

1R - 485

**APPROVALS**

**YEAR(S):**

2009

## **Hansen, Edward J., EMNRD**

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**From:** Hansen, Edward J., EMNRD  
**Sent:** Wednesday, July 22, 2009 10:32 AM  
**To:** 'BBlevins@chkenergy.com'  
**Cc:** 'Cliff P. Brunson'; Ken Swinney; Jennifer Gilkey  
**Subject:** Remediation Plan Termination: 1R-485 Ches-Williams 14 Fed #1

**RE: "Closure Report"**  
**for the Chesapeake's**  
**Williams 14 Federal No. 1 Release Site**  
**Section 14, T15S, R35E, Lea County, New Mexico**  
**Remediation Plan (1R485) Termination**

Dear Mr. Blevins:

The New Mexico Oil Conservation Division (OCD) has received the closure report for the Chesapeake Williams 14 Federal No. 1 Release Site, dated June 29, 2009, and has conducted a review of the report. The report, submitted for the above-referenced site, indicates that Chesapeake Operating, Inc., has completed the closure requirements in accordance with 19.15.29 NMAC (Part 29, formally, Rule 116). Therefore, the OCD hereby approves the report and gives notice that the Remediation Plan (1R-485) is terminated:

Please be advised that OCD approval of this report does not relieve the owner/operator of responsibility should operations pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the owner/operator of responsibility for compliance with any OCD, federal, state, or local laws and/or regulations.

If you have any questions regarding this matter, please contact me at 505-476-3489.

Edward J. Hansen  
Hydrologist  
Environmental Bureau

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**From:** Cliff P. Brunson [mailto:cbrunson@bbcinternational.com]  
**Sent:** Thursday, July 02, 2009 5:52 PM  
**To:** Hansen, Edward J., EMNRD  
**Cc:** Ken Swinney; Jennifer Gilkey  
**Subject:** RE: 1R-485 Ches-Williams 14 Fed #1

Ed,

Please find attached the closure report for the case 1R-485 Chesapeake Williams 14 Federal #1. If you have any questions, please let me know.

Thanks, Cliff

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**From:** Hansen, Edward J., EMNRD [mailto:edwardj.hansen@state.nm.us]  
**Sent:** Tuesday, June 30, 2009 8:23 AM  
**To:** Cliff P. Brunson  
**Subject:** RE: 1R-485 Ches-Williams 14 Fed #1

Cliff,  
Sounds good.

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**From:** Cliff P. Brunson [mailto:cbrunson@bbcinternational.com]  
**Sent:** Monday, June 29, 2009 6:36 PM  
**To:** Hansen, Edward J., EMNRD  
**Subject:** RE: 1R-485 Ches-Williams 14 Fed #1

Ed,

I am out of town, but the 1R-485 Chesapeake site report is completed and I will e-mail that to you on Thursday this week when I am back in the office. We will be sampling the 1R-434 after the holiday so when we get the data I will contact you.

Thanks, Cliff

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This inbound email has been scanned by the MessageLabs Email Security System.

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PHONE (575) 397-6388 • FAX (575) 397- 0397 • 1324 W. MARLAND • P.O. BOX 805 • HOBBS, NM 88241-0805  
E-MAIL: cbrunson@bbcinternational.com

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June 29, 2009

Edward J. Hansen  
New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

**RE: 1R-485; Chesapeake Williams 14 Federal #1**

Dear Mr. Hansen:

On behalf of Chesapeake Operating, Inc. (Chesapeake), BBC International, Inc. (BBC), is pleased to submit this report confirming the closure of all site remediation activities at the above referenced site. In agreement with the New Mexico Oil Conservation Division (NMOCD), all remedial requirements have been completed and this site is now closed.

