation conducted.

In the event that contaminant levels continue to be significantly above background or higher than New Mexico standards at the 65' depth, the borehole will be re-entered and drilled down to water bearing strata for development as a monitor well. Once the well is developed, a sample will be collected and analyzed for TPH and chloride content. Should the analytical results prove that groundwater has not been impacted, the pump and casing will be removed and the wellbore grouted utilizing proper well abandonment methods.

Mr. Wayne Price May 23, 2000 Page 2

If analytical results indicate that groundwater has been impacted by the pit, Apache will reassess the situation at that time and submit a proposal to delineate the contaminant plume if necessary.

Apache Corporation is committed to the protection and preservation of the environment. Apache will construct four steel markers and place them at the corners of the backfilled pit as a permanent reminder of the pit location. The markers will have the word "PIT" welded on them and an arrow indicating the location of the pit in relation to the marker. All Apache employees involved with the operation of the Skelly Penrose field will be made aware of the pit location and instructed to contact the foreman before any construction or demolition is conducted at the site.

All of the correspondence and data relating to this pit will be kept in a file at the Houston office and a copy placed in the files at the Wink, Texas field office for future reference.

Apache Corporation respectfully submits this proposal for your consideration. Drilling and sampling can commence shortly after NMOCD written approval is received in the Apache Houston office. Pit markers will be placed during the time that borehole drilling is being conducted. Should you have any questions or wish to discuss other options, please contact me at 713-296-6555.

Thank you for your time and consideration.

Sincerely,

APACHÉ CORPORATION

David E. Urbanski

Environmental Coordinator

cc: Paul Griesedieck, Manager EH&S

Doug O'Neil, Regional Manager Donna Williams, NMOCD Hobbs

OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

April 19, 2000

CERTIFIED MAIL RETURN RECEIPT NO. 5051 4690

David E. Urbanski Apache Corporation 2000 Post Oak Boulevard Suite 100 Houston, Texas 77056-4400

RE:

Skelly Penrose "A" Central Battery Pit: (Abandoned emergency overflow pit)

Located: SE/4SE/4 Sec 4-Ts23s-R37e

Pit Closure Report

Dear Mr. Urbanski:

The New Mexico Oil Conservation Division (NMOCD) is in receipt of the letter dated March 21, 2000 with attached closure report. The report indicates Apache conducted a soil boring and collected soil samples from the middle of the pit approximately 40-42 feet below surface grade. The results of the bottom hole sample were reported to be <5.0 ppm TPH, <.50 BTEX and 4.6 ppm of chlorides.

The report indicates the pit was excavated down to 40 foot below grade surface. Bottom hole samples taken at this time revealed the presence of total petroleum hydrocarbons at 134 ppm and chloride concentration of 3400 ppm still remaining at the bottom of the excavation, which was reported to be approximately 40 feet below grade surface. The distance to ground water below the bottom of the excavation is reported to be 9.23 meters in the modeling report. The model predicted whether remaining contaminants will impact groundwater in the foreseeable future.

The model did not indicate the amount of contamination that has passed through the vadose zone, between the bottom of the pit and top of groundwater, during the time the pit was being used. The report does not adequately demonstrate that ground water has not been impacted from past operations. In order for OCD to properly evaluate the closure, Apache shall submit the following information:

- 1. A plan to determine if groundwater has been impacted.
- 2. Apache shall submit documentation to demonstrate that the buried liner will be protected in the future.

Please submit the above requested information by June 01, 2000.

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Wayne Price-Pet. Engr. Spec.
Environmental Bureau
cc: OCD Hobbs office

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
■ Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. ■ Print your name and address on the reverse so that we can return the card to you. ■ Attach this card to the back of the mailpiece, or on the front if space permits. 1. Article Addressed to: Apache Corporation 2000 Post OAK BLUJ.	A. Received by (Please Print Clearly) B. Date of Delivery C. Signature Addressee Addressee D. Se delivery address different from item 1? Yes If YES, enter delivery address below:
SUITE 100 HOUSTON, TEXAS 117056-4400 ALL: DAVID URBANSKI	3. Service Type ★ Certified Mail □ Express Mail ★ Registered □ Return Receipt for Merchandise □ Insured Mail □ C.O.D. 4. Restricted Delivery? (Extra Fee) □ Yes

February 9, 2000

CERTIFIED MAIL RETURN RECEIPT NO. Z 142 564 939

Mr. Michael Bernard Apache Corporation 2000 Post Oak Boulevard Suite 100 Houston, Texas 77056-4400

Re: Apache Corporation Skelly Penrose Pit Closure

Dear Mr. Bernard:

The New Mexico Oil Conservation Division (NMOCD) is in receipt of Apache Corporation's (AC) Pit Closure Protocol submitted by Whole Earth Environmetal dated October 11, 1999 and the pit bottom Re-Test dated January 20, 2000. The pit is presently dug out to 40 feet below ground surface. The NMOCD took split samples during the last sampling event and the results indicate there is remaining contaminants below the pit bottom. NMOCD's sampling results reveal chlorides at 3400 mg/kg and diesel range organics >C28 at 134 mg/mg. The vertical distance between the bottom of the pit and the top of water was reported to be 34 feet.

