

MARTIN YATES, III  
1912-1985

FRANK W. YATES  
1936-1986

S.P. YATES  
1914-2008



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210-2118  
TELEPHONE (575) 748-1471

JOHN A. YATES, ----  
CHAIRMAN OF THE BOARD  
- PRESIDENT

JOHN A. YATES JR.  
ASSISTANT TO THE PRESIDENT

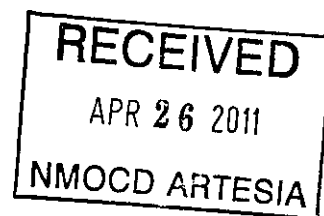
JAMES S. BROWN  
CHIEF OPERATING OFFICER

JOHN D. PERINI  
CHIEF FINANCIAL OFFICER

March 12, 2010

Mr. Mike Bratcher  
NMOCD District II  
1301 West Grand  
Artesia, NM 88210

Re: Zinnia BKC Federal #1  
30-015-27939  
Section 27, T20S-R3029E  
Eddy County, New Mexico



Dear Mr. Bratcher,

Enclosed please find a Form C-141, Final Report for the above captioned site regarding the release on January 14, 2010 (8 bbls of produced water with 0 bbls produced water being recovered). The release was from a failed Murphy switch, causing the stock tank to over flow. Samples were taken on 3/2/2010 and sent to an NMOCD approved laboratory for analysis, based on results (enclosed with a sample diagram), TPH & BTEX are below RRAL's for the site ranking of (10) ten, (chlorides for documentation, results indicate decreasing levels); Yates Petroleum Corporation requests closure.

If you have any questions, please call me at 575-748-4217.

Thank you.

YATES PETROLEUM CORPORATION

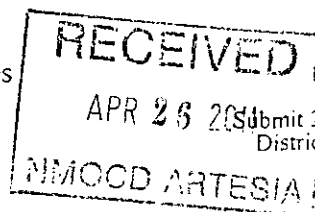
Robert Asher  
Environmental Regulatory Agent

/rca  
Enclosure(s)

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 Yates Petroleum Corporation	OGRID Number 25575	Contact Robert Asher
Address 104 S. 4 <sup>TH</sup> Street		Telephone No. 575-748-1471
Facility Name Zinnia BKC Federal #1	API Number 30-015-27939	Facility Type Battery

Surface Owner Federal	Mineral Owner Federal	Lease No. NM-83068
--------------------------	--------------------------	-----------------------

#### LOCATION OF RELEASE

Unit Letter E	Section 27	Township 20S	Range 29E	Feet from the 1980'	North/South Line North	Feet from the 910'	East/West Line West	County Eddy
------------------	---------------	-----------------	--------------	------------------------	---------------------------	-----------------------	------------------------	----------------

Latitude 32.54599 Longitude 104.06794

#### NATURE OF RELEASE

Type of Release Produced Water	Volume of Release 8 B/PW	Volume Recovered 0 B/PW
Source of Release Water Tank	Date and Hour of Occurrence 1/14/2010; PM	Date and Hour of Discovery 1/14/2010; PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	

If a Watercourse was Impacted, Describe Fully.\*  
N/A


Describe Cause of Problem and Remedial Action Taken.\*

Murphy switch failed, not activating the water pump causing water tank to run over. No produced water to recover, pump started on water tank.

Describe Area Affected and Cleanup Action Taken.\*

An approximate area of 5' X 30'. All water remained within bermed battery. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX. Chlorides will be documented. If results are above RRAL's for TPH & BTEX with the site ranking of ten (10), a work plan or corrective action plan will be submitted. If results are below RRAL's for TPH & BTEX with the site ranking of ten (10), a Final Report C-141 will be submitted requesting closure. **Depth to Ground Water: 50-99' (approximately 70'), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 10. Based on enclosed analytical results (chlorides documented, decreasing chlorides) and amounts released, Yates Petroleum Corporation requests closure.**