As agreed upon on October 12, 2007 per a telephone conference and via e-mail (attached), a path forward was approved to conduct and complete the following tasks:

1. A compacted clay liner may be installed and overlap the underlying contamination. The thickness of the liner will be a minimum of two feet and compacted to 95 % proctor. (Three feet will be acceptable per your telephone conversation) The permeability shall be  $1 \times 10^{-7}$  cm/sec or less. The clay liner was installed starting on October 22, 2007 and completed on October 29, 2007 according to the NMOCD requirements. See attached pictures.
2. There shall be a minimum of one foot of original topsoil or background thickness whichever is greater. The surface shall be re-vegetation and maintained for a minimum of two years. A two foot layer of topsoil was installed in November 2007. See attached pictures. The site has been re-vegetated and seeded with BLM Seed Mix No. 1. See attached pictures.
3. An interim closure report shall be submitted within 60 days of pit closure with photos. This report shall contain a groundwater sampling and water depth measurement plan for OCD approval, an estimated accrued cost as-of-to date for this project, the size and type of pit liner used and the reason for failure. This information was transmitted to Wayne Price of the NMOCD in December 2007.
4. The approval e-mail of October 12, 2007 is attached to this report per NMOCD instructions.

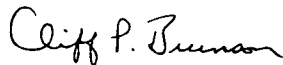
As you recall, I met with you and Wayne Price on March 20, 2009 to discuss the closing of this site. Upon reviewing the latest ground water data and discussing the site, it was agreed that the NMOCD would allow Chesapeake to plug and abandon the three ground water monitoring wells according to NMOCD standards, write a report stating that and then the site would be closed. The monitor wells were plugged and abandoned on April 10, 2009.

Therefore, Chesapeake respectfully requests that the NMOCD acknowledge their acceptance that this site has been closed in writing.

Chesapeake and BBC both appreciate the cooperation of the NMOCD in this process to close this site.

We look forward to receiving the closure letter. If you have any questions, please do not hesitate to contact me.

Sincerely,  
BBC International, Inc.



Cliff P. Brunson  
President

jg:CPB

encl.

cc: Bradley Blevins – Chesapeake Operating, Inc. – Hobbs, NM Field Office  
Harlan Brown – Chesapeake Operating, Inc. – Oklahoma City, Ok

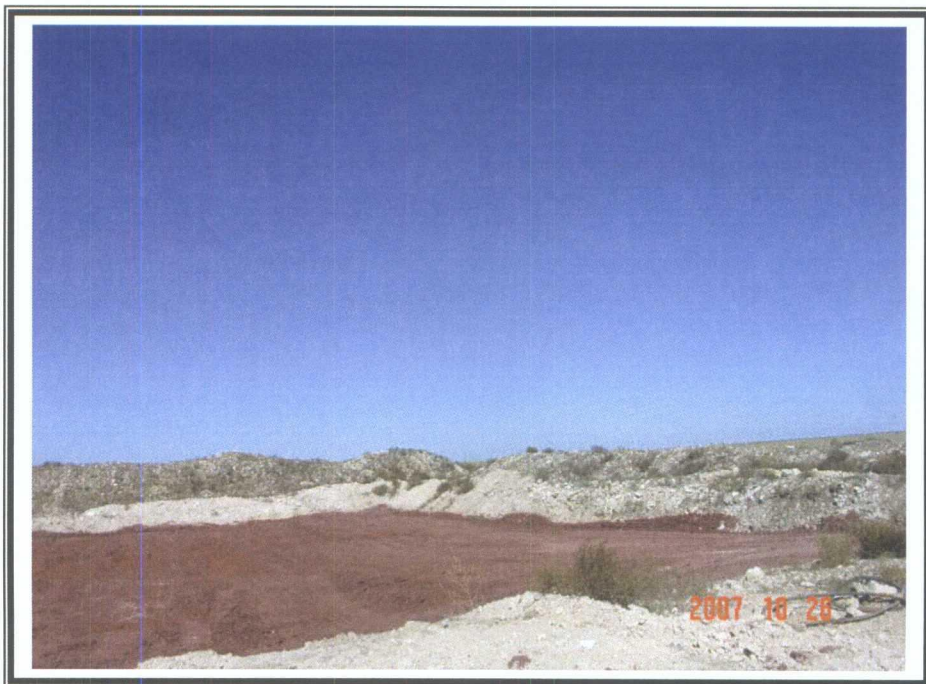
Williams 14 Federal #1  
Backfilling, Clay Liner Installation, Backfilling Topsoil