Apache's report indicates that the major source of contamination has been removed and request closure by installing a bottom and top liner and placing the remediated soils between the liners. The NMOCD hereby approves of the closure plan with the following additional conditions:

1. The closure report shall include Apache's commitment as outlined in Whole Earth's PR-22B 8.0 Closure report and shall include the final third party soil analytical results for all soils placed back into the hole between the liners. The samples collected shall be tested for BTEX, TPH and Chlorides. Closure results shall be submitted by April 30, 2000.

AC will notify the OCD Santa Fe office and the OCD District office at least 48 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and split samples. This event shall take place during NMOCD's normal working hours.





19606 San Gabriel Houston, Tx. 77084 Phone: (281) 492-7077 Fax: (281) 646-8996

FAX COVER PAGE

o: Wayne Price	From: Mike Gniffin	
Company: NMOCD	Company: Whole Earth Environ	,
ax No.: 505.827.8177	Pages including cover sheet:	6
Apache Skelly Pennose Sp	olit Sample Results	
llessage:	Date: 1 20100	
·		
	•	







Jan 20 00 09:53a

To: Wayne Price / NMOCD

From: Mike Griffin / Whole Earth Environmental

Date: January 20, 2000

Subject: Apache Corporation Skelly Penrose Re-test Results

Attached, please find copies of the test results obtained from a split sample collected last week on the Skelly Penrose pit. As you will note, we've essentially non-detectable hydrocarbons and only moderate chloride concentrations.

If your own test results prove to be similar to ours we request that we be allowed to perform the final closure as outlined within our protocol PR-22B submitted October 11, 1999.

Thank you again for your consideration.



P.08

ENVIRONMENTAL LAB OF , INC.

Mike Griffin

"Don't Treat Your Soll Like Dirt!"

WHOLE EARTH ENVIRONMENTAL ATTN: MR. MIKE GRIFFIN 19606 SAN GABRIEL HOUSTON, TEXAS 77084 FAX: 1-281-646-8996

Sample Type: Soil

Sample Condition: Intact/loed

Project #: Apache Eunice Pit Bottom Retest

Project Name: None Given Project Location: Eunice

Sampling Date: 01/12/00 Receiving Date: 01/13/00 Analysis Date: 01/13/00

GRO DRO

 ELT#
 FIELD CODE
 C8-C10 >C10-C28 mg/kg

 22754
 AB
 <10 20</td>

% IA 86 86 %EA 96 85 BLANK <10 <10

Melhods: EPA SW 846-8015M GRO/DRO

Raland K Tuttle

Date

Mike Griffin

P.07

ENVIRONMENTAL

"Don't Treat Your Soil Like Diri!"

WHOLE EARTH ENVIRONMENTAL ATTN: MR. MIKE GRIFFIN 19606 SAN GABRIEL HOUSTON, TEXAS 77084 FAX: 1-281-846-8998

SampleType: Soil

Sample Condition: Intact/ load

Project #: Apacha Eunica Pit Bottom Retest

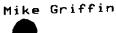
Project Name: None Given Project Location: Eunice

Sampling Date: 01/12/00 Receiving Date: 01/13/00 Analysis Date: 01/13/00

ELTS	FIELD CODE/ DATE	BENZENE Ingika	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m.p-XYLENE <i>maha</i>	o-XYLENE morkg	
22754	AB	<0.100	<0.100	<0.100	<0.100	<0.100	
	% IA	94	90	88	90	88	
	% EA	102	98	96	98	96	
	BLANK	<0.100	<0.100	<0.100	<0.100	<0.100	

METHODS: SW 846-8021B.5030

-1-4									
Project Manager		FANT #: (3)	FLAS (800) 874-4358 FASS: (80) 646-8996			akalysis request	REQUEST		
Company Name & Address:	H. J. T. 7	, X C							
1	1 R.H. Ro	Project Name	. 9		011 ag 1		.)		
ŧ	1	Sampler Squarare	nature:		BOCO CI				
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P.01

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL ATTN: MR. MIKE GRIFFIN 19806 SAN GABRIEL HOUSTON, TEXAS 77084 FAX: 1-281-646-8996

Sample Type: Soil

Sample Condition: Intact/load

Project #: Apache Eunice Pit Bottom Retest

Project Name: None Given Project Location: Eunice

Sampling Date: 01/12/00 Receiving Date: 81/13/00 Analysis Date: 01/19/00

Chloride FIELD CODE ELT# mg/kg 22754 780

> QUALITY CONTROL 5140 TRUE VALUE 5000 % PRECISION 103 BLANK <10

Methods: EPA SW 846-9052

.

