

# Closure Report

RECEIVED

SEP 27 2013

NMOCD ARTESIA

2RP-1318

Site Description	
Site Name:	Cedar Canyon 28 Federal #4
Company:	Oxy Permian Ltd.
Legal Description:	U/L K, Section 28, T24S, R29E
County:	Eddy County, NM
GPS Coordinates:	N 32.18629° W 103.99155°

Release Data	
Date of Release:	08/14/2012
Type of Release:	Produced Water
Source of Release:	Valve on suction line left open
Volume of Release:	80 bbls
Volume Recovered:	8 bbls

Remediation Specifications	
Remediation Parameters:	An initial response excavation to a depth of 1 foot was completed. Excavate an additional 1 foot in the areas covered by SP1, SP2, and SP3. Excavate an additional 2 feet in the area covered by SP4. Then, backfill the entire excavation with clean soil.
Remediation Activities:	08/23/2013 to 09/12/2013

Plan Sent to OCD:	01/21/2013	Email from Cliff Brunson to Mike Bratcher
OCD Approval of Plan:	01/24/2013	Email from Mike Bratcher to Cliff Brunson
Plan Sent to BLM:	03/11/2013	Email from Cliff Brunson to J. Van Curen
BLM Approval of Plan:	03/25/2013	Email from J. Van Curen to Cliff Brunson

Supporting Documentation	
Initial C-141	Signed 09/25/2012
Final C-141	Signed 09/24/2013
Site Diagram	August 2012
Groundwater Plot	75'
TOPO Maps	August 2012
Lab Summary	10/05/2012
Lab Analysis	10/05/2012
Correspondence	Request and approval of remediation plan via email

Request for Closure	
Based on the completion of the remediation plan as agreed upon, BBC International requests closure approval from NMOCD.	
Cliff Brunson, President of BBC International Inc.	09/26/2013

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

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

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company	Oxy Permian Ltd.	Contact	CJ Summers
Address	1017 W. Stanolind Rd, Hobbs, NM	Telephone No.	(575) 397-8216
Facility Name	Cedar Canyon 28 Federal #4	Facility Type	Gathering
Surface Owner	BLM	Mineral Owner	
		Lease No.	NM 94651

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	28	24S	29E	1980'	South	1950'	West	Eddy

Latitude N 32.18629° Longitude W 103.99155°

**NATURE OF RELEASE**

Type of Release	Produced water	Volume of Release	80 bbls	Volume Recovered	0 bbls
Source of Release	Valve on suction line left open	Date and Hour of Occurrence	08/14/2012	Date and Hour of Discovery	
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Mike Bratcher- OCD; James Amos- BLM		
By Whom?	Chancey Summers	Date and Hour	08/14/2012 @ 12:58 pm		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse:			

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NMOCD ARTESIA

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
The valve on a 1" steel suction line between the triplex pump and tank was left open which caused 80 bbls of water to spill onto the ground. 0 bbls of water were recovered. The valve was closed to prevent further leaking.

Describe Area Affected and Cleanup Action Taken.\*  
The area affected by the 80 bbls leak is approximately 40' x 100'. Remediation will be performed in accordance with an OCD and BLM approved remediation plan.

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

Signature:	<u>OIL CONSERVATION DIVISION</u>		
Printed Name: Chancey Summers	Approved by District Supervisor:		
Title: HES Specialist	Approval Date:	Expiration Date:	
E-mail Address: Chancey.Summers@oxy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 9/25/12	Phone: (575) 397-8216		

\* Attach Additional Sheets If Necessary

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Form C-141  
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with Rule 116 on back  
side of form

**Release Notification and Corrective Action**

**OPERATOR**

Initial Report  Final Report

Name of Company	Oxy Permian Ltd.	Contact	CJ Summers
Address	1017 W. Stanolind Rd, Hobbs, NM	Telephone No.	(575) 397-8216
Facility Name	Cedar Canyon 28 Federal #4	Facility Type	Gathering
Surface Owner	BLM	Mineral Owner	
		API#	30-015-29118

**LOCATION OF RELEASE**

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
K	28	24S	29E	1980'	South	1950'	West	Eddy

Latitude N 32.18629° Longitude W 103.99155°

**NATURE OF RELEASE**

Type of Release	Produced water	Volume of Release	80 bbls	Volume Recovered	0 bbls
Source of Release	Valve on suction line left open	Date and Hour of Occurrence	08/14/2012	Date and Hour of Discovery	
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Mike Bratcher- OCD; James Amos- BLM		
By Whom?	Chancey Summers	Date and Hour	08/14/2012 @ 12:58 pm		
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse			

**RECEIVED**  
SEP 27 2013  
NMOCD ARTESIA

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*  
The valve on a 1" steel suction line between the triplex pump and tank was left open which caused 80 bbls of water to spill onto the ground. 0 bbls of water were recovered. The valve was closed to prevent further leaking.

Describe Area Affected and Cleanup Action Taken.\*  
The area affected by the 80 bbls leak is approximately 40' x 100'. Remediation was completed in accordance with a remediation plan approved by Mike Bratcher of NMOCD via email on 01/24/2013 and approved by Jennifer Van Curen of the BLM via email on 03/25/2013.