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: Robert Asher	Approved by District Supervisor:	
Title: Environmental Regulatory Agent	Approval Date:	Expiration Date:
E-mail Address: boba@yatespetroleum.com	Conditions of Approval:	Attached <input type="checkbox"/>
Date: Friday, March 12, 2010 Phone: 575-748-4217	2RP-	

\* Attach Additional Sheets If Necessary

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

AKW1111143297

#### OPERATOR

☒ Initial Report ☐ Final Report

Name of Company Yates Petroleum Corporation	OGRID Number 25575	Contact Robert Asher
Address 104 S. 4 <sup>TH</sup> Street	Telephone No. 575-748-1471	
Facility Name Zinnia BKC Federal #1	API Number 30-015-27939	Facility Type Battery
Surface Owner Federal	Mineral Owner Federal	Lease No. NM-83068

#### LOCATION OF RELEASE

Unit Letter E	Section 27	Township 20S	Range 29E	Feet from the 1980'	North/South Line North	Feet from the 910'	East/West Line West	County Eddy
------------------	---------------	-----------------	--------------	------------------------	---------------------------	-----------------------	------------------------	----------------

Latitude 32.54599 Longitude 104.06794

#### NATURE OF RELEASE

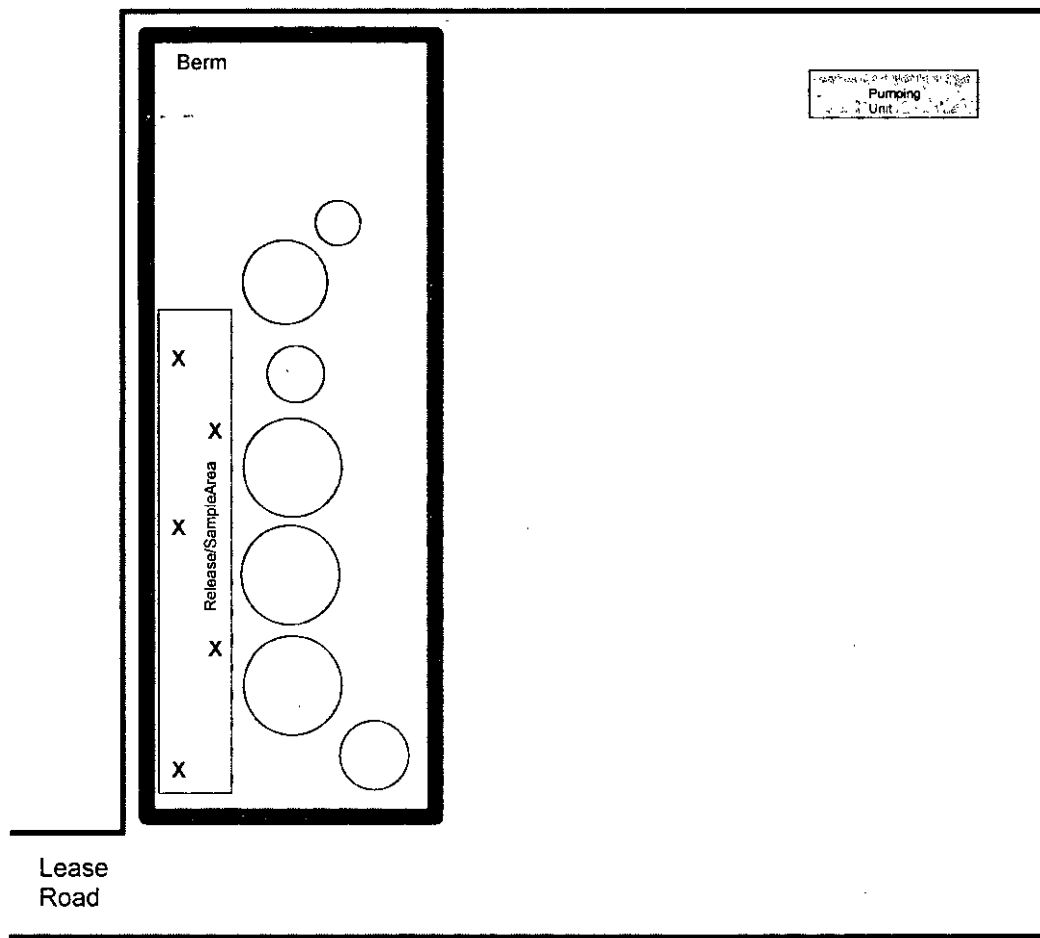
Type of Release Produced Water	Volume of Release 8 B/PW	Volume Recovered 0 B/PW
Source of Release Water Tank	Date and Hour of Occurrence 1/14/2010; PM	Date and Hour of Discovery 1/14/2010; PM
Was Immediate Notice Given? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required	If YES, To Whom? N/A	
By Whom? N/A	Date and Hour N/A	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. N/A	
If a Watercourse was Impacted, Describe Fully.* N/A		
Describe Cause of Problem and Remedial Action Taken.* Murphy switch failed, not activating the water pump causing water tank to run over. No produced water to recover, pump started on water tank.		
Describe Area Affected and Cleanup Action Taken.* An approximate area of 5' X 30'. All water remained within bermed battery. Vertical and horizontal delineation samples will be taken and analysis ran for TPH & BTEX. Chlorides will be documented. If results are above RRAL's for TPH & BTEX with the site ranking of ten (10), a work plan or corrective action plan will be submitted. If results are below RRAL's for TPH & BTEX with the site ranking of ten (10), a Final Report C-141 will be submitted requesting closure. Depth to Ground Water: 50-99' (approximately 70'), Wellhead Protection Area: No, Distance to Surface Water Body: >1000', SITE RANKING IS 10.		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOC 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 NMOC 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, NMOC 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>Robert Asher</u>	OIL CONSERVATION DIVISION	
Printed Name: Robert Asher	Approved by District Supervisor: <u>M. H. Brannon</u>	
Title: Environmental Regulatory Agent	Approval Date: <u>4/21/11</u>	Expiration Date:
E-mail Address: boba@yatespetroleum.com	Conditions of Approval:	
Date: Monday, January 25, 2010 Phone: 575-748-4217	Remediation per OCD Rules & Guidelines. <b>SUBMIT REMEDIATION PROPOSAL NOT LATER THAN:</b>	