N/A

GRO

7941298;

21 Jan'00 6:03PM;Job 426;Page 2/6

_0

Report Date: 1/21/00

Order ID Number: A00011503

Apache-Skelly

Page Number: 2 of 6

Ni/A

N/A

Analytical Results Report

Sample Number 138794 0114001330 Description. Date Date Prep QC Amilytical Result Dilution Method Prepared Analyzed Analyst Batch # Batch # ROL Param BIEX (mg/Kg) 1/19/00 PB00340 QC00449 RC 0.001 < 0.05 5() S 8021B 1/19/00 Henzene 50 1/19/00 1/19/00 RC PB00340 QC00449 0.001 < 0.05 S 8021B Toluene PR00340 QC00449 0.001 1/19/00 1/19/00 RĈ < 0.05 10 5 802113 Ethylbenzene PR00340 OC00449 0.001 1/19/00 1/19/00 RC 50 \$ 802113 M.P.O-Xylene <0.05 1/19/00 PB00340 QC00449 0.001 Total RTEX S 8021B 1/19/00 RC < 0.05 50 % % Hec. Prep OC Spike Surrogate (mg/Kg) Batch # Result Dilution Amount Rec Limit Analyst Butch # RC PB00340 QC00449 72 - 128TFT 4.97 50 0.1 99 72 - 128 PB00340 QC00449 RC. 50 102 4-BFB 5.1 1.0 Ion Chromatography (IC) (mg/Kg) PR00338 QC00445 3400 1 E 300.0 1/17/00 1/19/00 JS 0.5 CL. TPH DRO (mg/Kg) 1/17/00 MF PB00299 QC00413 50 134 Mod. 8015B 1/17/00 DRO "DRO - Hydrocarbons present past C28. TPH GRO (mg/Kg)

801513

<5

1/19/00

1/19/00

RC

PB00341 QC00450

0.1

7941298;

21 Jan'00 6:02PM; Job 426; Page 1/6



6701 Aberdeen Avenue, Suite 9 4725 Ripley Avenue, Suite A

Lumbock, Texas 79424 800+378+1296 El Paso, Texas 79922 800-508-3443 E-Mail. lab@traceanalysis.com

806 + 794 + 1296 975+5H5+3443

FAX 806+794+1298 FAX 915+585+4944

Analytical and Quality Control Report

Donna Williams OCD Hobbs Office 1625 N. French Drive Hobbs, NM 88240

Report Date:

1/21/00

Project Number:

N/A

Project Name: **Project Location:** Apache-Skelly

Order ID Number: A00011503

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc.

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Dute Received
138794	0114001330	Soil	1/14/00	13:30	1/15/00

These results represent only the samplex received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 6 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.

Dr. Blair Lettwich. Director

Report Date: 1/21/00

N/A

Order ID Number: A00011503

Apache-Skelly

Page Number: 6 of 6

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Falu Analyzed	QC Batch #
ЮV	Benzene (mg/Kg)		0.1	0.103	103	80 - 120	1/19/00	QC00449
ICV	Toluene (mg/Kg)		0.1	0.104	104	80 - 120	1/19/00	QC00449
ICV	Ethylbenzene (mg/Kg)		Q. i	0.103	103	80 - 120	1/19/00	QC00449
ICV	M,P,O-Xylene (mg/Kg)		0.3	0.308	103	80 - 120	1/19/00	QC90449
CCV (I	Benzene (mg/Kg)		1.0	0.099	97	80 - 120	1/19/00	QC00449
CCV (I	Toluene (mg/Kg)		0.1	0.1	100	80 - 120	1/19/00	QC00449
CCV (I	Ethylbenzene (mg/Kg)		0.1	0.098	98	80 - 120	1/19/00	QC00449
CCV (1	M,P,O-Xylene (mg/Ka)		0.3	0.291	47	80 - 120	1/19/00	QC00149
CCA (5	Benzone (mg/Kg)		0.1	0.101	101	80 - 120	1/19/00	QC00449
CCV (2	Toluene (mg/Kg)		0.1	0.103	103	80 - 120	1/19/00	QC00449
CCV (2	Ethylbenzene (mg/Kg)		0.1	0.101	101	80 - 120	1/19/00	QC00449
CCV (2	M.P.O-Xylene (mg/Kg)		0.3	0.304	101	#0 ~ 150	1/19/00	QC00449
Stondard	Poram	Flag	CCVs TRUE Cone.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch
ICV	CL (mg/L)		12.5	11.53	92	80 - 120	1/19/00	QC00445
CCV (1	CL (mg/L)		12.5	11.74	94	80 - 120	1/19/00	QC00445
Standard	Param	Flag	CCVs TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch
ICV	DRO (mg/Kg)		250	271	i 08	70 - 130	1/17/00	QC00413
CCV (t	DRO (mg/Kg)		250	302	121	70 - 130	1/17/00	QC00413
		**************************************	CCVs TRUE	CCVs Found	CCVs Percent	Percent Recovery	Date	QC Batch
Standard	Param	Flag	Conc.	Conc.	Recovery	Limits	Analyzed	#
ICV	GRO (mg/Kg)		1	0.986	99	80 - 120	1/19/00	QC00450
CCV (I	GRO (mg/Kg)		1	0.881	88	80 - 120	1/19/00	QC00450