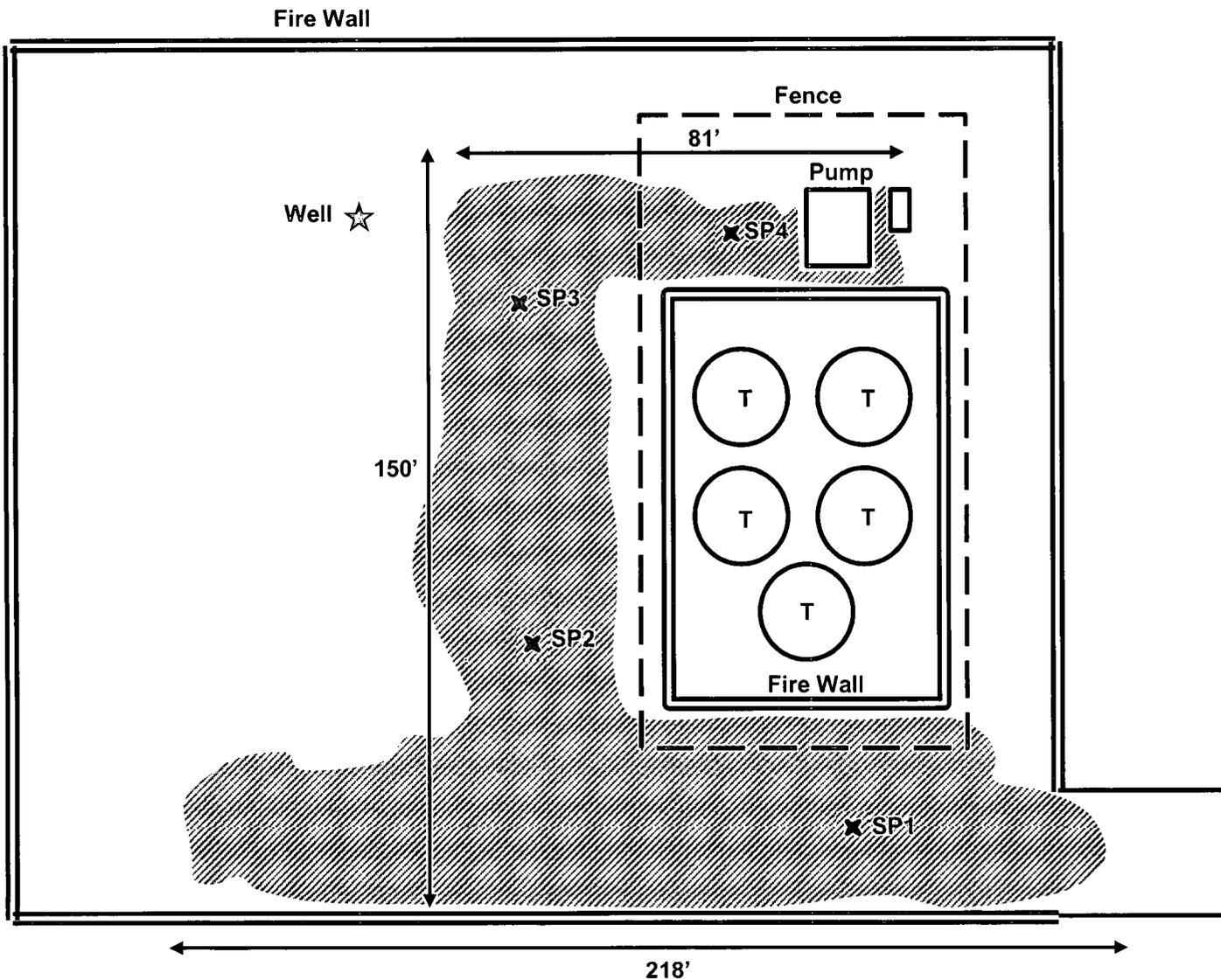
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger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

Signature:	<b>OIL CONSERVATION DIVISION</b>		
Printed Name: Chancey Summers	Approved by District Supervisor:		
Title: HES Specialist	Approval Date:	Expiration Date:	
E-mail Address: Chancey.Summers@oxy.com	Conditions of Approval:		Attached <input type="checkbox"/>
Date: 9/24/13	Phone: (575) 397-8216		

\* Attach Additional Sheets If Necessary



Oxy  
Cedar Canyon 28 Federal #4



U/L K, Section 28, T24S, R29E  
1980' FSL & 1980' FWL  
Eddy County, NM  
N 32.18629° W 103.99155°  
Lease # NM94651

BBC International, Inc.	
Oxy	
Cedar Canyon 28 Federal #4	
Date: 08/17/12	DRWG by: K. Purvis
NOT TO SCALE	File: Oxy 2012



