



NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

Janauray 6, 2006

Mr. Keith Spradlin keithsprad@yahoo.com
Yates Energy Corporation (Yates)
POB 2323
500 North Main Street
Roswell, NM 88202

Re: Closure Approval, Reddy Gulf Tank Bat.
N 32 deg. 39' 57.145", W 103 deg. 29' 53.87"
UL-C, Sec-18-T19S-R35E - Dated: 12/23/2005

Dear Mr. Spradlin,

The New Mexico Oil Conservation Division reviewed the Closure Proposal submitted by Environmental Plus Inc., for Yates, Reddy Gulf Tank Battery referenced above. The closure plan is **hereby approved** according to the information provided.

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

If you have any questions or need assistance please feel free to write or call (505) 393-6161, x113 or <mailto:psheeeley@state.nm.us>

Sincerely,

Paul Sheeley-Environmental Engineer
Cc: Roger Anderson - Environmental Bureau Chief
Chris Williams - District I Supervisor
Larry Johnson - Environmental Engr.
Pat McCasland - EPI



12/23/2005

Mr. Paul Sheeley
Environmental Engineer
New Mexico Oil Conservation Division
1625 North French
Hobbs, New Mexico 88240



Re: Final NMOCD form C-141 and closure documentation
Yates Energy Corporation Reddy Gulf Tank Battery (12-08-05), (ref. #270005)
UL-C (NE¼ of the NW¼) of Section 18, T19S, R35E
Latitude 32° 39' 57.145"N and Longitude 103° 29' 53.87"W
Landowner: State of New Mexico leased by Snyder Ranch

Dear Mr. Sheeley,

Environmental Plus, Inc. (EPI), on behalf of Keith Spradlin, Yates Energy Corporation, submits the attached New Mexico Oil Conservation Division (NMOCD) final form C-141 and closure documentation for the above referenced leak site requesting that "no further remedial action" be required.

OCCURRENCE

On December 8, 2005, the production lines from the heater-treater to the storage tanks froze, causing the heater-treater to pressure up, opening the pressure relief valve and allowing the release of approximately 5 barrels of crude oil. The initial spill area is approximately 4,258 square feet (reference Figure 2). The decision was made to excavate and dispose of impacted soils contaminated above the NMOCD remedial goals at the Controlled Recovery, Inc. (CRI) disposal facility (#NM-01-0006) and backfill with clean soil obtained from the landowner.

NMOCD SITE RANKING AND REMEDIAL GOALS

According to information from the New Mexico Office of the State Engineer, the average groundwater level in the area is between 54.5 and 59-feet below ground surface (bgs) and based on the four water wells nearest the remediation site. There are no recorded water wells in Section 18 in which the site is located. The annotated USGS topographical map included Figure 1.

Table with 12 columns: Well ID, Latitude, Longitude, Altitude, Water Level ('bgs), WI-date, Section, Township, Range, Distance from Site (miles), Direction from Site. Contains 12 rows of well data.

ENVIRONMENTAL PLUS, INC.

There are no water wells or surface water bodies located within a 1,000-foot radius of the site. The attached site information and metrics form ranks the site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993). Based on the proximity of the site to protectable area water wells, surface water bodies, and depth to groundwater, the site has an NMOCD ranking score of 10 points with the soil remedial goals highlighted below in the Site Ranking Matrix.

1. Groundwater		2. Wellhead Protection Area		3. Distance to Surface Water Body	
If Depth to GW <50 feet: 20 points		If <1000' from water source, or; <200' from private domestic water source: 20 points		<200 horizontal feet: 20 points	
If Depth to GW 50 to 99 feet: 10 points				200-100 horizontal feet: 10 points	
If Depth to GW >100 feet: 0 points		If >1,000' from water source, or; >200' from private domestic water source: 0 points		>1,000 horizontal feet: 0 points	
Groundwater Score = 10		Wellhead Protection Area Score= 0		Surface Water Score= 0	
Site Rank (1+2+3) = 20 + 0 + 0 = 10 points					
Total Site Ranking Score and Acceptable Remedial Goal Concentrations					
Parameter	>19 (4.5 to 54.5' bgs)	10-19 (surface to 4.5' bgs)		0-9	
Benzene	10 ppm	10 ppm		10 ppm	
BTEX	50 ppm	50 ppm		50 ppm	
TPH	100 ppm	1,000 ppm		5,000 ppm	

This report documents the vertical and horizontal extents of contamination of the Constituents of Concern (CoCs), i.e.:

- Chloride (Cl) (EPA method 4500),
- Total petroleum hydrocarbon (TPH^{8015m}) (EPA method 8015m),
- Benzene (EPA method 8021B), and
- BTEX (i.e., the mass sum of benzene, toluene, ethylbenzene, and xylenes) (EPA method 8021B)

The contaminated soil is exempted from RCRA 40 CFR Part 261.

REMEDICATION AND DELINEATION

From December 14 to December 15, 2005, 196 cubic yards of impacted soils were removed to the CRI disposal facility. A total of 10 equally spaced grab samples were collected from the floor of the excavation on December 15, 2005 and submitted to the laboratory for quantification of the CoCs. The analytical results for TPH^{8015m} ranged from <10.0 mg/Kg to 42.7 mg/Kg, well below the 1,000 mg/Kg remedial goal. The analytical results for benzene and BTEX were not detected above the method detection limits and were below the respective remedial goals of 10 mg/Kg and 50 mg/Kg. The analytical results for chloride ranged from 48 mg/Kg to 16 mg/Kg, well below the 250 mg/Kg concentration considered by the NMOCD as being capable of impacting local groundwater. Upon receipt of acceptable analytical results from the excavation samples and after consultation with the NMOCD, the decision was made to backfill the excavation with clean soil, contour the surface to grade and prepare submit the final C-141 and closure documentation (reference *Figure 3, Table 1* and the attached *Laboratory Reports* and *Photographs*). The pressure relief line has been plumbed into the production tank to prevent a reoccurrence.

CLOSURE REQUEST

Based on the information collected during the project and provided in this letter report, it is concluded that the site has been remediated to less than the NMOCD remedial goals and the surface restored, EPI

therefore requests, on behalf of the Yates Energy Corporation, that "no further remedial action" be required at this location except for reseeding in the spring.