N/A

00

Report Date: 1/21/00

Order ID Number: A00011503

Apache-Skelly

Page Number: 5 of 6

N/A

Quality Control Report Lab Control Spikes and Duplicate Spike

Рагат	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS MTBE (mg/Kg)	<0.05	50	0.1	5.02	100		80 - 120	0 - 20	QC00449
LCS Benzene (mg/Kg)	<0.05	50	0.1	4.95	99		80 - 120	0 - 20	QC00449
LCS Toluene (mg/Kg)	<0.05	50	0.1	5	100		80 - 120	0 - 20	QC00449
LCS Ethylhenzene (mg/Kg)	<0.05	50	0.1	4.92	98		80 - 120	0 - 20	QC00449
LCS M,P,O-Xylene (mg/Kg)	40.05	50	0.3	14.6	97		80 - 120	0 - 20	QX:00449
Standard Surrogate LCS TFT (mg/Kg) LCS 4-HFH (mg/Kg)		Dil 50 50	Spike Amount 0.1 0.1	Result 5.22 5.39	% Rec. 104 108		% Rec. Limit 72 - 128 72 - 128		QC Batch # QC00449 QC00449
LCSD MTBE (mg/Kg)	<0.05	50	0.1	5.15	103	3	80 - 120	0 - 20	QC00449
LCSD Benzene (mg/Kg)	< 0.05	50	0.1	4.95	99	0	80 - 120	0 - 20	QC00449
LCSD Toluene (mg/Kg)	< 0.05	50	0.1	4.99	100	0	80 - 120	0 - 20	QC00449
LCSD Ethylbenzene (mg/Kg)	<0.05	50	0.1	4.92	98	0	80 - 120	0 - 20	QC00449
LCSD M,P,O-Xylene (mg/Kg)	< 0.05	50	0.3	14.7	98	1	80 - 120	0 - 20	QC00449
Standard Surrogate LCSD TFT (mg/Kg) LCSD 4-BFB (mg/Kg)		Dil. 50 50	Spike Amount 0.1 0.1	Result 5.04 5.27	% Rec 101 105		% Rec Limit 72 - 128 72 - 128		OC Batch # OC00449 QC00449
Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec	RPD	% Rec. Limit	RPD Limit	QC Batch #
LCS DRO (mg/Kg)	<50	1	250	259	1()4		70 - 130	0 - 20	QC00413
LCSD DRO (mg/Kg)	~ 50	1	250	277	m	7	70 - 130	0 - 20	QC00413
Param	Blank Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rcc	KPI)	% Rec. Limit	RPD Limit	QC Batch #
LCS GRO (mg/Kg)	<.5	1	1	0.997	100		80 - 120	0 - 20	QC00450
LCSD GRO (mg/Kg)	<5	1	ŧ	0.978	98	2	80 - 120	0 - 20	QC00450

Report Date: 1/21/00

N/A

7941298;