\* Attach Additional Sheets If Necessary

5/21/11

2 RP-759



Sample ID	Sample Area	Sample Date	Sample Type	Depth	BTEX	GRO	DRO	TOTAL	Chlorides
GS/Comp-000.5	Battery Area	3/2/2010	Grab/Auger	6"	ND	ND	47.7	47.7	2010
GS/Comp-001.0	Battery Area	3/2/2010	Grab/Auger	12"	ND	ND	27.4	27.4	1540
GS/Comp-001.5	Battery Area	3/2/2010	Grab/Auger	18"	ND	ND	25.6	25.6	1250

Site Ranking is Ten (10). Depth to Ground Water 50-99' (approx. 70').

All results are ppm. Chloride results are for documentation. BSL - Below Subsurface Level. X - Sample Points



Zinnia BKC Federal #1

30-015-27939

Section 27, T20S-R29E

Eddy County, NM

SAMPLE DIAGRAM (Not to Scale)

Xenco Laboratories: #364138 & 364139  
Report Date: 3/10/2010

Prepared by Robert Asher  
Environmental Regulatory Agent

# Analytical Report 364138

for

## Yates Petroleum Corporation

Project Manager: Robert Asher

Zinnia BCK Federal # 1

30-015-27939

10-MAR-10



12600-West I-20 East Odessa, Texas 79765

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)  
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)  
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)  
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)  
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370)

Xenco-Boca Raton (EPA Lab Code: FL00449):

Florida (E86240), South Carolina (96031001), Louisiana (04154), Georgia (917)

North Carolina (444), Texas (T104704468-TX), Illinois (002295)



10-MAR-10

Project Manager: Robert Asher  
Yates Petroleum Corporation  
105 South Fourth St.  
Artesia, NM 88210

Reference: XENCO Report No: 364138  
Zinnia BCK Federal # 1  
Project Address: Eddy County