Should there be any questions please call me at the office or Keith Spradlin at 817.573.4979. All official communication should be addressed to:

Keith Spradlin
Yates Energy Corporation
P.O. Box 2323
500 North Main Street
Roswell, New Mexico 88202
e-mail: KeithSprad@yahoo.com

Sincerely,



Pat McCasland
EPI Consultant

cc: Keith Spradlin, O'Briant and Associates, w/enclosure
Yates Energy Corporation, w/enclosure
file

Enclosures:

- Figure 1 - Reddy Gulf Tank Battery (12-08-05) Area Map with Groundwater Wells
- Figure 2 - Reddy Gulf Tank Battery (12-08-05) Site Map
- Figure 3 - Reddy Gulf Tank Battery (12-08-05) Sample Location Map
- Table 1 - Reddy Gulf Tank Battery (12-08-05) Analytical Results
- Laboratory Reports
- Photographs
- Site Information and Metrics Form and C-141

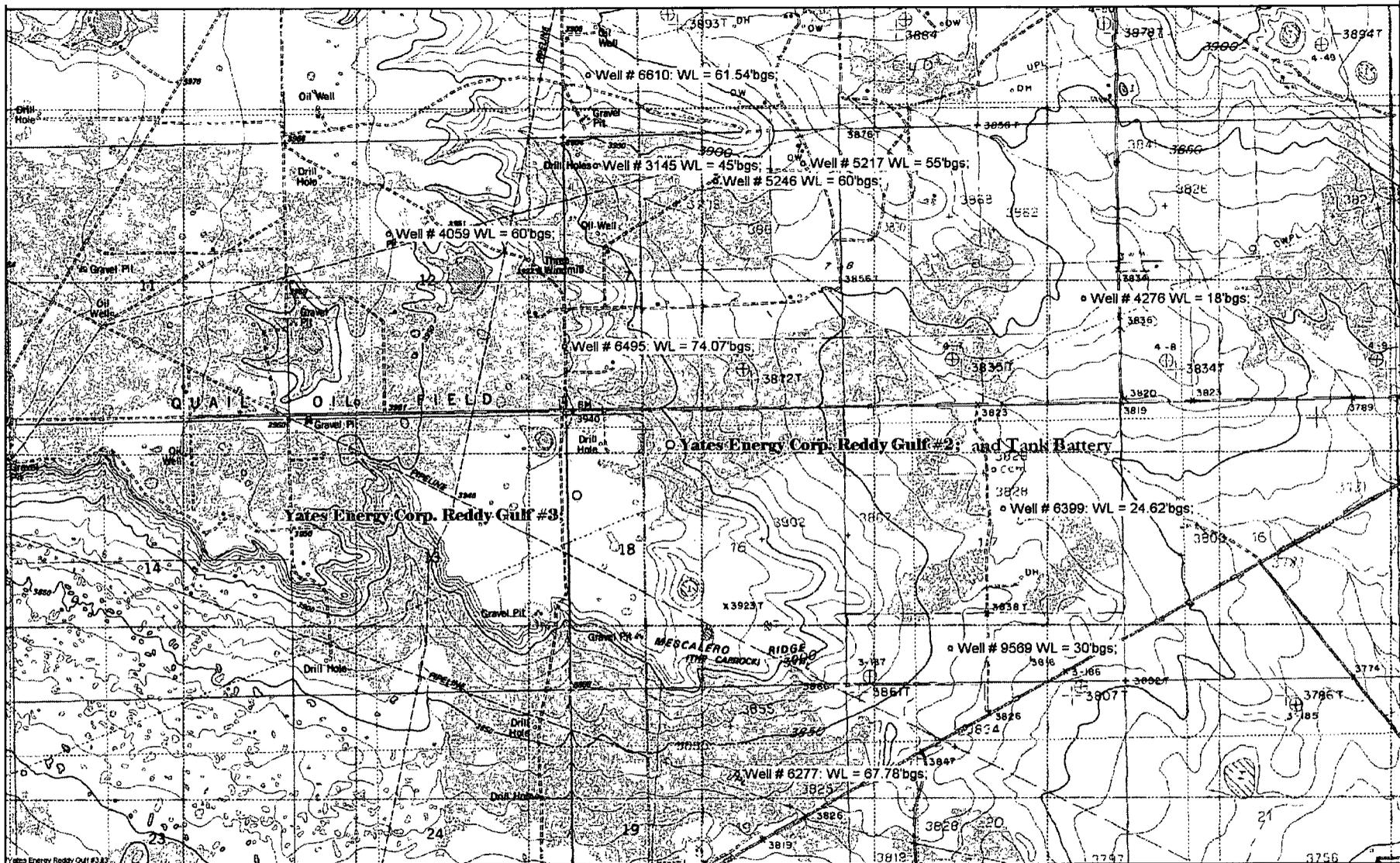


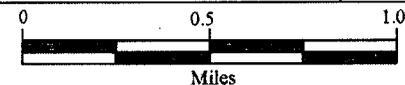
Figure 1

Area Map with Groundwater Wells
 Yates Energy Corporation
 Reddy Gulf Tank Battery

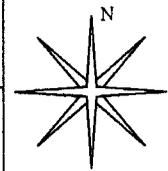
Lea County New Mexico
 UL-C Section 18 T19S R35E
 32°39'57.1"N 103°29'53.8"W
 Elevation ~3,940 feet-amsl