Williams 14 Federal #1  
Backfilling, Clay Liner Installation, Backfilling Topsoil



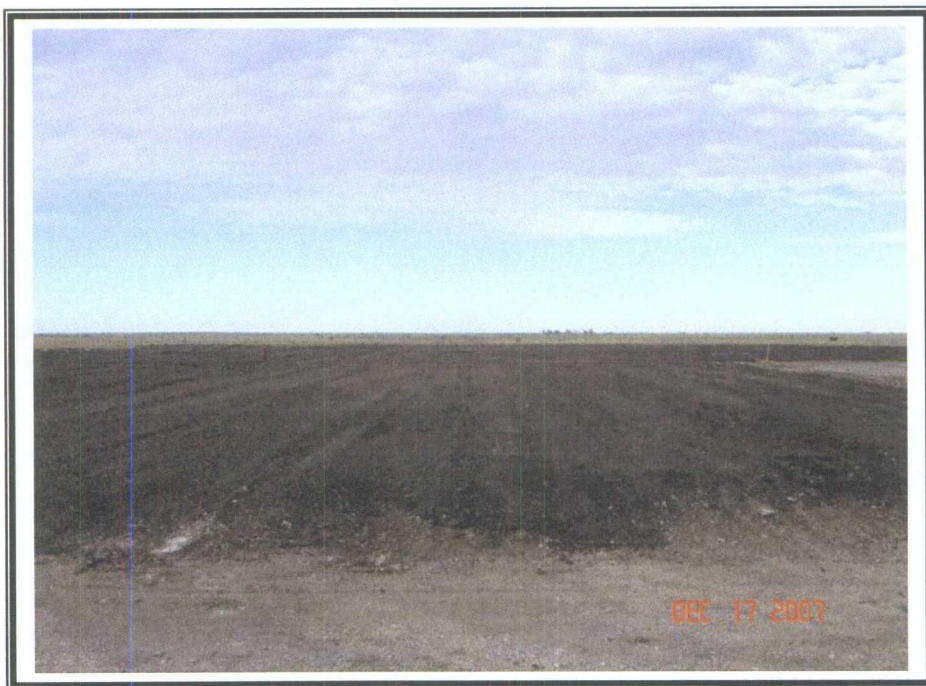
Williams 14 Federal #1  
Backfilling, Clay Liner Installation, Backfilling Topsoil



Williams 14 Federal #1  
Backfilling, Clay Liner Installation, Backfilling Topsoil



Williams 14 Federal #1  
Backfilling, Clay Liner Installation, Backfilling Topsoil



Williams 14 Federal #1  
Backfilling, Clay Liner Installation, Backfilling Topsoil



## Cliff P. Brunson

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**From:** Price, Wayne, EMNRD [wayne.price@state.nm.us]  
**Sent:** Friday, October 12, 2007 1:28 PM  
**To:** cbrunson@bbcinternational.com; Harlan Brown  
**Cc:** VonGonten, Glenn, EMNRD; Sanchez, Daniel J., EMNRD; Fesmire, Mark, EMNRD  
**Subject:** RE: AT&T TeleConference Reservation Confirmation - HOST Copy (MCB1457)

Reference: OCD Case # 1R0485

Dear Mr. Brown:

Pursuant to our telephone conference OCD hereby approves the path forward with the following conditions:

1. A compacted clay liner may be installed and overlap the underlying contamination. The thickness of the liner will be a minimum of two feet and compacted to 95 % proctor. (Three feet will be acceptable per your telephone conversation) The permeability shall be  $1 \times 10^{-7}$  cm/sec or less.
2. There shall be a minimum of one foot of original topsoil or background thickness whichever is greater. The surface shall be re-vegetation and maintained for a minimum of two years.
3. An interim closure report shall be submitted within 60 days of pit closure with photos. This report shall contain a groundwater sampling and water depth measurement plan for OCD approval, an estimated accrued cost as-of-to date for this project, the size and type of pit liner used and the reason for failure.
4. This E-mail shall be included in the final report.