# Groundwater Plot

## Oxy Cedar Canyon 28 Federal #4

County  
Eddy

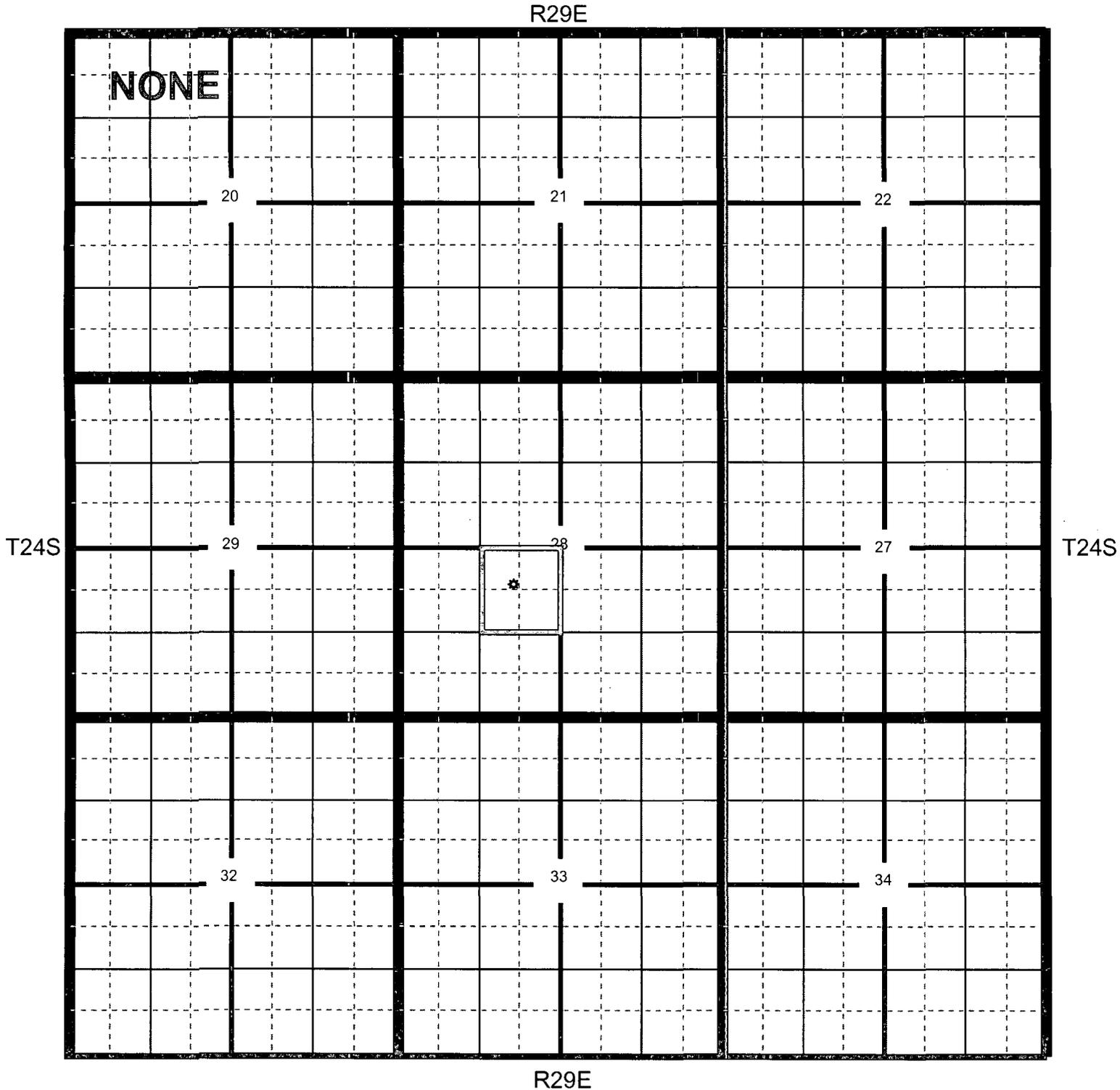
Unit Letter  
K

Section  
28

Township  
24S

Range  
29E

Trend Map 75'