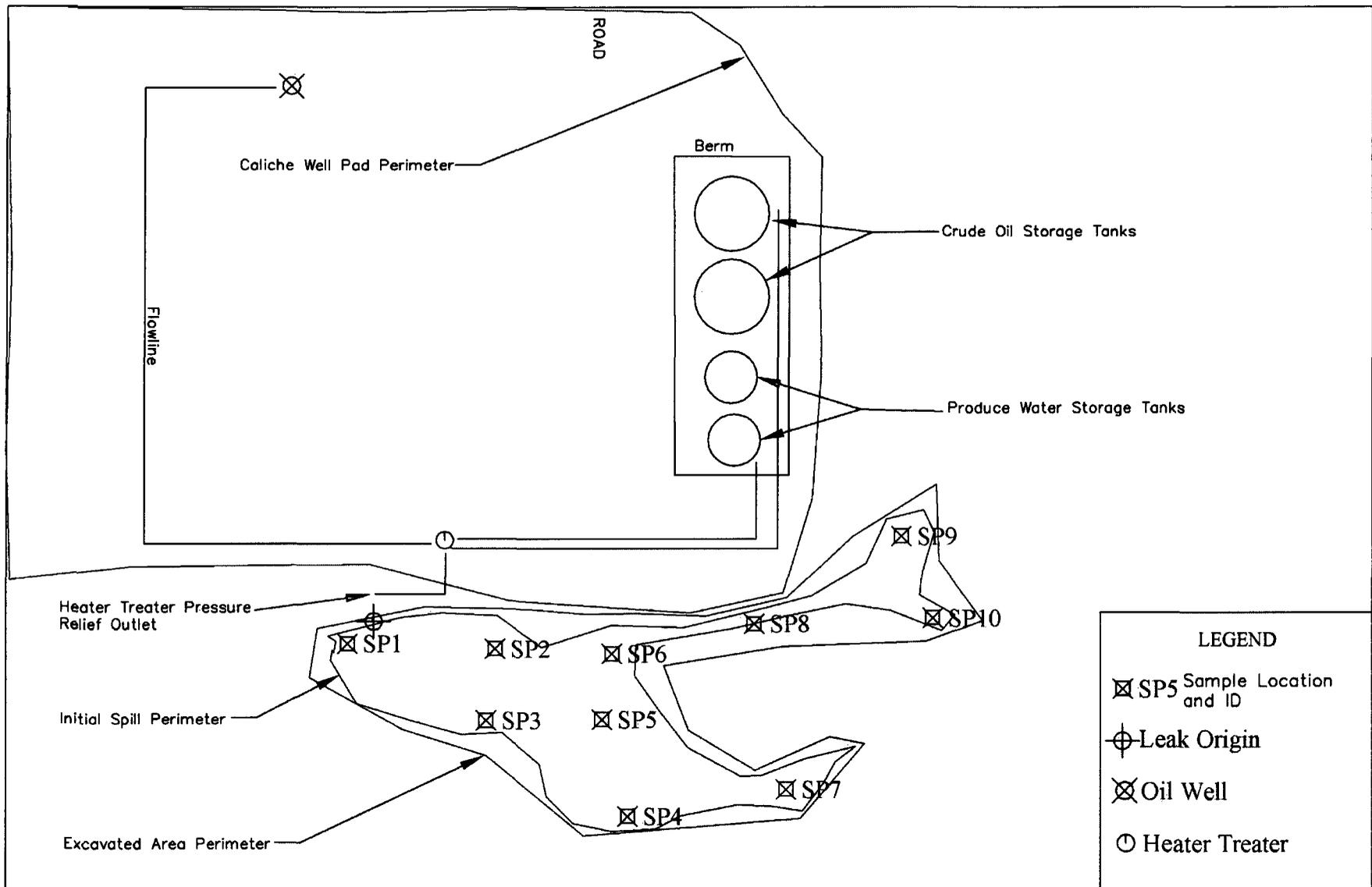
DWG By: P McCasland
 Dec 2005

REVISED:



SHEET
 1 of 1





LEGEND

- ☒ SP5 Sample Location and ID
- ⊕ Leak Origin
- ⊗ Oil Well
- Heater Treater

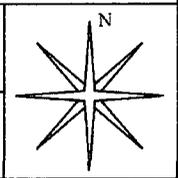
Figure 2
 Site Map
 Yates Energy Corporation
 Reddy Gulf Tank Battery

Lea County New Mexico
 UL-C Section 18 T19S R35E
 32°39'57.1"N 103°29'53.8"W
 Elevation ~3,940 feet-amsl

DWG By: P McCasland
 Dec 2005

0 40 80
 Feet

REVISED:
 SHEET
 1 of 1



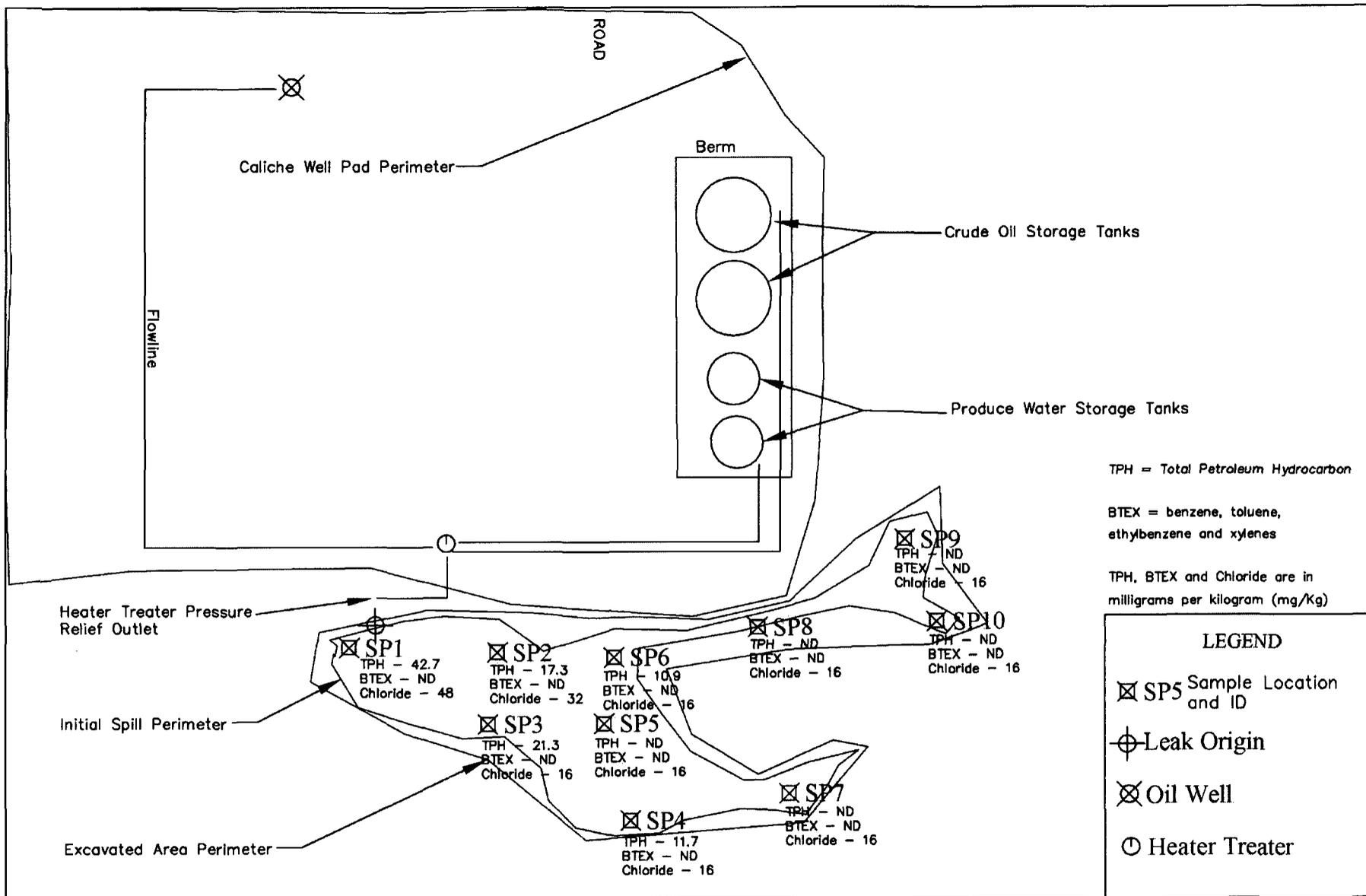
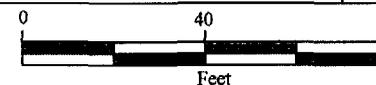


Figure 3
Sample Location Map
Yates Energy Corporation
Reddy Gulf Tank Battery

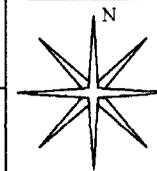
Lea County New Mexico
UL-C Section 18 T19S R35E
32°39'57.1"N 103°29'53.8"W
Elevation ~3,940 feet-amsl