21 Jan'00 6:04PM;Job 426;Page 4/6

Order ID Number: A00011503

Apache-Skelly

Page Number: 4 of 6 N/A

Quality Control Report Matrix Spike and Matrix Duplicate Spike

Standard	Param	Sumple Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	CL (mg/Kg)	3400	1	1250	4564.02	93		80 - 120	0 - 20	QC00445
MSD	CL (mg/Kg)	3400	1	1250	4584.90	95	2	80 - 120	0 - 20	QC00445
Standard	Param	Sample Kesult	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	Benzene (mg/Kg)	<0.05	50	0.1	4.9	98		80 - 120	0 - 20	QC00449
MS	Toluene (mg/Kg)	<0.05	50	0.1	4.94	99		80 - 120	0 - 20	QC00449
MS	Lithyibenzene (mg/Kg)	< 0.05	50	0.1	4.86	97		80 - 120	0 - 20	QC00449
MS	M,P,O-Xylene (mg/Kg)	<0.05	50	0.3	14.4	96		80 - 120	0 - 20	QC00449
Standard MS MS	Surrogate TFT (my/Kg) 4-BFB (mg/Kg)	Result 5.04 5.2	1	Spike Amount 0.1 0.1	Analysi RC RC	% Rec. 101 104		% Rec. Limit 72 - 128 72 - 128	Prep Batch # PB00340 PB00340	
MSD	Benzene (mg/Kg)	<0.05	50	0.1	1.7	94	4	80 - 120	0 - 20	QC00449
MSD	Toluene (mg/Kg)	<0.05	50	0.1	4.76	95	4	80 - 120	0 - 20	QC00449
MSD	Ethylbenzene (mg/Kg)	<0.05	50	0.1	4.65	93	4	80 - 120	0 - 20	QC00449
MSD	M.P.O-Xylene (mg/Kg)	<0.05	50	0.3 Spike	13.8	92 %	4	80 - 120 % Rec.	0 - 20 Prep	QC00449 QC
Standard	Surrogate	Remit	Dil.	Amount	Analysi	Rec		Limit	Baich #	Batch #
MSD	TFT (mg/Kg)	5.06		0.1	RC	101		72 - 128	PB00340	-
MSD	4-BFB (mg/Kg)	5.28	. 1	0.1	RC	106		72 - 128	PBU0341	QC00449

Report Date: 1/21/00

N/A

7941298;

21 Jan'00 6:03PM; Job 426; Page 3/6

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Order ID Number: A00011503 Apache-Skelly

Page Number: 3 of 6

N/A

Quality Control Report Method Blanks

Peram	Flug	Blank Result	Reporting Limit))ate Analyzed	Prep Batch #	QC Batch #
Benzene (mg/Kg)		< 0.05	0.05	1/19/00	PH00340	QC00449
Toluege (mg/Kg)		<0.05	0.05	1/19/00	PB00340	QC00449
Ethylbenzene (mg/Kg)		<0.05	0.05	1/19/00	PB00340	QC00449
M,P,O-Xylene (mg/Kg)		< 0.05	0.05	1/19/00	PB00340	QC00449
Total BTEX (mg/Kg)		<0.05	0.05	1/19/00	PB00340	QC00449
Surrogate TFT (mg/Kg) 4-BFB (mg/Kg)		Result 5.34 \$,34	Spike Amount 0.1 0.1	% Rec. 107 107	% Rec. Limit 72 - 128 72 - 128	QC Batch # QC00449 QC00449
Param	Flag	Hlank Resuli	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
CL (mg/Kg)		9.46	0.5	1/19/00	PH00338	QC00445
Parain	Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Batch #	QC Butch #
DRO (mg/Kg)		₹50	50	1/17/00	PB00299	QC00413
Puran	Flag	Blank Result	Reporting Limit	Date Analyzed	Prup Batch #	QC Batch #
GRO (mg/Kg)		<.5	0.1	1/19/00	PB00341	QC00450

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8701 Aberdeen Avenue, Suite 9 4775 Hipley Avenue, Suite A

Lubbock, Texas 79424 FI Pusti, Texas 79922 888+588+3443 E-Mail: lab@traceanalysis.com

806-794-1296 915+585+3443

FAX 886 = 794 = 1298 FAX 915+585+4944

Analytical and Quality Control Report

Donna Williams **OCD Hobbs Office** 1625 N. French Drive Hobbs, NM 88240

Report Date:

1/21/00

Project Number:

N/A

Project Name:

Apache-Skelly

Project Location:

N/A

Order ID Number: A00011503

Enclosed are the Analytical Results and Quality Control Data Reports for the following samples submitted to TraceAnalysis, Inc. for analysis:

Sample Number	Sample Description	Matrix	Date Taken	Time Taken	Date Received
138794	0114001330	Soil	1/14/00	13:30	1/15/00

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(ex) in which your sample(s) were analyzed.

This report consists of a total of 6 pages and shall not be reproduced except in its entirety, without written approval of TraccAnalysis, Inc.