Special note: OCD would like to point out that since the vadoze zone was never completely delineated originally, The fact that the district environmental person had to request additional delineation, the fact that the original groundwater sample showed a slight impact, the fact that the operator requested closure without verifying the background groundwater conditions, the fact that the groundwater gradient direction is very non-typical, and the fact that the reason for the unusual gradient was not given, has caused the OCD to place this project outside of a normal approval. The bottom line is these types of submittals require enormous amounts of the OCD's staff time which we do not have.

Please be advised that OCD approval of this plan does not relieve the owner/operator of responsibility 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, OCD approval does not relieve the owner/operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

-----Original Message-----

**From:** Cliff P. Brunson [mailto:cbrunson@bbcinternational.com]  
**Sent:** Thursday, October 11, 2007 1:35 PM  
**To:** Price, Wayne, EMNRD; Harlan Brown  
**Subject:** Fw: AT&T TeleConference Reservation Confirmation - HOST Copy (MCB1457)

CHLORIDE: 8/17/07 28 ppm

MW #1  
(3926.53')

CHLORIDE: 2/6/07 36 ppm  
CHLORIDE: 2/14/07 32 ppm  
CHLORIDE: 8/21/07 44 ppm

TEMP - MW  
(3926.30')

EXISTING PIT

MW #2  
(3924.98')

CHLORIDE: 8/17/07 28 ppm

CHLORIDE: 8/17/07 44 ppm  
CHLORIDE: 8/21/07 32 ppm

MW #3  
(3925.75')

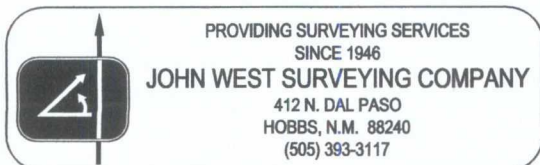
WELL  
O

WELL	COORDINATES	ELEVATIONS
MW #1	736151.4 N 790786.1 E	NATURAL GROUND - 3981.05' TOP OF PVC - 3984.13'
MW #2	735948.7 N 790853.7 E	NATURAL GROUND - 3979.23' TOP OF PVC - 3982.60'
MW #3	735979.4 N 791023.5 E	NATURAL GROUND - 3979.60' TOP OF PVC - 3982.60'
TEMP MW	736086.5 N 790858.1 E	NATURAL GROUND - 3971.33' TOP OF PVC - 3972.88'

50 0 50 100 FEET  
Scale: 1"=50'

BBC INTERNATIONAL, INC.

CHESAPEAKE WILLIAMS 14 FEDERAL No. 1  
SECTION 14, TOWNSHIP 15 SOUTH, RANGE 35 EAST,  
N.M.P.M., LEA COUNTY, NEW MEXICO



Survey Date: 9/5/07	Sheet 1 of 1 Sheets
W.O. Number: 07.11.1235	Drawn By: L.A.
Date: 9/14/07	DISK: CD#6 07111235



Analysis Date: 03/13/09  
Sampling Date: 03/13/09  
Sample Type: GROUNDWATER  
Sample Condition: COOL & INTACT  
Sample Received By: ML  
Analyzed By: HM

METHOD: Standard Methods	4500-CIB
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Date \_\_\_\_\_

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# ARDINAL LABORATORIES

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(505) 393-2326 FAX (505) 393-2476

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]