DWG By: P McCasland
Dec 2005

REVISED:



SHEET
1 of 1



TABLES

Table 1

Yates Energy Corporation
Reddy Gulf Tank Battery (12-08-05) (ref. #27005)
Analytical Results

Sample Location	Sampling Interval (FF. BGS)	SAMPLE ID#	Date	Lithology	VOC Headspace ppm	GRO ³ mg/Kg	DRO ⁴ mg/Kg	TPH ⁵ mg/Kg	BTEX mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ethylbenzene mg/Kg	Xylenes ^m g/Kg	Chloride mg/Kg
Excavation Floor	0.5	SP1	12/15/2005	Brown Sandy Clay	12.8	<10	42.7	42.7	<0.015	<0.005	<0.005	<0.005	<0.015	48
	0.5	SP2	12/15/2005	Brown Sandy Clay	9.20	<10	17.3	17.3	<0.015	<0.005	<0.005	<0.005	<0.015	32
	1.0	SP3	12/15/2005	Brown Sandy Clay	10.6	<10	21.3	21.3	<0.015	<0.005	<0.005	<0.005	<0.015	16
	1.5	SP4	12/15/2005	Brown Sandy Clay	36.4	<10	11.7	11.7	<0.015	<0.005	<0.005	<0.005	<0.015	16
	1.0	SP5	12/15/2005	Brown Sandy Clay	23.2	<10	<10	<10	<0.015	<0.005	<0.005	<0.005	<0.015	16
	1.0	SP6	12/15/2005	Brown Sandy Clay	79.2	<10	10.9	10.9	<0.015	<0.005	<0.005	<0.005	<0.015	16
	2.0	SP7	12/15/2005	Brown Sandy Clay	8.10	<10	<10	<10	<0.015	<0.005	<0.005	<0.005	<0.015	16
	1.0	SP8	12/15/2005	Brown Sandy Clay	2.20	<10	<10	<10	<0.015	<0.005	<0.005	<0.005	<0.015	16
	1.0	SP9	12/15/2005	Brown Sandy Clay	0.40	<10	<10	<10	<0.015	<0.005	<0.005	<0.005	<0.015	16
	1.0	SP10	12/15/2005	Brown Sandy Clay	12.0	<10	<10	<10	<0.015	<0.005	<0.005	<0.005	<0.015	16

¹bgs - below ground surface

³GRO-Gasoline Range Organics C₆-C₁₀

⁴DRO-Diesel Range Organics C₁₀-C₂₈

⁵TPH-Total Petroleum Hydrocarbon = GRO+DRO. Method 8015m

^mna - Not Analyzed

Reported detection limits are considered "de minimus" values and are included in the GRO/DRO summations.

LABORATORY REPORTS



PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
 ENVIRONMENTAL PLUS, INC.
 ATTN: PAT McCASLAND
 P.O. BOX 1558
 EUNICE, NM 88231
 FAX TO: (505) 394-2601

Receiving Date: 12/15/05
 Reporting Date: 12/19/05
 Project Owner: YATES ENERGY CORP.
 Project Name: REDDY GULF TANK BATTERY
 Project Location: REDDY GULF TANK BATTERY

Sampling Date: 12/15/05
 Sample Type: SOIL
 Sample Condition: COOL & INTACT
 Sample Received By: NF
 Analyzed By: BC

LAB NUMBER	SAMPLE ID	GRO (C ₆ -C ₁₀) (mg/Kg)	DRO (>C ₁₀ -C ₂₈) (mg/Kg)	BENZENE (mg/Kg)	TOLUENE (mg/Kg)	ETHYL BENZENE (mg/Kg)	TOTAL XYLENES (mg/Kg)
ANALYSIS DATE:		12/17/05	12/17/05	12/16/05	12/16/05	12/16/05	12/16/05
H10510-1	SP1	<10.0	42.7	<0.005	<0.005	<0.005	<0.015
H10510-2	SP2	<10.0	17.3	<0.005	<0.005	<0.005	<0.015
H10510-3	SP3	<10.0	21.3	<0.005	<0.005	<0.005	<0.015
H10510-4	SP4	<10.0	11.7	<0.005	<0.005	<0.005	<0.015
H10510-5	SP5	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H10510-6	SP6	<10.0	10.9	<0.005	<0.005	<0.005	<0.015
H10510-7	SP7	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H10510-8	SP8	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H10510-9	SP9	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
H10510-10	SP10	<10.0	<10.0	<0.005	<0.005	<0.005	<0.015
Quality Control		805	800	0.094	0.095	0.100	0.308
True Value QC		800	800	0.100	0.100	0.100	0.300
% Recovery		101	100	93.5	94.8	99.9	103.0
Relative Percent Difference		7.8	1.6	1.8	6.5	6.4	6.7

METHODS: TPH GRO & DRO - EPA SW-846 8015 M; BTEX - SW-846 8260.

Burgess J.A. Cooke
 Burgess J.A. Cooke, Ph. D.

12/19/05
 Date

H10510.XLS

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
ENVIRONMENTAL PLUS, INC.
ATTN: PAT McCASLAND
P.O. BOX 1558
EUNICE, NM 88231
FAX TO: (505) 394-2601

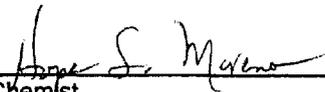
Receiving Date: 12/15/05
Reporting Date: 12/19/05
Project Owner: YATES ENERGY CORPORATION
Project Name: REDDY GULF TANK BATTERY
Project Location: REDDY GULF TANK BATTERY

Analysis Date: 12/19/05
Sampling Date: 12/15/05
Sample Type: SOIL
Sample Condition: COOL & INTACT
Sample Received By: NF
Analyzed By: HM

LAB NUMBER	SAMPLE ID	*Cl ⁻ (mg/Kg)
H10510-1	SP1	48
H10510-2	SP2	32
H10510-3	SP3	16
H10510-4	SP4	16
H10510-5	SP5	16
H10510-6	SP6	16
H10510-7	SP7	16
H10510-8	SP8	16
H10510-9	SP9	16
H10510-10	SP10	16
Quality Control		1010
True Value QC		1000
% Recovery		101
Relative Percent Difference		1.0