★ Location

○ OCD

○ USGS

○ SEO

● All Databases

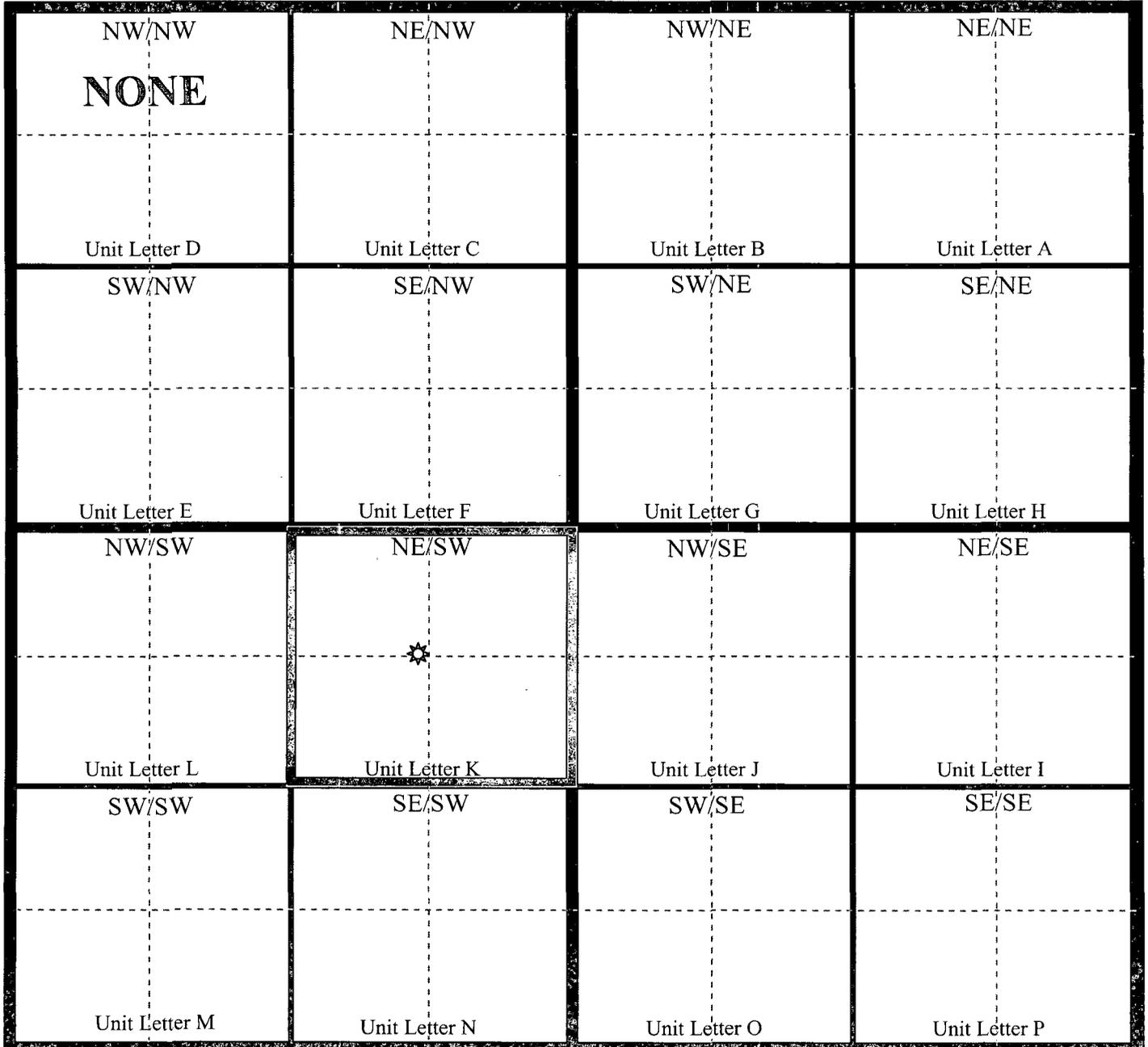
Oxy Cedar Canyon 28 Federal #4

County Eddy      Unit Letter K      Section 28      Township 24S      Range 29E

Trend Map 75'

1

2



3

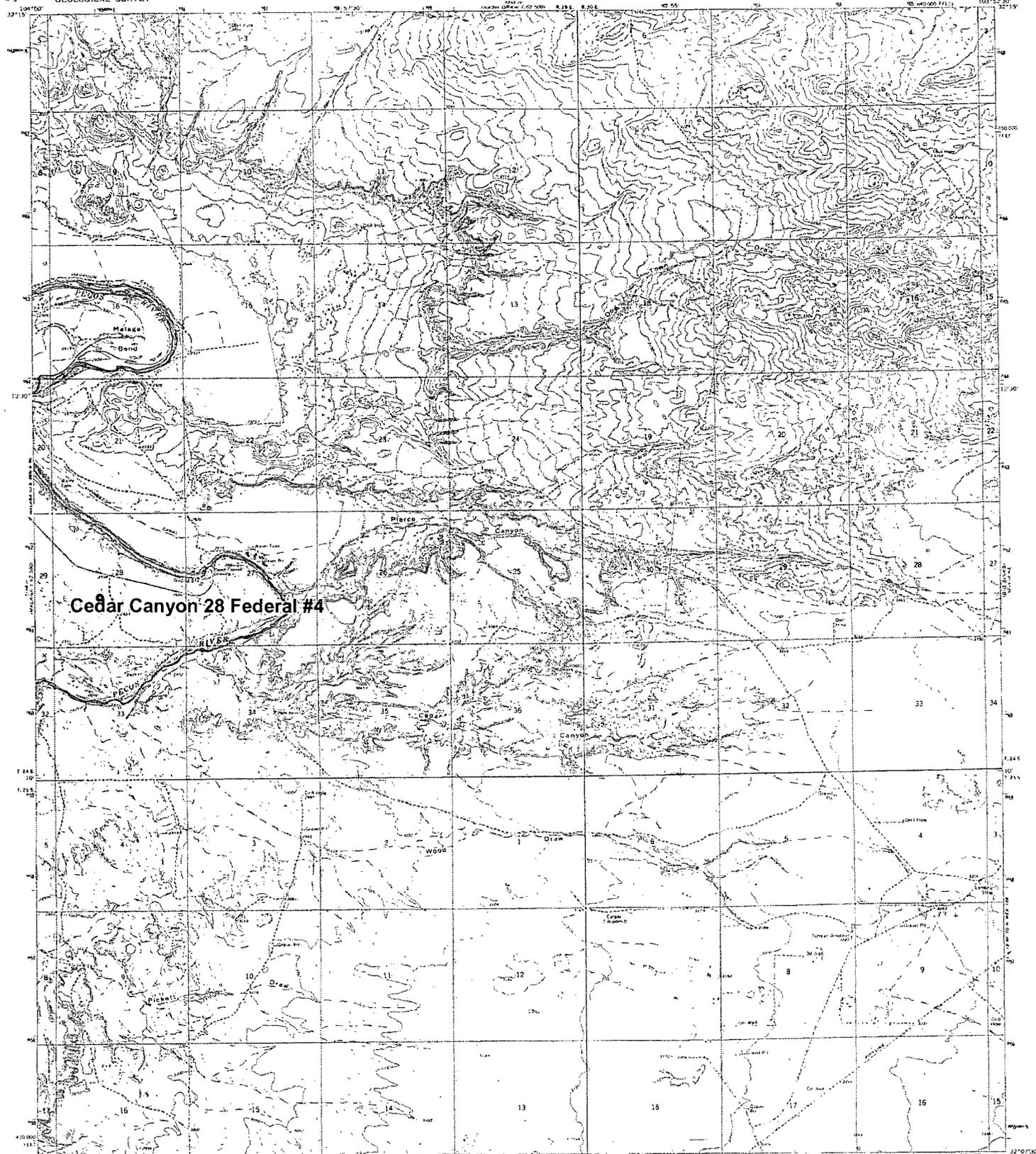
4

# Oxy

## Cedar Canyon 28 Federal #4

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

PIERCE CANYON QUADRANGLE  
NEW MEXICO—EDDY CO.  
7.5 MINUTE SERIES (TOPOGRAPHIC)



**Cedar Canyon 28 Federal #4**

Revised, edited, and published by the Geological Survey  
Control by LSCRS and USGASG  
Topography by photogrammetric methods from aerial  
photographs taken 1957. Field work and 1958  
Vertical projection: 1927 North American datum  
Horizontal projection: 1927 North American datum  
Scale: 1:50,000  
1:50,000 meter (1:160,934.72 feet) scale  
1:50,000 meter (1:160,934.72 feet) scale  
1:50,000 meter (1:160,934.72 feet) scale

SCALE (METERS)  
0 100 200 300 400 500 600 700 800 900 1000  
SCALE (FEET)  
0 300 600 900 1200 1500 1800 2100 2400 2700 3000  
CONTOUR INTERVAL: 10 FEET  
DATUM: IS MEAN SEA LEVEL

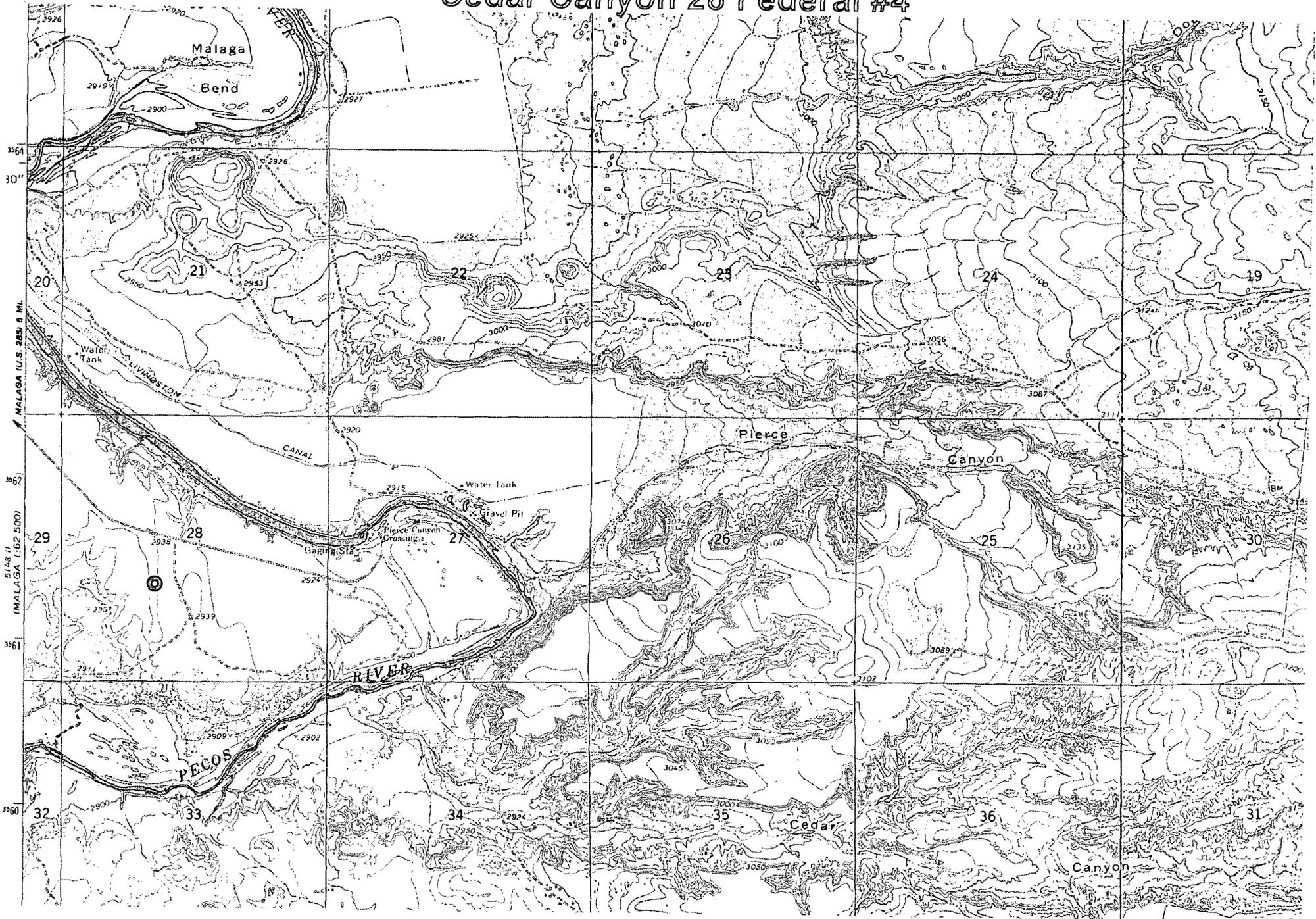
ROAD CLASSIFICATION  
Light duty road all weather  
Improved road  
Controlled road, 1/2 or 3/4  
all-weather

FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR WASHINGTON, D.C. 20542  
A LIST OF DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

PIERCE CANYON, N. MEX.  
1:50,000  
ANS 2248-D (REV. 5-22-64) SERIES 4001

Oxy

# Cedar Canyon 28 Federal #4



**Laboratory Analytical Results Summary  
OXY, Cedar Canyon 28 Federal #4 CTB**

		Sample	SP1 @ 1'	SP1 @ 3'	SP1 @ 6'	SP1 @ 8'
Analyte	Method	Date	10/5/12	10/5/12	10/5/12	10/5/12
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Chloride</b>	SM4500CI-B		2320	592	480	32

		Sample	SP2 @ 1'	SP2 @ 3'	SP2 @ 6'	SP2 @ 8'
Analyte	Method	Date	10/5/12	10/5/12	10/5/12	10/5/12
			mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	N/A	N/A	N/A
<b>Toluene</b>	BTEX 8021B		<0.050	N/A	N/A	N/A
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	N/A	N/A	N/A
<b>Total Xylenes</b>	BTEX 8021B		<0.150	N/A	N/A	N/A
<b>Chloride</b>	SM4500CI-B		2520	608	448	16
<b>GRO</b>	TPH 8015M		<10.0	N/A	N/A	N/A
<b>DRO</b>	TPH 8015M		<10.0	N/A	N/A	N/A

		Sample	SP3 @ 1'	SP3 @ 3'	SP3 @ 6'	SP3 @ 8'	SP3 @ 10'
Analyte	Method	Date	10/5/12	10/5/12	10/5/12	10/5/12	10/5/12
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Chloride</b>	SM4500CI-B		4640	640	704	416	<16.0

		Sample	SP4 @ 1'	SP4 @ 3'	SP4 @ 6'	SP4 @ 8'	SP4 @ 10'
Analyte	Method	Date	10/5/12	10/5/12	10/5/12	10/5/12	10/5/12
			mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
<b>Benzene</b>	BTEX 8021B		<0.050	N/A	N/A	N/A	N/A
<b>Toluene</b>	BTEX 8021B		<0.050	N/A	N/A	N/A	N/A
<b>Ethylbenzene</b>	BTEX 8021B		<0.050	N/A	N/A	N/A	N/A
<b>Total Xylenes</b>	BTEX 8021B		<0.150	N/A	N/A	N/A	N/A
<b>Chloride</b>	SM4500CI-B		3600	2280	720	1010	32
<b>GRO</b>	TPH 8015M		<10.0	N/A	N/A	N/A	N/A
<b>DRO</b>	TPH 8015M		<10.0	N/A	N/A	N/A	N/A

October 17, 2012

Cliff Brunson  
BBC International, Inc.  
P.O. Box 805  
Hobbs, NM 88241

RE: CEDAR CANYON 28 FED#4 CTB

Enclosed are the results of analyses for samples received by the laboratory on 10/11/12 16:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-11-3. 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](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited 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.

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

**Analytical Results For:**

 BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (505) 397-0397

Received:	10/11/2012	Sampling Date:	10/05/2012
Reported:	10/17/2012	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 FED#4 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SP 1 @ 1' (H202482-01)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2320	16.0	10/16/2012	ND	400	100	400	7.69	

**Sample ID: SP 1 @ 3' (H202482-02)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	592	16.0	10/16/2012	ND	400	100	400	7.69	

**Sample ID: SP 1 @ 6' (H202482-03)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	480	16.0	10/16/2012	ND	400	100	400	7.69	

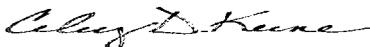
**Sample ID: SP 1 @ 8' (H202482-04)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/16/2012	ND	400	100	400	7.69	

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (505) 397-0397

Received:	10/11/2012	Sampling Date:	10/05/2012
Reported:	10/17/2012	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 FED#4 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SP 2 @ 1' (H202482-05)**

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/16/2012	ND	2.07	104	2.00	10.6		
Toluene*	<0.050	0.050	10/16/2012	ND	1.89	94.6	2.00	9.65		
Ethylbenzene*	<0.050	0.050	10/16/2012	ND	1.87	93.5	2.00	9.26		
Total Xylenes*	<0.150	0.150	10/16/2012	ND	5.53	92.2	6.00	8.46		

*Surrogate: 4-Bromofluorobenzene (PIC) 105 % 89.4-126*

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>2520</b>	16.0	10/16/2012	ND	400	100	400	7.69		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	10/13/2012	ND	179	89.3	200	4.40		
DRO >C10-C28	<10.0	10.0	10/13/2012	ND	170	84.8	200	8.47		

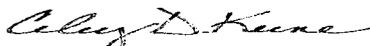
*Surrogate: 1-Chlorooctane 69.3 % 65.2-140*
*Surrogate: 1-Chlorooctadecane 67.7 % 63.6-154*
**Sample ID: SP 2 @ 3' (H202482-06)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>608</b>	16.0	10/16/2012	ND	400	100	400	3.92		

Cardinal Laboratories

\*=Accredited Analyte

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Caley D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (505) 397-0397

Received:	10/11/2012	Sampling Date:	10/05/2012
Reported:	10/17/2012	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 FED#4 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SP 2 @ 6' (H202482-07)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	448	16.0	10/16/2012	ND	400	100	400	3.92	

**Sample ID: SP 2 @ 8' (H202482-08)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/16/2012	ND	400	100	400	3.92	

**Sample ID: SP 3 @ 1' (H202482-09)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	4640	16.0	10/16/2012	ND	400	100	400	3.92	

**Sample ID: SP 3 @ 3' (H202482-10)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	640	16.0	10/16/2012	ND	400	100	400	3.92	

**Sample ID: SP 3 @ 6' (H202482-11)**

Chloride, SM4500Cl-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	704	16.0	10/16/2012	ND	400	100	400	3.92	

Cardinal Laboratories

\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

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 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (505) 397-0397

Received:	10/11/2012	Sampling Date:	10/05/2012
Reported:	10/17/2012	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 FED#4 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SP 3 @ 8' (H202482-12)**

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	416	16.0	10/16/2012	ND	400	100	400	3.92	

**Sample ID: SP 3 @ 10' (H202482-13)**

Chloride, SM4500CI-B	mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/16/2012	ND	400	100	400	3.92	

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\* = Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (505) 397-0397

Received:	10/11/2012	Sampling Date:	10/05/2012
Reported:	10/17/2012	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 FED#4 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SP 4 @ 1' (H202482-14)**

BTEX 8021B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/16/2012	ND	2.07	104	2.00	10.6		
Toluene*	<0.050	0.050	10/16/2012	ND	1.89	94.6	2.00	9.65		
Ethylbenzene*	<0.050	0.050	10/16/2012	ND	1.87	93.5	2.00	9.26		
Total Xylenes*	<0.150	0.150	10/16/2012	ND	5.53	92.2	6.00	8.46		

Surrogate: 4-Bromofluorobenzene (PIL) 101 % 89.4-126

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>3600</b>	16.0	10/16/2012	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10	<10.0	10.0	10/13/2012	ND	179	89.3	200	4.40		
DRO >C10-C28	<10.0	10.0	10/13/2012	ND	170	84.8	200	8.47		

Surrogate: 1-Chlorooctane 84.7 % 65.2-140

Surrogate: 1-Chlorooctadecane 85.4 % 63.6-154

**Sample ID: SP 4 @ 3' (H202482-15)**

Chloride, SM4500CI-B		mg/kg		Analyzed By: AP						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>2280</b>	16.0	10/16/2012	ND	400	100	400	3.92		

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Caley D. Keene, Lab Director/Quality Manager

**Analytical Results For:**

 BBC International, Inc.  
 Cliff Brunson  
 P.O. Box 805  
 Hobbs NM, 88241  
 Fax To: (505) 397-0397

Received:	10/11/2012	Sampling Date:	10/05/2012
Reported:	10/17/2012	Sampling Type:	Soil
Project Name:	CEDAR CANYON 28 FED#4 CTB	Sampling Condition:	Cool & Intact
Project Number:	NONE GIVEN	Sample Received By:	Jodi Henson
Project Location:	NOT GIVEN		

**Sample ID: SP 4 @ 6' (H202482-16)**

Chloride, SM4500CI-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	720	16.0	10/16/2012	ND	400	100	400	3.92	

**Sample ID: SP 4 @ 8' (H202482-17)**

Chloride, SM4500CI-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1010	16.0	10/16/2012	ND	400	100	400	3.92	

**Sample ID: SP 4 @ 10' (H202482-18)**

Chloride, SM4500CI-B	mg/kg	Analyzed By: AP							
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/16/2012	ND	400	100	400	3.92	

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Celey D. Keene, Lab Director/Quality Manager

**Notes and Definitions**

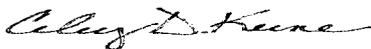
ND	Analyte NOT DETECTED at or above the reporting limit
RPD	Relative Percent Difference
**	Samples not received at proper temperature of 6°C or below.
***	Insufficient time to reach temperature.
-	Chloride by SM4500Cl-B does not require samples be received at or below 6°C Samples reported on an as received basis (wet) unless otherwise noted on report

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\*=Accredited Analyte

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Celestine D. Keene, Lab Director/Quality Manager





**ARDINAL LABORATORIES**  
 101 East Marland, Hobbs, NM 88240  
 (505) 393-2326 FAX (505) 393-2476

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

2 of 2

Company Name: BBC International, Inc.				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																						
Project Manager: Cliff Brunson				P.O. #:																										
Address: P.O. Box 805				Company:																										
City: Hobbs State: NM Zip: 88241				Attn:																										
Phone #: 575-397-6388 Fax #: 575-397-0397				Address: <i>SAME</i>																										
Project #: Project Owner: <i>OKY</i>				City:																										
Project Name: <i>CEDAR Canyon 28 FEB # 4LCB</i>				State: Zip:																										
Project Location:				Phone #:																										
Sampler Name: <i>ROGER HERNANDEZ</i>				Fax #:																										
FOR LAB USE ONLY																														
Lab I.D.		Sample I.D.		# CONTAINERS	MATRIX			PRESERV.			SAMPLING																			
				(GRAB OR C/DIMP)	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID/BASE:	ICE/COOL	OTHER:	DATE	TIME															
<i>H202493</i>																														
<i>11</i>		<i>SP306'</i>		<i>G</i>			<i>✓</i>				<i>✓</i>			<i>10.5</i>	<i>232</i>	<i>✓</i>														
<i>12</i>		<i>0'</i>		<i>G</i>			<i>✓</i>				<i>✓</i>			<i>10.5</i>	<i>248</i>	<i>✓</i>														
<i>13</i>		<i>10'</i>		<i>G</i>			<i>✓</i>				<i>✓</i>			<i>10.5</i>	<i>311</i>	<i>✓</i>														
<i>14</i>		<i>SP40 1'</i>		<i>G</i>			<i>✓</i>				<i>✓</i>			<i>10.5</i>	<i>328</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>												
<i>15</i>		<i>3'</i>		<i>G</i>			<i>✓</i>				<i>✓</i>			<i>10.5</i>	<i>335</i>	<i>✓</i>														
<i>16</i>		<i>6'</i>		<i>G</i>			<i>✓</i>				<i>✓</i>			<i>10.5</i>	<i>345</i>	<i>✓</i>														
<i>17</i>		<i>8'</i>		<i>G</i>			<i>✓</i>				<i>✓</i>			<i>10.5</i>	<i>353</i>	<i>✓</i>														
<i>18</i>		<i>10'</i>		<i>G</i>			<i>✓</i>				<i>✓</i>			<i>10.5</i>	<i>400</i>	<i>✓</i>														