Dr. Blair Leftwich, Director

Report Date: 1/21/00

7941298;

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Order ID Number: A00011503

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Page Number: 6 of 6

N/A

N/A Apache-Skelly

Quality Control Report
Continuing Calibration Verification Standard

Standard	Param	Flag	CCVs TRUE Cons.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch #
ICV	Bonzene (mg/Kg)		0.1	0.103	103	80 - 120	1/19/00	QC00449
(CV	Toluens (mg/Kg)		0.1	0.104	104	80 - 120	1/19/00	QCXXI449
ICV	Ethylbenzene (mg/Kg)		0.1	0.103	103	80 - 120	1/19/00	QC00449
ICV	M.P.O-Xylene (mg/Kg)		0.3	0.308	103	80 - 120	1/19/00	QC00449
CCV (I	Benzene (mg/Kg)		0.1	0.099	49	80 - 120	1/19/00	QC00449
CCV (I	Toluene (mg/Kg)		0.1	0.1	100	80 - 120	1/19/00	QC00449
CCV (1	Ethylbenzene (mg/Kg)		0.1	0.098	48	80 - 120	1/19/00	QC00449
CCV (1	M.F.O-Xylene (mg/Kg)		0.3	0.291	47	80 - 120	1/19/00	QC00449
CCV (2	Bunzene (mg/Kg)		0.1	0.101	/01	80 - 120	1/19/00	QC00449
CCV (2	Toluene (mg/Kg)		0.1	0.103	103	60 - 120	1/19/00	QC00449
CCV (2	Ethylbenzene (mg/Kg)		0.1	0.101	10 (80 - 120	1/19/00	QC00449
CCV (2	M,P,O-Xylene (mg/Kg)		0.3	0.304	101	80 - 120	1/19/00	QC:00449
Standard	Yarum	Flag	CCVs TRUE Conc.	CCVs Found Cone.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch
ICV	C1. (mg/L)		12.5	11.53	92	NO - 120	1/19/00	QC00445
CCV (I	CL (mg/L)		12.5	11.74	94	80 - 120	1/19/00	QC00445
Standard	Param	Flag	CCV* TRUE Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch
icv	DRO (mg/Kg)	<u> </u>	250	271	108	70 - 130	1/17/00	QC00413
CCV (t	DRO (mg/Kg)		250	302	121	70 - 130	1/17/00	QC00413
Standard	Param	Flag	CCVs TRUE Cone.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed	QC Batch
icv	URO (mg/Kg)	- 100	1	0.986	yo	80 - 120	1/19/00	QC00450
ccv (t	GRO (mg/Kg)		1	0.881	88	80 - 120	1/19/00	QC00450