METHOD: Standard Methods 4500-Cl⁻B

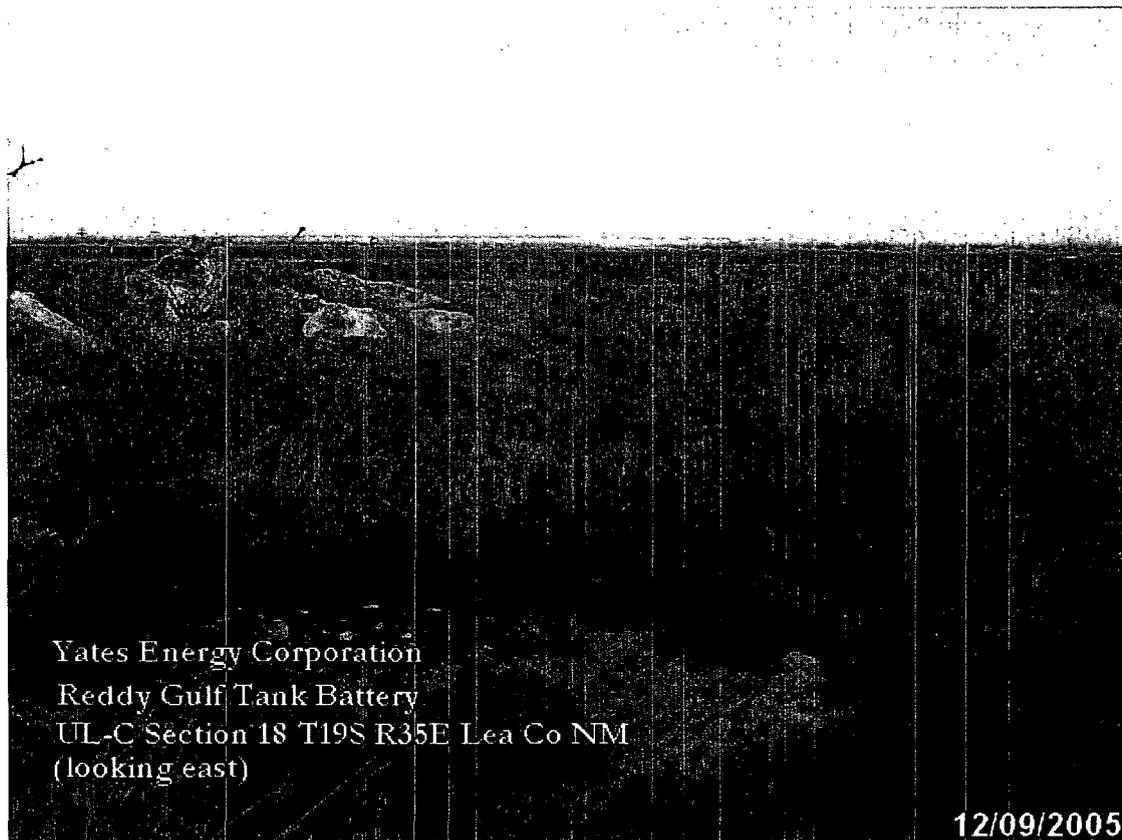
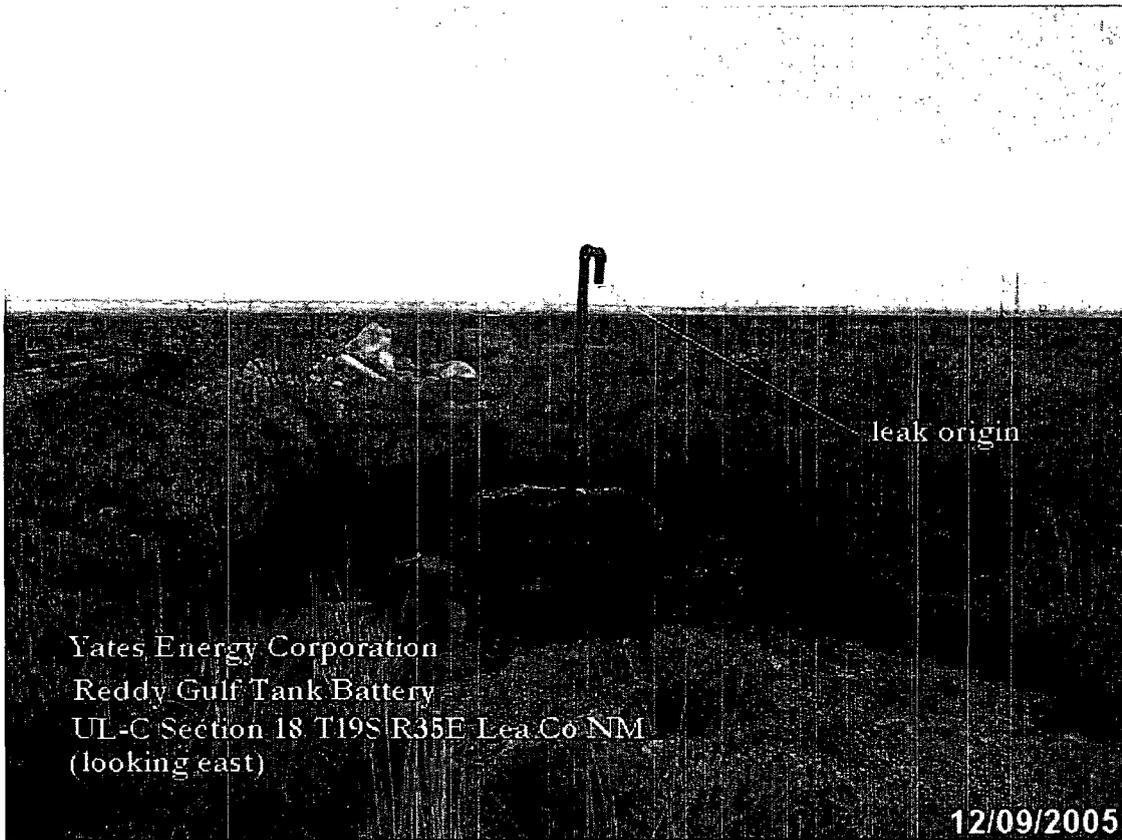
Note: Analyses performed on 1:4 w:v aqueous extracts.

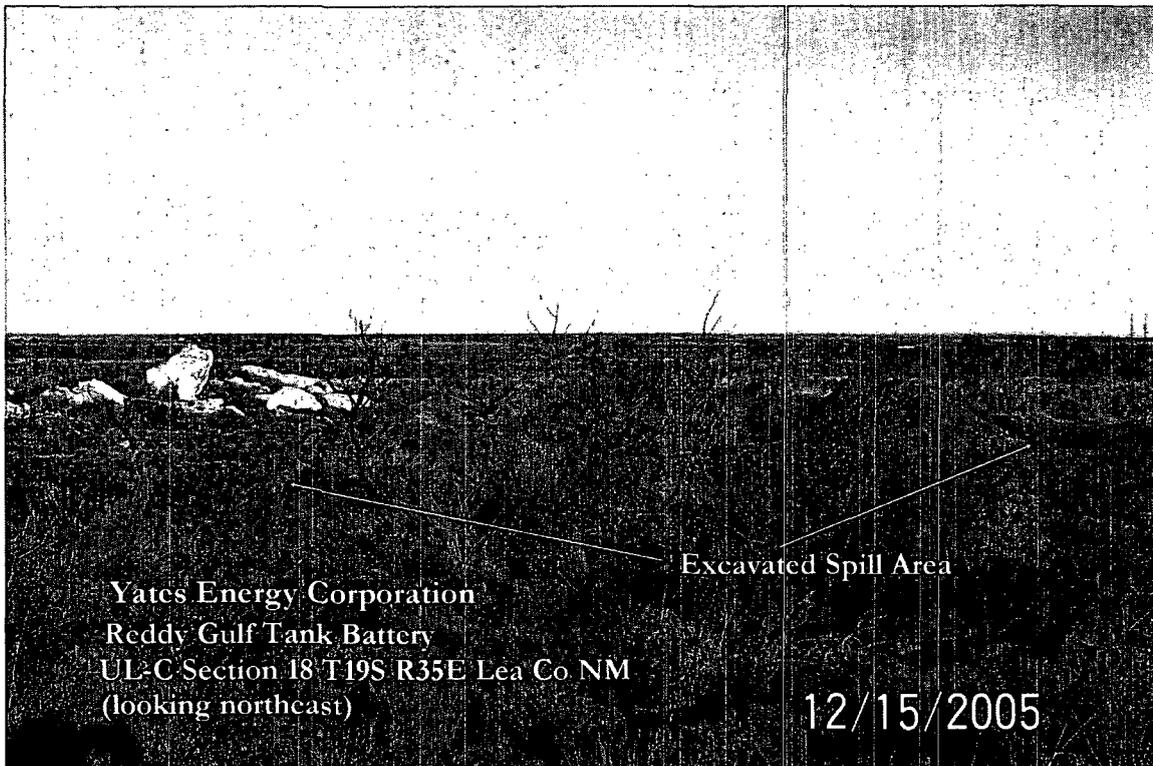
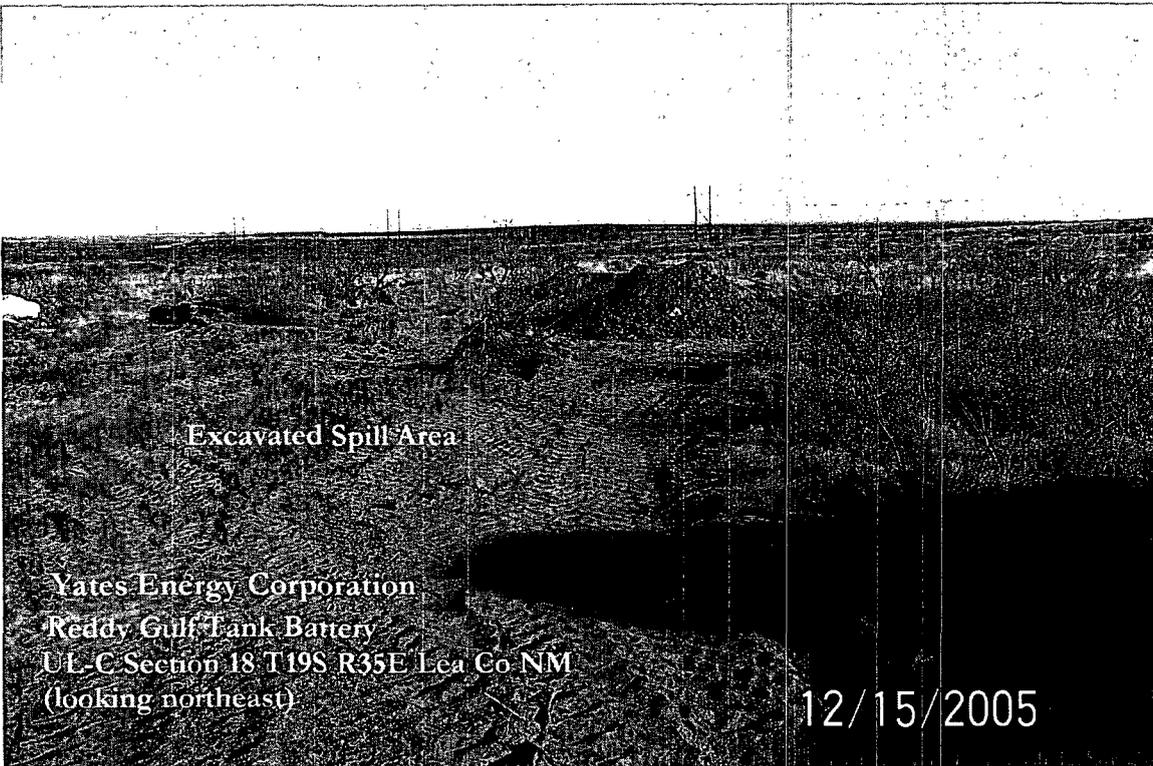

Chemist

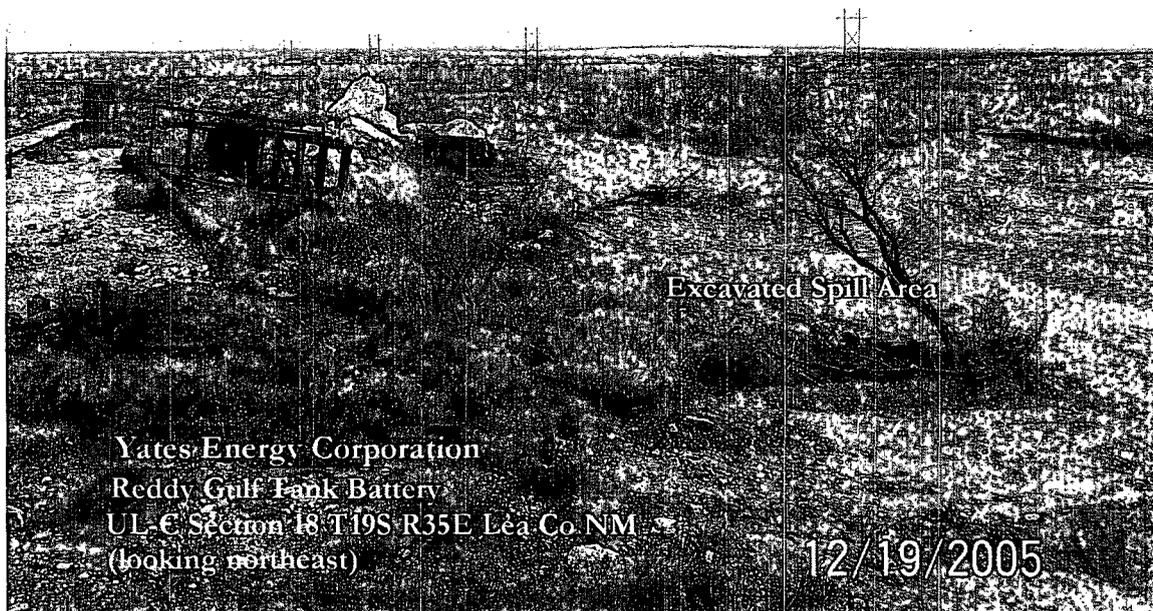
12-19-05
Date

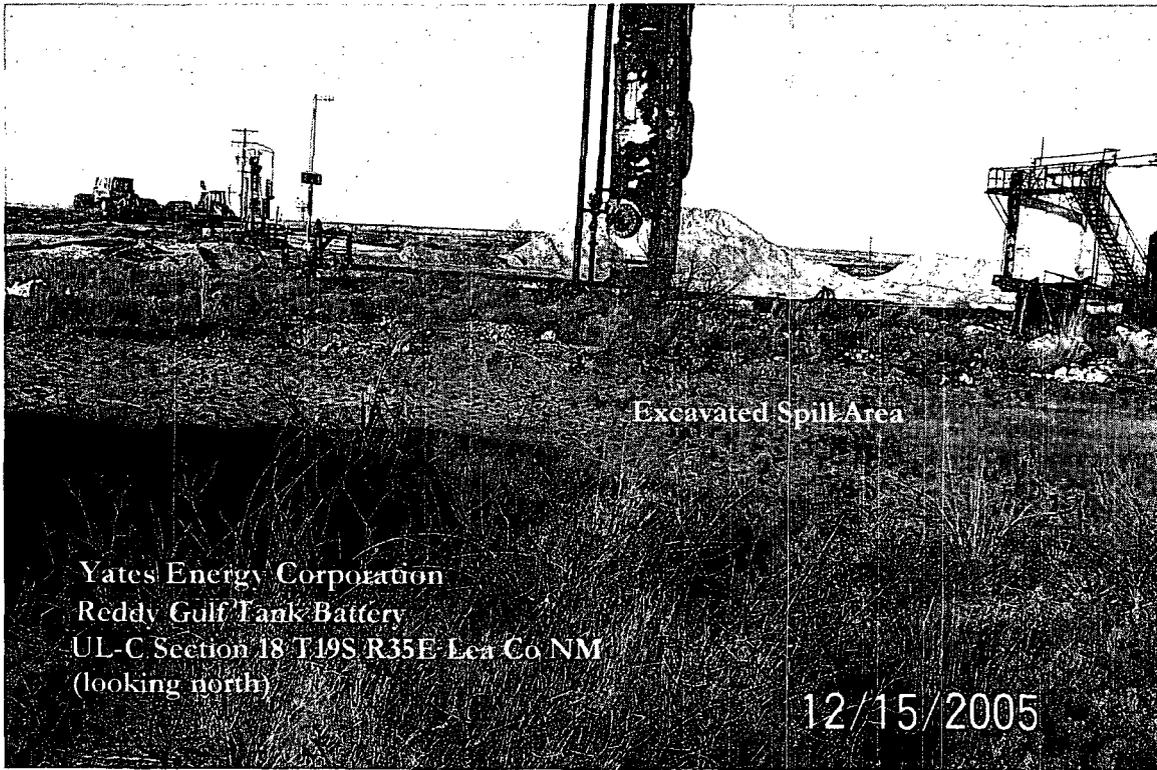
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. H10510 shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

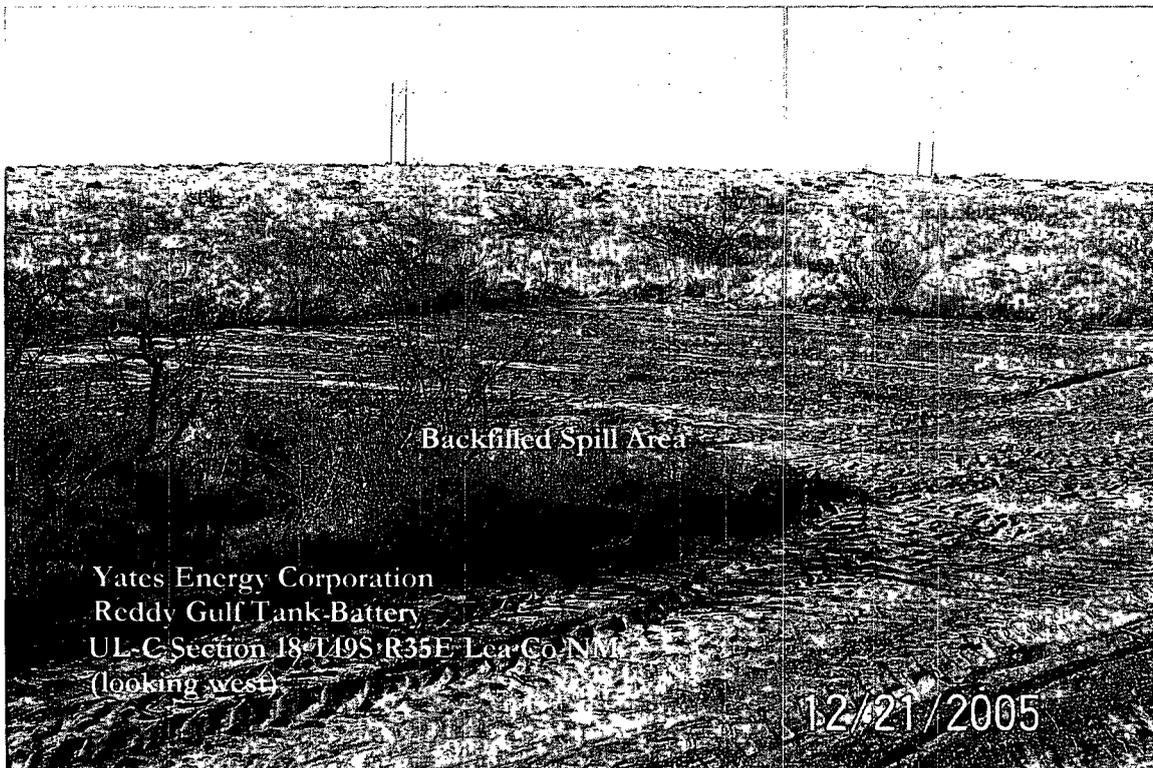
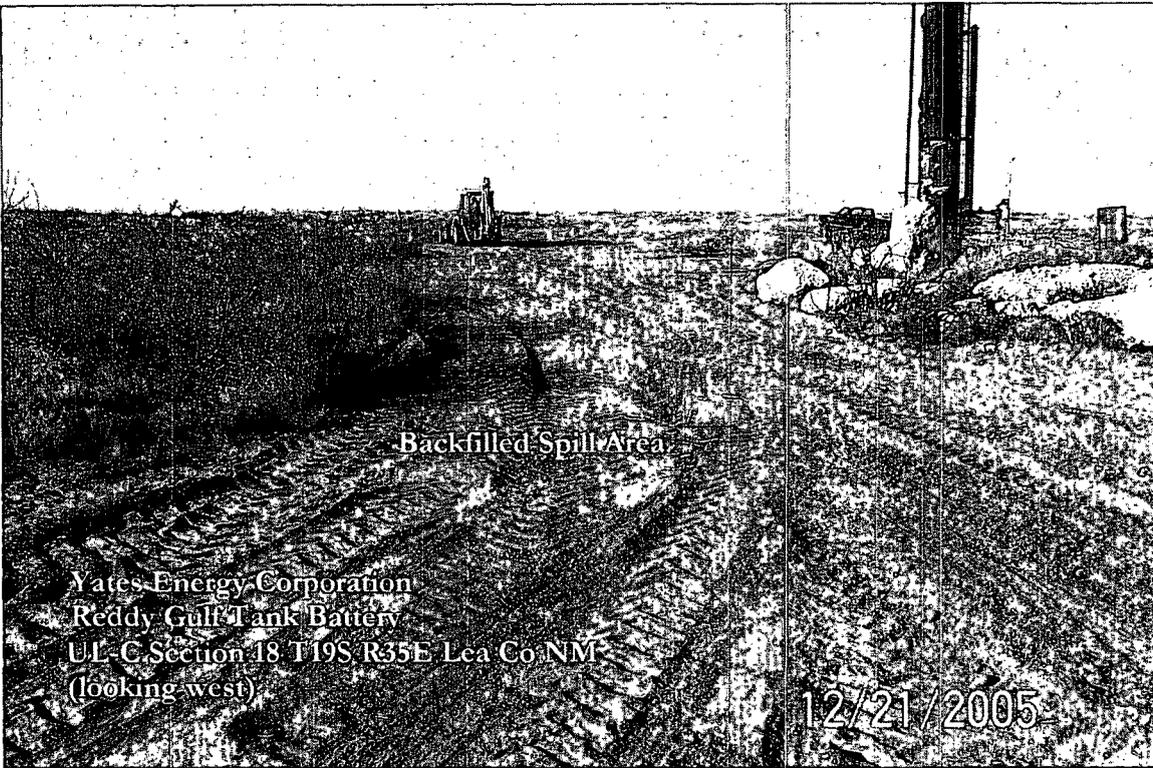
PHOTOGRAPHS











SITE INFORMATION AND METRICS FORM AND C-141

Yates Energy Corporation Site Information and Metrics		Incident Date: 12/8/2005	NMOCD Notified: 12/12/2005 Paul Sheeley by Pat McCasland - EPI
SITE: Reddy Gulf Tank Battery (12-08-05)		Assigned Site Reference #: 270005	
Company: Yates Energy Corporation			
Street Address: P.O. Box 2323		Notified Date/Time:	
Mailing Address: 500 North Main Street		Notified by: Pat McCasland - EPI	
City, State, Zip: Roswell, New Mexico 88202		Person Notified:	
Representative: Keith Spradlin		NRC Report# :	
Representative Telephone: 817.573.4979			
Telephone:			
Fluid volume released (bbls): 5 to 10 bbls		Recovered (bbls): 0 bbls	
>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)			
5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)			
Leak, Spill, or Pit (LSP) Name: Reddy Gulf Tank Battery (12-08-05)			
Source of contamination: Heater treater pressure relief valve			
Land Owner, i.e., BLM, ST, Fee, Other: State of New Mexico leased by Snyder Ranch			
LSP Dimensions 100' x 45'			
LSP Area: 4,258 sqft			
Location of Reference Point (RP)			
Location distance and direction from RP			
Latitude: 32° 39' 57.145"N			
Longitude: 103° 29' 53.87"W			
Elevation above mean sea level: 3,940'amsl			
Feet from South Section Line			
Feet from West Section Line			
Location- Unit or ¼¼: NE¼ of the NW¼ Unit Letter: C			
Location- Section: 18			
Location- Township: T19S			
Location- Range: R35E			
Surface water body within 1000' radius of site: none			
Domestic water wells within 1000' radius of site: none			
Agricultural water wells within 1000' radius of site: none			
Public water supply wells within 1000' radius of site: none			
Depth from land surface to groundwater (DG) 54.5 to 59-feet bgs			
Depth of contamination (DC) - 0			
Depth to groundwater (DG - DC = DtGW) - 0			
1. Groundwater		2. Wellhead Protection Area	
If Depth to GW <50 feet: 20 points		If <1000' from water source, or; <200' from private domestic water source: 20 points	
If Depth to GW 50 to 99 feet: 10 points		If >1,000' from water source, or; >200' from private domestic water source: 0 points	
If Depth to GW >100 feet: 0 points			
Groundwater Score = 10		Wellhead Protection Area Score=0	
Site Rank (1+2+3) = 10			
Total Site Ranking Score and Acceptable Concentrations			
Parameter	>19 (4.5 to 54.5'bgs)	10-19 (surface to 4.5'bgs)	0-9
Benzene ¹	10 ppm	10 ppm	10 ppm
BTEX ¹	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1,000 ppm	5,000 ppm
¹ 100 ppm field VOC headspace measurement may be substituted for lab analysis			

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 Energy Corporation		Contact: Keith Spradlin
Address: P.O. Box 2323 500 North Main Street Roswell, New Mexico 88202		Telephone No. 817.573.4979
Facility Name Reddy Gulf Tank Battery (12-08-05) #270005		Facility Type Heater treater pressure relief valve
Surface Owner: State of New Mexico leased by Snyder Ranch	Mineral Owner	Lease No.

LOCATION OF RELEASE

Unit Letter C	Section 18	Township T19S	Range R35E	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea
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Latitude: 32° 39' 57.145"N Longitude: 103° 29' 53.87"W

NATURE OF RELEASE

Type of Release Crude Oil and formation water	Volume of Release 5 to 10 bbls barrels	Volume Recovered 0 bbls barrels
Source of Release Heater treater pressure relief valve	Date and Hour of Occurrence 12/8/2005	Date and Hour of Discovery 12/8/2005
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Paul Sheeley	
By Whom? Pat McCasland - EPI	Date and Hour 12/12/2005	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse. NA	

If a Watercourse was Impacted, Describe Fully.*
NA

Describe Cause of Problem and Remedial Action Taken.***Heater treater pressure relief valve-Tank lines froze causing the heater treater to pressure up and open the pressure relief valve. The relief valve was configured to vent gas to the atmosphere. The pressure relief line has been plumbed into the production tank to prevent a reoccurrence.**

Describe Area Affected and Cleanup Action Taken.***4,258 sqft 100' x 45': Impacted soils (196 cy) have been disposed of in the Controlled Recovery, Inc. (CRI) disposal facility, acceptable analytical results from excavation samples received, the excavation backfilled with clean soil and contoured to grade. Remedial Goals: TPH 8015m = 1000 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg.**

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 groundwater, 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:	OIL CONSERVATION DIVISION	
Printed Name: Keith Spradlin	Approved by District Supervisor:	
E-mail Address: KeithSprad@yahoo.com	Approval Date:	Expiration Date:
Title: Consultant	Conditions of Approval:	Attached <input type="checkbox"/>
Date: 12/23/2005 Phone: 817.573.4979		

* Attach Additional Sheets If Necessary