*CHLORIDE*  
*TAH*  
*BTEX*

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Relinquished By: <i>Roger Hernandez</i>		Date: <i>10/1/12</i>	Received By: <i>Jodi Anderson</i>		Phone Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
		Time: <i>4:50</i>			Fax Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Fax #:
Relinquished By:		Date:	Received By:		REMARKS:	
		Time:				
Delivered By: (Circle One)			Sample Condition		CHECKED BY:	
Sampler - UPS - Bus - Other:			Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No		(Initials)	

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

*# 206*

## Kathy Purvis

---

**From:** Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>  
**Sent:** Thursday, January 24, 2013 4:17 PM  
**To:** Cliff P. Brunson  
**Cc:** C J Summers; Ken Swinney; Jennifer Gilkey; Kathy Purvis  
**Subject:** RE: Oxy-Cedar Canyon 28 Federal #4-Remediation Plan

Reference: OXY USA \* Cedar Canyon 28 Fed 4 \* 30-015-29118 \* K-28-24s-29e \* Eddy County, New Mexico  
NMOCD Tracking Number: 2RP-1318 \* Date of release: 8/14/12

Cliff,

Your proposal for remediation of the above referenced release is approved. The well site is situated on Federal surface and may require like approval by BLM.

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, please contact me.

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

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**From:** Cliff P. Brunson [<mailto:cbrunson@bbcinternational.com>]  
**Sent:** Monday, January 21, 2013 6:06 PM  
**To:** Bratcher, Mike, EMNRD  
**Cc:** C J Summers; Ken Swinney; Jennifer Gilkey; Kathy Purvis  
**Subject:** Oxy-Cedar Canyon 28 Federal #4-Remediation Plan

Mike,

This e-mail is to confirm our discussion on January 14, 2013 concerning the remediation plan for the release that occurred at the Oxy Cedar Canyon 28 Federal #4. I have attached the site drawing and the summary of the laboratory data we reviewed during our discussion for your files. As agreed, Oxy will excavate 2 feet in the areas covered by SP1, SP2, and SP3 and will excavate 3 feet in depth in the area covered by SP4. As discussed, an initial response to the spill was done immediately after the spill occurred and 1 foot of the impacted soil has already been removed. The depth referred to earlier in this e-mail is the total depths that will be removed not additional to what has already been removed. The site will then be backfilled with clean soil. The depth to groundwater in this area is approximately 75 feet.

If you would please reply back via e-mail with your concurrence of this remediation plan, it would be greatly appreciated.

Oxy and I thank you for your assistance in handling this matter.

Thanks, Cliff

Cliff P. Brunson, CEI, CRS  
President  
BBC International, Inc.  
World-Wide Environmental Specialists  
Mailing Address:  
P. O. Box 805  
Hobbs, NM 88241-0805 USA  
Shipping Address:  
1324 W. Marland St.  
Hobbs, NM 88240 USA  
Phone: (575) 397-6388  
Fax: (575) 397-0397  
E-Mail: [cbrunson@bbcinternational.com](mailto:cbrunson@bbcinternational.com)

\*\*\*\*\*

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\*\*\*\*\*

## Kathy Purvis

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**From:** Ken Swinney <kswinney@bbcinternational.com>  
**Sent:** Tuesday, April 02, 2013 11:03 AM  
**To:** 'Kathy Purvis'  
**Subject:** FW: remediation plans on the Cedar canyon 28-4 and Amax 24 -8`

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**From:** Van Curen, Jennifer [<mailto:jvancure@blm.gov>]  
**Sent:** Monday, March 25, 2013 12:11 PM  
**To:** Chancey Summers; [kswinney@bbcinternational.com](mailto:kswinney@bbcinternational.com); Jennifer Gilkey; Brunson  
**Subject:** Re: remediation plans on the Cedar canyon 28-4 and Amax 24 -8`

With the Amex plan, these are the minimal depths. There will need to be bottom and side samples for closure. I would think that the depths might need to be a foot on each area except the 7-9 which my thoughts are a foot. But if you get good results from the followup samples, we can back fill. It will be monitored that there are higher results at a lower depth from a past event, but if the OCD is not concerned with the lower depths, it is not a problem with the surface unless it prevents vegetation growth. If you have any questions please let me know.

JENNIFER E VAN CUREN  
ENVIRONMENTAL PROTECTION SPECIALIST  
DOI-BLM-CARLSBAD FIELD OFFICE  
320 E GREENE ST. CARLSBAD, NM 88220  
OFFICE- 575-234-5905  
CELL - 575-361-0042  
FAX - 575-234-5927

On Mon, Mar 11, 2013 at 1:31 PM, Van Curen, Jennifer <[jvancure@blm.gov](mailto:jvancure@blm.gov)> wrote:  
This is the first that I have heard of the Amax 24-8 spill. I will need to review it. The Cedar Canyon I visited. This site also has some salt impacted soils on the north and south of the old pit area. I would also like to see this area addressed simultaneously. The berm along that edge will need to be removed due to be heavily salt impacted. Can you get back to me on this please? Thanks

JENNIFER E VAN CUREN  
ENVIRONMENTAL PROTECTION SPECIALIST  
DOI-BLM-CARLSBAD FIELD OFFICE  
320 E GREENE ST. CARLSBAD, NM 88220  
OFFICE- 575-234-5905  
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FAX - 575-234-5927