**Robert Asher:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 364138. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 364138 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

**Brent Barron, II**

Odessa Laboratory Manager

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America



## Sample Cross Reference 364138



Yates Petroleum Corporation, Artesia, NM  
Zinnia BCK Federal # 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
GS/Comp-000.5	S	Mar-02-10 14:32	6 - 6 In	364138-001
GS/Comp-001.0	S	Mar-02-10 14:50	12 - 12 In	364138-002
GS/Comp-001.5	S	Mar-02-10 15:06	18 - 18 In	364138-003



## CASE NARRATIVE

Client Name: Yates Petroleum Corporation

Project Name: Zinnia BCK Federal # 1



Project ID: 30-015-27939

Report Date: 10-MAR-10

Work Order Number: 364138

Date Received: 03/03/2010

---

**Sample receipt non conformances and Comments:**

None

---

**Sample receipt Non Conformances and Comments per Sample:**

None

**Analytical Non Conformances and Comments:**

Batch: LBA-796840 TPH by SW 8015B

SW8015B\_NM

Batch 796840, 1-Chlorooctane, o-Terphenyl recovered above QC limits . Matrix interferences is suspected; data not confirmed by re-analysis

Samples affected are: 364138-003.

Batch: LBA-796984 BTEX by EPA 8021

SW8021BM

Batch 796984, 1,4-Difluorobenzene recovered below QC limits . Matrix interferences is suspected; data not confirmed by re-analysis

Samples affected are: 363830-004 D, 364138-002.

---

SW8021BM

Batch 796984, Ethylbenzene, o-Xylene RPD is outside the QC limit. This is most likely due to sample non-homogeneity.

Samples affected are: 364138-002, -001, -003.

Batch: LBA-797201 Percent Moisture

None





# Certificate of Analysis Summary 364138

## Yates Petroleum Corporation, Artesia, NM

Project Name: Zinnia BCK Federal # 1

Project Id: 30-015-27939

Contact: Robert Asher

Project Location: Eddy County



Date Received in Lab: Wed Mar-03-10 09:33 am

Report Date: 10-MAR-10

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:		364138-001		364138-002		364138-003	
	Field Id:	Depth:	GS/Comp-000.5	6-6 In SOIL	GS/Comp-001.0	12-12 In SOIL	GS/Comp-001.5	18-18 In SOIL
BTX by EPA 8021	Matrix:		Mar-02-10 14:32		Mar-02-10 14:50		Mar-02-10 15:06	
	Sampled:							
	Extracted:		Mar-05-10 15:00		Mar-05-10 15:00		Mar-05-10 15:00	
	Analyzed:		Mar-06-10 03:30		Mar-06-10 03:53		Mar-06-10 04:15	
	Units/RL:		mg/kg RL		mg/kg RL		mg/kg RL	
Benzene			ND 0.0012		ND 0.0013		ND 0.0013	
Toluene			ND 0.0025		ND 0.0025		ND 0.0026	
Ethylbenzene			ND 0.0012		ND 0.0013		ND 0.0013	
m,p-Xylenes			ND 0.0025		ND 0.0025		ND 0.0026	
o-Xylene			ND 0.0012		ND 0.0013		ND 0.0013	
Xylenes, Total			ND 0.0012		ND 0.0013		ND 0.0013	
Total BTX			ND 0.0012		ND 0.0013		ND 0.0013	
Percent Moisture	Extracted:							
	Analyzed:		Mar-04-10 12:45		Mar-04-10 12:45		Mar-04-10 12:45	
	Units/RL:		% RL		% RL		% RL	
Percent Moisture			20.1 1.00		21.1 1.00		23.3 1.00	
TPH by SW 8015B	Extracted:		Mar-05-10 14:44		Mar-05-10 14:44		Mar-05-10 14:44	
	Analyzed:		Mar-06-10 14:39		Mar-07-10 13:08		Mar-07-10 13:34	
	Units/RL:		mg/kg RL		mg/kg RL		mg/kg RL	
C6-C10 Gasoline Range Hydrocarbons			ND 18.8		ND 19.0		ND 19.7	
C10-C28 Diesel Range Hydrocarbons			47.7 18.8		27.4 19.0		25.6 19.7	
Total TPH			47.7 18.8		27.4 19.0		25.6 19.7	

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi

Brent Barron, II  
Odessa Laboratory Manager



## Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the MQL and above the SQL.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- ~~**K** Sample analyzed outside of recommended hold time.~~
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- BRL** Below Reporting Limit.
- RL** Reporting Limit

\* Outside XENCO's scope of NELAC Accreditation.