Report Date: 1/21/00

NA

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Order ID Number: A00011503

- Page Number: 5 of 6

Apache-Skelly

N/A

Quality Control Report Lab Control Spikes and Duplicate Spike

Param			Blank		Spike Amount	Matrix Spike	%		% Rec	RPD	QC:
LCS Benzene (mg/Kg)		Param		Dil.				RPD			
LCS Toluene (mg/Kg) 40.05 50 0.1 5 100 80 - 120 0 - 20 QC00449 LCS Ethylbenzene (mg/Kg) 40.05 50 0.1 4.92 98 80 - 120 0 - 20 QC00449 LCS M,P,O-Xylene (mg/Kg) 70.05 50 0.3 14.6 97 86 80 - 120 0 - 20 QC00449 Result Res	LCS	MTBE (mg/Kg)	<0.05	50	0.1	5.02	100	*******	80 - 120	0 20	QC00449
LCS Ethylbenzene (mg/Kg)	LCS	Benzene (mg/Kg)	< 0.05	50	0.1	4.95	99		80 - 120	0 - 20	QC00449
I.CS M.P.OXylene (mg/Kg)	LCS	Toluene (mg/Kg)	< 0.05	50	0.1	5	100		80 - 120	0 - 20	QC00449
Nitandard Surrogate Dil. Antiount Result Resu	LCS	Ethylbenzene (mg/Kg)	∹0.05	50	0.1	4.92	98		80 - 120	0 - 20	QC00449
Standard Surrogate Dil. Anjount Result Res. Limit Barch Res. Limit Result ICS TYT (mg/Kg) 50 0.1 5.22 104 72-128 QC00449 QC00445 QC004	LCS	M.P.O-Xylene (mg/Kg)	< 0.05	50	0.3	14.6	97		80 - 120	0 - 20	QC00449
CS TFT (mg/Kg)							%				
LCS 4-BFB (mg/Kg)								-			
CSD MTBE (mg/Kg)		· = •									
LCSD Benzene (mg/Kg)	LCS	4-BFB (mg/Kg)		50	0.1	5.39	108	•	77 - 128		QC00449
CS1 Toluene (mg/Kg) C0.05 S0 0.1 4.99 100 0 80 - 120 0 - 20 QC00449	LCSD	MTBE (mg/Kg)	<0.05	50	0.1	5.15	103	3	80 - 120	0 - 20	QC00449
LCSD Toluene (mg/Kg) <0.05 50 0.1 4.99 100 0 80 - 120 0 - 20 QC00449 LCSD Ethylbenzene (mg/Kg) <0.05 50 0.1 4.92 98 0 80 - 120 0 - 20 QC00449 LCSD M.P.O-Xylene (mg/Kg) <0.05 50 0.3 14.7 98 1 80 - 120 0 - 20 QC00449 LCSD Spike Spike	LCSD	Benzene (mg/Kg)	- <0.05	50	0.1	4.95	99	0	80 - 120	0 - 20	QC00449
CSD Ethylbenzene (mg/Kg)	LCSD	· · · · · · · · · · · · · · · · · · ·	<0.05	50	0.1	4.90	100	0	80 - 120	0 - 20	QC:00449
CSD M,P,O-Xylene (mg/Kg) <0.05 50 0.3 14.7 98 1 80 - 120 0 - 20 QC00449	LCSD	▼ - -	< 0.05	50	0.1	4.92	98	0	80 - 120	0 - 20	QC00449
Sundard Surrogate File Amount Result Rec. Limit Batch #	LCSD		<0.05	50	0.3	14.7	98	1	80 - 120	0 - 20	QC00449
LCSD TFT (mg/Kg) 50 0.1 5.04 101 72-128 QC00449 LCSD 4-BPB (mg/Kg) 50 0.1 5.27 105 72-128 QC00449 QC00					Spike		%		% Rec.		
Spike Matrix Spike Result Rec. RPD Limit Limit Batch Herman LCS DRO (mg/Kg) Spike Matrix Spike Result Rec. RPD Limit Limit Batch Herman LCS DRO (mg/Kg) So 1 250 259 104 70 - 130 0 - 20 QC00413		· ·									
Param Result Dil. Added Rosult Rec. Rep. Rep. Rep. Dil. Added Rosult Rec. Rep. Limit Limit Batch		, -									•
Blank Amount Spike % % Rec. RFI) QC	LCSD	4-BFB (mg/Kg)		50	0.1	5.27	103	,	72 - 128		QC00449
Param Result Dil. Added Result Rec. RPD Limit Limit Batch H					Spike	Matrix					
LCS DRO (mg/Kg) <50 1 250 259 104 70 - 130 0 - 20 QC00413			Blank				-				
CSD DRO (mg/Kg) <50 1 250 277 111 7 70 - 130 0 - 20 QC00413		Param	Result	Dil.	Added	Result	Rec.	RPD	Limit	l.imit	Batch #
Spike Matrix Water Matrix Spike Matrix Spike Water Wat	LCS	DRO (mg/Kg)	<50	1	250	259	104		70 - 130	0 - 20	QC00413
Param	LCSD	DRO (mg/Kg)	<50	1	250	277	111	7	70 - 130	0 - 20	QC00413
Param Result Dil. Added Result Rec. RPD Limit Limit Batch # LCS GRO (mg/Kg) <5	-				Spike	Matrix				 ^	
LCS GRO (mg/Kg) <5 1 1 0.997 100 80 - 120 0 - 20 QC:00450			Blank		Amount	Spike	%		% Rec.	RPD	QC
And the same		Param	Result	Dil.	Added	Result	Rcc.	RPD	Limit	Limit	Batch #
LCSD GRO (mg/Kg) <5 1 0.978 98 2 \$0-120 0-20 QC00450	LCS	GRO (mg/Kg)	<5	1	1	0.997	100		80 - 120	0 - 20	QC00450
	LCSD	GRO (mg/Kg)	<5	ı	1	0.978	98	2	80 - 120	0 - 20	QC00450

Report Date: 1/21/00

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Order ID Number: A00011503

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72 - 128 PB00340 QC00449

Prep

Ratch #

72 - 128 PR00340 QC00449

72 - 128 PB00340 QC00449

0 - 20 QC00449

0 - 20 QC00449

0-20 QC00449

0 - 20 QC00449

QC

isatch #

80 - 120

80 - 120

80 - 120

80 - 120

% Rec.

Limit

Apache-Skelly

N/A

N/A

MS

MSD

MSD

MSD

MSD

MSD

MSD

Standard

4-BFB (mg/Kg)

Benzene (mg/Kg)

Toluene (mg/Kg)

Surrogate

TFT (mg/Kg)

4-BFB (mg/Kg)

Ethylhenzenc (mg/Kg)

M,P,O-Xylene (mg/Kg)