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - San Antonio - Corpus Christi - Midland/Odessa - Tampa - Miami - Latin America

4143 Greenbriar Dr, Stafford, Tx 77477  
9701 Harry Hines Blvd, Dallas, TX 75220  
5332 Blackberry Drive, San Antonio TX 78238  
2505 North Falkenburg Rd, Tampa, FL 33619  
5757 NW 158th St, Miami Lakes, FL 33014  
12600 West I-20 East, Odessa, TX 79765  
842 Cantwell Lane, Corpus Christi, TX 78408

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(361) 884-0371	(361) 884-9116

## CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Phone: 432-563-1800  
Fax: 432-563-1713

**Project Name: Zinnia BCK Federal #1**

Project #: 30-015-27939

Project Loc: Eddy County

**PO #: 105832**

Fax No: 975-748-4602

Report Format: ☒ Standard

[boba@yatespetroleum.com](mailto:boba@yatespetroleum.com)

Final Ver. 1.000

# Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client:

Yates Petroleum

Date/ Time:

3.3.10 9:33

Lab ID #:

364138 / 364139

Initials:

AL

### Sample Receipt Checklist

Client Initials

#1	Temperature of container/ cooler?	<u>Yes</u>	No	<u>3.6</u> °C	
#2	Shipping container in good condition?	<u>Yes</u>	No		
#3	Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	Not Present	
#5	Chain of Custody present?	<u>Yes</u>	No		
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No		
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No		
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	ID written on Cont/ Lid	
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No		
#11	Containers supplied by ELOT?	<u>Yes</u>	No		
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below	
#13	Samples properly preserved?	<u>Yes</u>	No	See Below	
#14	Sample bottles intact?	<u>Yes</u>	No		
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No		
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No		
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below	
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below	
#19	Subcontract of sample(s)?	<u>Yes</u>	No	<u>Not Applicable</u>	
#20	VOC samples have zero headspace?	<u>Yes</u>	No	<u>Not Applicable</u>	

### Variance Documentation

Contact:

Contacted by:

Date/ Time:

Regarding:

Corrective Action Taken:

Check all that Apply:

☐

See attached e-mail/ fax

☐

Client understands and would like to proceed with analysis

☐

Cooling process had begun shortly after sampling event

# Analytical Report 364139

for

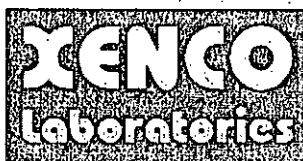
**Yates Petroleum Corporation**

**Project Manager: Robert Asher**

**Zinnia BCK Federal # 1**

**30-015-27939**

**10-MAR-10**



**12600-West-I-20-East Odessa, Texas-79765**

Xenco-Houston (EPA Lab code: TX00122):

Texas (T104704215-TX), Arizona (AZ0738), Arkansas (08-039-0), Connecticut (PH-0102), Florida (E871002)  
Illinois (002082), Indiana (C-TX-02), Iowa (392), Kansas (E-10380), Kentucky (45), Louisiana (03054)  
New Hampshire (297408), New Jersey (TX007), New York (11763), Oklahoma (9218), Pennsylvania (68-03610)  
Rhode Island (LAO00312), USDA (S-44102)

Xenco-Atlanta (EPA Lab Code: GA00046):

Florida (E87429), North Carolina (483), South Carolina (98015), Utah (AALI1), West Virginia (362), Kentucky (85)  
Louisiana (04176), USDA (P330-07-00105)

Xenco-Miami (EPA Lab code: FL01152): Florida (E86678), Maryland (330)

Xenco-Tampa Mobile (EPA Lab code: FL01212): Florida (E84900)

Xenco-Odessa (EPA Lab code: TX00158): Texas (T104704400-TX)

Xenco-Dallas (EPA Lab code: TX01468): Texas (T104704295-TX)

Xenco-Corpus Christi (EPA Lab code: TX02613): Texas (T104704370)

Xenco-Boca Raton (EPA Lab Code: FL00449):

Florida(E86240),South Carolina(96031001), Louisiana(04154), Georgia(917)

North Carolina(444), Texas(T104704468-TX), Illinois(002295)



10-MAR-10

Project Manager: **Robert Asher**  
**Yates Petroleum Corporation**  
105 South Fourth St.  
Artesia, NM 88210

Reference: XENCO Report No: **364139**  
**Zinnia BCK Federal # 1**  
Project Address: Eddy County

**Robert Asher:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number 364139. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. Estimation of data uncertainty for this report is found in the quality control section of this report unless otherwise noted. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 364139 will be filed for 60 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

**Brent Barron, II**

Odessa Laboratory Manager

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - San Antonio - Austin - Tampa - Miami - Atlanta - Corpus Christi - Latin America



## Sample Cross Reference 364139



Yates Petroleum Corporation, Artesia, NM

Zinnia BCK Federal # 1

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
GS/Comp-000.5	S	Mar-02-10 14:32	6 - 6 In	364139-001
GS/Comp-001.0	S	Mar-02-10 14:50	12 - 12 In	364139-002
GS/Comp-001.5	S	Mar-02-10 15:06	18 - 18 In	364139-003



## CASE NARRATIVE

*Client Name: Yates Petroleum Corporation*

*Project Name: Zinnia BCK Federal # 1*



*Project ID: 30-015-27939*

*Report Date: 10-MAR-10*

*Work Order Number: 364139*

*Date Received: 03/03/2010*

---

**Sample receipt non conformances and Comments:**

*None*

---

**Sample receipt Non Conformances and Comments per Sample:**

*None*

**Analytical Non Conformances and Comments:**

*Batch: LBA-796843 Percent Moisture*

*None*

*Batch: LBA-797400 Inorganic Anions by EPA 300  
E300MI*

*Batch 797400, Chloride recovered below QC limits in the Matrix Spike.*

*Samples affected are: 364139-002, -003, -001.*

*The Laboratory Control Sample for Chloride is within laboratory Control Limits*

*E300MI*

*Batch 797400, Chloride RPD is outside the QC limit. This is most likely due to sample non-homogeneity.*

*Samples affected are: 364139-002, -003, -001.*

---





# Certificate of Analysis Summary 364139

Yates Petroleum Corporation, Artesia, NM

Project Name: Zinnia BCK Federal # 1

Project Id: 30-015-27939

Contact: Robert Ashier

Project Location: Eddy County



Date Received in Lab: Wed Mar-03-10 09:33 am

Report Date: 10-MAR-10

Project Manager: Brent Barron, II

Analysis Requested	Lab Id:	364139-001	364139-002	364139-003		
	Field Id:	GS/Comp-000.5	GS/Comp-001.0	GS/Comp-001.5		
Anions in Soil By EPA 300.0	Depth:	6-6 In	12-12 In	18-18 In		
	Matrix:	SOIL	SOIL	SOIL		
	Sampled:	Mar-02-10 14:32	Mar-02-10 14:50	Mar-02-10 15:06		
	Extracted:					
Percent Moisture	Analyzed:	Mar-10-10 02:20	Mar-10-10 02:20	Mar-10-10 02:20		
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL		
		2010 105	1540 106	1250 110		
	Extracted:					
Percent Moisture	Analyzed:	Mar-04-10 17:00	Mar-04-10 17:00	Mar-04-10 17:00		
	Units/RL:	% RL	% RL	% RL		
		20.1 1.00	21.1 1.00	23.3 1.00		
	Extracted:					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Since 1990 Houston - Dallas - San Antonio - Austin - Tampa - Miami - Latin America - Atlanta - Corpus Christi

Brent Barron, II

Odessa Laboratory Manager



## Flagging Criteria



- X In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to effect the recovery of the spike concentration. This condition could also effect the relative percent difference in the MS/MSD.
- B A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F RPD exceeded lab control limits.
- J The target analyte was positively identified below the MQL and above the SQL.
- U Analyte was not detected.
- L The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- ~~K-Sample analyzed outside of recommended hold time.~~
- JN A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.
- BRL Below Reporting Limit.
- RL Reporting Limit

\* Outside XENCO's scope of NELAC Accreditation.

*Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.*

*Certified and approved by numerous States and Agencies.*

*A Small Business and Minority Status Company that delivers SERVICE and QUALITY*

Houston - Dallas - San Antonio - Corpus Christi - Midland/Odessa - Tampa - Miami - Latin America

4143 Greenbriar Dr, Stafford, Tx 77477  
9701 Harry Hines Blvd, Dallas, TX 75220  
5332 Blackberry Drive, San Antonio TX 78238  
2505 North Falkenburg Rd, Tampa, FL 33619  
5757 NW 158th St, Miami Lakes, FL 33014  
12600 West I-20 East, Odessa, TX 79765  
842 Cantwell Lane, Corpus Christi, TX 78408

Phone	Fax
(281) 240-4200	(281) 240-4280
(214) 902 0300	(214) 351-9139
(210) 509-3334	(210) 509-3335
(813) 620-2000	(813) 620-2033
(305) 823-8500	(305) 823-8555
(432) 563-1800	(432) 563-1713
(361) 884-0371	(361) 884-9116



# Environmental Lab of Texas

## Variance/ Corrective Action Report- Sample Log-In

Client:

Yates Petroleum

Date/ Time:

3.3.10 9:33

Lab ID #:

364138 / 364139

Initials:

AL

### Sample Receipt Checklist

Client Initials

#1	Temperature of container/ cooler?	<u>Yes</u>	No	<u>3.6</u> °C	
#2	Shipping container in good condition?	<u>Yes</u>	No		
#3	Custody Seals intact on shipping container/ cooler?	<u>Yes</u>	No	Not Present	
#4	Custody Seals intact on sample bottles/ container?	<u>Yes</u>	No	Not Present	
#5	Chain of Custody present?	<u>Yes</u>	No		
#6	Sample instructions complete of Chain of Custody?	<u>Yes</u>	No		
#7	Chain of Custody signed when relinquished/ received?	<u>Yes</u>	No		
#8	Chain of Custody agrees with sample label(s)?	<u>Yes</u>	No	iD written on Cont/ Lid	
#9	Container label(s) legible and intact?	<u>Yes</u>	No	Not Applicable	
#10	Sample matrix/ properties agree with Chain of Custody?	<u>Yes</u>	No		
#11	Containers supplied by ELOT?	<u>Yes</u>	No		
#12	Samples in proper container/ bottle?	<u>Yes</u>	No	See Below	
#13	Samples properly preserved?	<u>Yes</u>	No	See Below	
#14	Sample bottles intact?	<u>Yes</u>	No		
#15	Preservations documented on Chain of Custody?	<u>Yes</u>	No		
#16	Containers documented on Chain of Custody?	<u>Yes</u>	No		
#17	Sufficient sample amount for indicated test(s)?	<u>Yes</u>	No	See Below	
#18	All samples received within sufficient hold time?	<u>Yes</u>	No	See Below	
#19	Subcontract of sample(s)?	<u>Yes</u>	No	<u>Not Applicable</u>	
#20	VOC samples have zero headspace?	<u>Yes</u>	No	<u>Not Applicable</u>	

### Variance Documentation

Contact:

Contacted by:

Date/ Time:

Regarding:

Corrective Action Taken:

Check all that Apply:

- ☐  
☐  
☐

See attached e-mail/ fax

Client understands and would like to proceed with analysis

Cooling process had begun shortly after sampling event