Quality Control Report Matrix Spike and Matrix Duplicate Spike

	14445 PE 4M	copino uno	* 1 10-24		· p					
Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch #
MS	CI. (mg/Kg)	3400	1	1250	4564.02	93	**************************************	80 - 120	0 - 20	QC00445
MSD	CL (mg/Kg)	3400	ŧ	1250	4584.90	95	2	80 - 120	0 - 20	QC00445
Standard	Param	Sample Result	Dil.	Spike Amount Added	Matrix Spike Result	% Rec.	RPD	% Rec. Limit	RPD Limit	QC Batch#
MS	Benzene (mg/Kg)	<0.05	50	0.1	4.9	98		80 - 120	0 - 20	QC00449
MS	Toluene (mg/Kg)	<0.05	50	0.1	4.94	99		80 - 120	0 - 20	QC00449
MS	Fthylbenzene (mg/Kg)	<0.05	50	0.1	4.86	97		80 - 120	0 - 20	QC00449
MS	M.F.O-Xylene (mg/Kg)	< 0.05	50	0.3	14.4	96		80 - 120	0 - 20	QC00449
Standard MS	Surrogate TFT (mg/Kg)	Result 5.04		Spike Amount 0.1	Analyst RC	% Rec. 101		% Rec. 1.imit 72 - 128	Prep Batch # PB00340	QC Batch # QC00449

5.2 1

50

50

30

<0.05

• 0.05

<0.05

< 0.05

Result Dil.

5.28 ı

5.06 1

RC

4.7

4.76

4.65

13.8

Analyst

RC

RC

0.1

0.1

0.1

Q. i

0.3

Spike

Amount

0.1

0.1

104

94

95

93

92

%

Rec.

101

106

Report Date: 1/21/00

7941298;

21 Jan'00 6:07PM; Job 428; Page 3/6

Order ID Number: A00011503

Page Number: 3 of 6

N/A

Apache-Skeity

Quality Control Report Method Blanks

	1470100				
Flag	Biank Resuit	Reporting Limit	Date Analyzed	Prep Batch #	QC Batch #
	<0.05	0.05	1/19/00	PB00340	QC00449
	< 0.05	0.05	1/19/00	PB00340	QC00449
	<0.05	Q.05	1/19/00	PB00340	QC00449
	<0.05	0.05	1/19/00	PB00340	QC00449
	<0.05	0.05	1/19/00	PB00340	QC00449
	Hesult 5.34 5.34	Spike Amount 0.1	% Rec. 107 107	% Rec. Limit /2 - 128 72 - 128	QC Batch # QC00449 QC00449
t/lag	Blank Result	Reporting Limit	i)atc Analyzců	Prep Batch #	QC Datch #
	9.46	0.5	1/19/00	PB00338	QC00445
Flag	Blank Result	Reporting Limit	Date Analyzed	Prep Hatch #	QC Batch #
Bandanda (no. 800 S. C. C. B. B. Banda and America (Banda)	<50	50	1/17/00	P[000299	QC00413
	Blank	Reporting	()ate	Руер	QC Details #
1 128					Batch #
	< 5	0.1	1/19/00	PB00341	QC00450
	tilag	Blank Result	Flag Result Limit	Blank Reporting Date	Blank Reporting Date Prep

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.	\	Relinquished by: Date: Time:	Relinquished by: Date: Time:				enc. cond			100		Service Control of the Control of th	Sir Control of the Co	1900	138794 0114001330	LAB # FIELD CODE (LAB USE) (ONLY / 2)	A Comment of the Comm		reject Location:	Project #:	If different from above) OCD Bill D	Donna Williams	Address: (Street, City, Zip) 1685 N French Dr.	Name	Fax (806) 794-1298 II acchidly S1S, 1 (800) 378-1296	6701 Aberdeen Avenue, Ste. 9 Lubbock, Texas 79424 T-1 (2002) 204
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OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

April 11, 1999

CERTIFIED MAIL RETURN RECEIPT NO. P 288 259 104

Mr. Michael Bernard Apache Corporation 2000 Post Oak Boulevard Suite 100 Houston, Texas 77056-4400

Re:

Assessment of the Vertical Hydrocarbon Impact at the Skelly Penrose "A" Central Battery Pit:

(Abandoned emergency overflow pit)

Located:

SE/4SE/4 Sec 4-Ts23s-R37e

Dear Mr. Bernard:

The New Mexico Oil Conservation Division (NMOCD) is in receipt of Anache Corporation's (AC) letter dated October 9, 1998 for the pit closure referenced above. The NMOCD hereby approves of AC's proposed work plan for the spring of 1999, subject to the following conditions:

- 1. After the additional excavation has taken place, AC shall take confirmation samples from the bottom of the excavation and sidewalls. Soil samples shall be analyzed for TPH, BTEX and Chlorides all per EPA SW-846 methods.
- 2. AC must seek NMOCD approval prior to the placement of any remediated soils. Please submit analytical results of the remediated soils to include TPH, BTEX and Chlorides.
- 3. AC will notify the OCD Santa Fe office and the OCD District office at least 48 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and split samples. This event shall take place during NMOCD's normal working hours.

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

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Sincerely Yours,

Wayne Price-Pet. Engr. Spec.

Environmental Bureau

OCD Hobbs District Office-Spill files. CC: