NM2 - 14

GENERAL CORRESPONDENCE YEAR(S):

1999-2002

Kieling, Martyne

From: Landreneau EK (Kyle) [EKLandreneau@equiva.com]

Sent: Monday, October 14, 2002 8:22 AM

To: Applied Earth Sciences; 'Steve Fischer'; 'Mike Lee'; 'andres.meglioli@aig.com'; 'hampkerby@worldnet.att.net'; 'ALLSTATEENV@aol.com'; 'gvonstam@armstrongteasdale.com'; 'ciaramitaro73@atc-enviro.com'; 'mcarter@bncdallas.com'; 'jrose@bncmid.wtxcoxmail.com'; Burkey SE (Scott); 'mstaffileno@bncdallas.com'; 'rowalker@bncmid.wtxcoxmail.com'; 'schaffey2@bncenv.com'; 'tlarson@bncmid.wtxcoxmail.com'; 'Joe Cruseturner'; 'blarsen@bncenv.com'; 'Craig Eschberger'; 'dsweeten@bncenv.com'; 'solivier@bncdallas.com'; 'Tony Flores'; 'Vince Nacewski'; 'Trish Carls'; 'jkind1111@aol.com'; 'jkelly@enercon.com'; 'dparsons@enercon.com'; 'charlan@enercon.com'; 'bhowell@enercon.com'; Jim Zumbro (Business Fax); Bertaut AH (Al); Burleson WJ (Jack); Mike Clement (Business Fax); Stokes HL (Lamar); 'ciadams@equiva.com'; Colwell TT (Timothy); Davis RR (Ricky); Ettinger Robert A [Shell]; Mobley JM (Jim); Rafferty DT (Daniel); Ross JP (Peyton); Stockwell JA (John); Stovall GD (Gary); Schexnayder DA (Douglas) Sr.; Guerreiro GK (Gregory); James Bela M [Shell]; Michalak JL (James)_old; 'diana.k.malloy@exxonmobil.com'; 'dwl@geotechnology.com'; 'rms@geotechnology.com'; 'MHawthorne@h2altd.com'; 'tnix@h2altd.com'; 'jpickens@intera.com'; 'Jbarry@TheITGroup.com'; 'dporter@kdhe.state.ks.us'; 'Frank Arnwine'; 'klimesand@kdhe.state.ks.us'; 'Wright,Buck'; 'nrhucks2@mail.dnr.state.mo.us'; 'tdomme@mstLAW.com'; 'kfinch@mstlaw.com'; 'mkieling@state.nm.us'; 'wprice@state.nm.us'; 'wolson@state.nm.us'; 'psheeley@state.nm.us'; 'joe.guerra@rrc.state.tx.us'; 'aimee.beveridge@rrc.state.tx.us'; 'kathleen.phillips@shell.com'; 'cara.mathes@shell.com'; Callahan BJ (Barney); 'tduhon@spl-inc.com'; 'Bernadette Fini'; 'Donohue, Mal G.'; 'dlowe@tepco.com'; 'bschlatter@testamerica.com'; 'Dan Lokey'; Hiebert JL (James); Keenan WK (William); Klein WJ (Bill); Sanders GW (Geoffrey); 'Jackie Lindsay'

Cc: Springer KR (Kenneth); Burkey SE (Scott); Dyer KE (Kevin); Oler MC (Marc)

Subject: Transportation remediation reorganization

As most of you know, I have taken a new position in Shell as supervisor of the HSE Residual Management team. It was therefore required that my projects be reassigned to other project manager in Science & Engineering. For better workload redistribution, Phil Daly (Mid Continent Manager) and Johnna Van Keuren (HSE Transportation Manager) have agreed to reorganize the transportation project distribution in the Mid Continent.

The information below describes the new coverage areas for Shell Oil Products Transportation projects. I have also attached an excel spreadsheet listing current pipeline projects that will be transitioned. Marc and I will be working with the receiving project managers to transfer responsibility over the next two weeks.

Texas-Pipeline and Terminals-Ken Springer 713-241-9979
Project Cardinal Sites (New Mexico)-Pipeline and Terminals- Ken Springer
Louisiana, Kansas, Colorado, New Mexico (Non-Cardinal), Oklahoma, Wyoming-Pipeline and Terminals-Scott Burkey 972-247-1700

Missouri, Ohio, Michigan, Indiana, Wisconsin, and Illinois Pipeline and Terminals- Kevin Dyer 618-288-7237

<<WEBSTER INCIDENT REFERENCE Transistion 1.xls>>

Kyle Landreneau
Residuals Supervisor
Shell Oil Products US
HSE-Residual Management Team
PMB-284
40 FM 1960 West
Houston Texas 77090

Office Mail TSP 1918

Office 713-241-3354
Fax 713-241-3415
Cell 281-414-0490

Attached is a link to the SHE Customer Survey. Please comment on the level of service that you have received.
http://equivaservices.newcos.com/survey/survey.asp?surveyid=18

Kieling, Martyne

From: Landreneau EK (Kyle) [EKLandreneau@equiva.com]
Sent: Tuesday, August 13, 2002 8:48 AM
To: Martyne Kieling (E-mail)
Subject: Sam Cooper Final closure.

Hope I am not bugging you but I was checking on the Sam Cooper closure review. There is a strong possibility that I am changing job assignments very soon and I am trying to close the loop any outstanding issues.

Thanks for your assistance

Kyle Landreneau
Equiva Services LLC
PMB-284
40 FM 1960 West
Houston Texas 77090

Office 281-353-2069
Fax 281-353-2317
Cell 281-414-0490

Attached is a link to the SHE Customer Survey. Please comment on the level of service that you have received.
http://equivaservices.newcos.com/survey/survey.asp?surveyid=18

Kieling, Martyne

From: Landreneau EK (Kyle) [EKLandreneau@equiva.com]
Sent: Friday, June 07, 2002 9:55 AM
To: 'mkieling@state.nm.us'
Subject: Sam Cooper Ranch

Martyne

I am trying to close my file on the Sam Cooper Landfarm sites (Jal New Mexico). The last time we spoke you were reviewing our final closure report. Did you have any outstanding issues with this report. If you agree that we have meet the requirements, I will close my file.

I hope that you are still enjoying the shorter work weeks.

Thanks a lot

Kyle

Kyle Landreneau
Equiva Services LLC
PMB-284
40 FM 1960 West
Houston Texas 77090

Office 281-353-2069
Fax 281-353-2317
Cell 281-414-0490

Attached is a link to the SHE Customer Survey. Please comment on the level of service that you have received.
http://equivaservices.newcos.com/survey/survey.asp?surveyid=18

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

RECEIVED
MAR 25 2002
Environmental Bureau
Oil Conservation Division

March 20, 2002

Ms. Martyne J. Kieling
Environmental Geologist
New Mexico Oil Conservation Division
1220 So. St. Francis Drive
Santa Fe, New Mexico 87505

RE: EQUILON PIPELINE CLOSURE OF FOUR LANDFARMS (1, 2, 3, 4)
LOCATED ON THE SAM COOPER RANCH, JAL, LEA COUNTY, NEW MEXICO
PERMITS NM-02-0014, NM-02-0015, NM-02-0016 and NM-02-0017

Dear Ms. Kieling,

Equiva Services LLC has completed Landfarm closure activities for permitted landfarms, 1 through 4, located on the Sam Cooper property near Jal, New Mexico. Closure of the landfarms was approved by the New Mexico Oil Conservation division (NMOCD) in a letter to Equilon dated February 19, 2000. Closure activities were conducted from December 6, 2001 to January 17, 2002. As stated in our closure plan, additional wastes have not been placed in the landfarms since closure was requested. The following activities were conducted at the site.

- Treatment zone analysis for soils beneath the landfarm was conducted. Enercon Services forwarded this data to you in a letter dated January 12, 2001,
- All fencing materials, gates, and signage surrounding the landfarms were removed and transported off-site for recycling and disposal,
- The landfarms and associated berms were leveled,
- A one-foot thick minimum layer of clean soils was placed over the landfarm cells (landowner requested), and
- The landfarm areas were seeded with native grasses and irrigated.

PMB 284, 40 FM 1960 West, Houston Texas 77090
Phone 281-353-2069 Facsimile 281-353-2317

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

Equiva has completed the required closure activities for these landfarms. Attached are photos documenting the closure activities? As directed in your February 19, 2000 letter a copy of this letter is being sent to Mr. Paul Sheeley of the Hobbs District office. Should you have any questions concerning these activities, please contact me at 281-353-2069.

Sincerely
EQUIVA SERVICES LLC

Kyle Landreneau

Kyle Landreneau CPG
Sr. Environmental Geologist
SHE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC dba Shell Oil Products US, and on behalf of Shell Oil Company, and Star Enterprise."

CC: Jeff Kindley-Enercon Services

Sam Cooper
Rt. 1 Box 141
Blossom, TX 75416

Mr. Paul Sheeley
State of New Mexico
Oil Conservation Division, District 1
1625 N. French Drive
Hobbs, NM 88240

SITE PHOTOGRAPHS

Photo 1: Completed covering of landfarm 1.

Photo 2: Completed covering of landfarm 1.

Photo 3: Completed covering of landfarm 1.

Photo 4: Completed covering of landfarm 1.

Photo 5: Placing clean soil over landfarm 2.

Photo 6: Covering of landfarm 2.

Photo 7: Completed covering of landfarm 2.

Photo 8: Completed covering of landfarm 2.

Photo 9: Leveling and covering of landfarm 3.

Photo 10: Leveling of landfarm 3.

Photo 11: Completed leveling and covering of landfarm 3.

Photo 12: Completed covering of landfarm 3.

Photo 13: Covering of landfarm 4.

Photo 14: Leveling of landfarm 4.

Photo 15: Leveling of landfarm 4.

Photo 16: Completed leveling and covering of landfarm 4.

Photo 17: Completed leveling and covering of landfarm 4.

Photo 18: Completed leveling and covering of landfarm 4.

Photo 19: Grading dirt road leading to landfarms.

Photo 20: Reseeding of landfarm 1.

Photo 21: Reseeding of landfarm 1.

Photo 22: Reseeding of landfarm 2.

Photo 23: Reseeding of landfarm 3.

Photo 24: Reseeding of landfarm 4.

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

Photo 7

Photo 8

Photo 9

Photo 10

Notes by Martyne Kieling.

The landfarms have been reseeded the furrows can be seen. Very little has sprouted as of yet. The spring has been fairly dry. Rainfall has been good possibly above average for July and August of 2002.

The closure report dated March 20, 2002 has the reseeding occurring on or around January 17, 2002. There has been some wind drifting of the soil that is visible in some photos. The top foot of soil is clean soil that has been added to each cell per landowner request. It is expected that grass and other vegetation will continue to cover the facility with additional rainfall and natural progression from the edges of the former farm.

STATE OF NEW MEXICO
ENERGY MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

✓ Telephone ____ Personal Time 4:15 Date 4-23-02

Originating Party: Marlyn Kieling

Other Parties: Larry Johnson
Hobbs District Office

Subject: Equilon Land Farms
NM-02-0014, 0015, 0016, 0017

Discussion: When you get a chance to check them out
For Vegitation Growth per Closure Report.
Check out in the next month or so while it

Conclusions or Agreements:

Distribution

Signed: Marlyn

Kieling, Martyne

From: Kieling, Martyne
Sent: Tuesday, March 06, 2001 11:52 AM
To: 'Landreneau EK (Kyle)'
Subject: RE: Sam Cooper Ranch closure letter

Looks like I got the address wrong.
I will copy the signed copy I have here and send it off to you at the right address.


Clospl01.doc

From: Landreneau EK (Kyle)[SMTP:EKLandreneau@equiva.com]
Sent: Tuesday, March 06, 2001 11:20 AM
To: 'mkieling@state.nm.us'
Subject: Sam Cooper Ranch closure letter

Just checking to see if you prepared the closure approval letter for the landfarms at the subject site. The land Owner has called to check the project status and I also wanted to make sure that you have my new mailing address. New address is listed below.

Thanks

Kyle Landreneau
Equiva Services LLC
SHE/Science & Engineering
PMB 284
40 FM 1960 West
Houston Texas 77090

Office Phone 281-353-2069
Office Fax 281-825-0024
Pager/Cell Phone 281-414-0490
9/80 Schedule "B"

"Don't worry about people stealing your ideas. If your ideas are any good, you'll have to ram them down people's throats."

TRANSMITTAL COVER SHEET

OIL CONSERVATION DIVISION
1220 S. ST. FRANCIS DRIVE
SANTA FE, NM 87505
(505) 476-3440
(505)476-3462 (Fax)

PLEASE DELIVER THIS FAX:

TO: Sam & Chriss Cooper 903-982 ~~5417~~ 5617

FROM: Martyne Kieling OCD 476-3488

DATE: 6-12-01

PAGES: 1 of 9

SUBJECT: Please see page 2 of Attachment Section

Item # 3 states 6 inches or less

Permit 0014 0015 0016 0017 are Identical

IF YOU HAVE TROUBLE RECEIVING THIS FAX, PLEASE CALL THE OFFICE NUMBER ABOVE.

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

February 19, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. 7900-3200-0000-5051-2047

Mr. Kyle Landreneau
Equilon Enterprises L.L.C.
PMB FM 1960 West
Houston, TX 77090

RE: Closure Plan for Equilon Enterprises, L.L.C.
Landfarm #1, #2, #3 and #4
Permits NM-02-0014, NM-02-0015, NM-02-0016 and NM-02-0017
Lea County, New Mexico

Dear Mr. Landreneau:

The New Mexico Oil Conservation Division (OCD) is in receipt of Equilon Enterprises L.L.C.'s (Equilon) Closure Plan dated November 20, 2000 and supplemental information dated January 12, 2001 at the above referenced landfarms. Based on the data provided by Equilon the cells within landfarms #1, #2, #3 and #4 have been remediated to OCD standards. **The OCD hereby approves of the closure plan with the following condition:**

Additional wastes may not be disposed of or managed on the property. Equilon shall submit a final closure report to the OCD Santa Fe office and a copy to the Hobbs District office when closure is complete.

Please be advised that OCD approval does not relieve Equilon of liability should any remaining contaminants result in pollution of the ground water, surface water or the environment. In addition, OCD approval does not relieve Equilon of the responsibility for compliance with other federal, state, or local laws and/or regulations.

If you have any questions please do not hesitate to contact me at (505) 476-3488. Please note our address change.

Sincerely,

Martyne J. Kieling
Environmental Geologist

xc: OCD Hobbs Office

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

August 18, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. Z-559-573-335

Mr. Kyle Landreneau
Equilon Enterprises L.L.C.
28510 C Tomball Parkway PMB Suite 406
Tomball, TX 77375

RE: OCD Rule 711 Permit Approval NM-02-0014
Equilon Enterprises, L.L.C.
Centralized Landfarm #1
SE/4 NE/4 of Section 23, Township 24 South, Range 36 East, NMPM,
Lea County, New Mexico

Dear Mr. Landreneau:

The permit application for the Equilon Enterprises L.L.C. (Equilon) centralized surface waste management facility (Landfarm #1) located in the SE/4 NE/4 of Section 23, Township 24 South, Range 36 East, NMPM, Lea County, New Mexico, is hereby approved in accordance with New Mexico Oil Conservation Division (OCD) Rule 711 under the conditions contained in the enclosed attachment. **This permit approval is conditional upon the receipt and approval by the Director of financial assurance in the amount of $25,000 for this facility or a $50,000 blanket financial assurance for all of Equilon's centralized surface waste management facilities.** The application consists of the permit application Form C-137 dated November 11, 1999, the public notice dated March 16, 2000, and supplemental materials dated December 22, 1999 and March 27, 2000.

The operation, monitoring and reporting shall be as specified in the enclosed attachment. All modifications and alternatives to the approved landfarming methods must receive prior OCD approval. Equilon is required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

Please be advised approval of this facility permit does not relieve Equilon of liability should your operation result in pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve Equilon of responsibility for compliance with other federal, state or local laws and/or regulations.

Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered nonhazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs or open receptacles.

The facility is subject to periodic inspections by the OCD. The conditions of this permit will be reviewed by the OCD no later than five (5) years from the date of this approval and the facility will be inspected at least once a year.

Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the OCD Santa Fe Office within five working days of receipt of this letter.**

If you have any questions please do not hesitate to contact Martyne J. Kieling at (505) 827-7153.

Sincerely,

Lori Wrotenbery

Lori Wrotenbery
Director

LW/mjk

xc with attachments:
Hobbs OCD Office

ATTACHMENT TO OCD 711 PERMIT APPROVAL
PERMIT NM-02-0014
EQUILON ENTERPRISES L.L.C.
Landfarm #1
SE/4 NE/4 of Section 23, Township 24 South, Range 36 East, NMPM,
Lea County, New Mexico
(August 18, 2000)

LANDFARM CONSTRUCTION

1. Construction must commence on the landfarm area within one (1) year of the permit approval date. If construction does not commence within one (1) year of the permit approval date, this permit will be of no effect.

2. The facility must be fenced and have a sign at the entrance. The sign must be legible from at least fifty (50) feet and contain the following information: a) name of the facility; b) location by section, township and range; and c) emergency phone number.

3. Contaminated soils may not be placed within five (5) feet of the boundary of the facility and the landfarm facility may not be constructed within one hundred (100) feet of adjacent landowners' property.

4. Contaminated soils may not be placed within twenty (20) feet of any pipeline crossing the landfarm. In addition, no equipment may be operated within ten (10) feet of a pipeline. All pipelines crossing the facility must have surface markers identifying the location of the pipelines.

5. The portion of the facility containing contaminated soils must be bermed to prevent runoff and runon. A perimeter berm no less than two (2) feet above grade with a base of at least four (4) feet must be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for the specific region. Individual cells must be contained with a berm no less than two (2) feet above grade with a base of at least four (4) feet.

6. All above-ground tanks, saddle tanks or drums located at the facility and containing materials other than fresh water must be placed on an impermeable pad with curb containment. The pad and curb containment must be able to hold one and one-third the volume of the largest tank or all interconnected tanks. The tanks and containers must be labeled as to contents and hazards.

LANDFARM OPERATION

1. Disposal may occur only when an attendant is on duty. The facility must be secured when no attendant is present.

2. All contaminated soils received at the facility must be spread and disked within 72 hours of receipt.

3. Soils must be spread on the surface in lifts of six inches or less.

4. Soils must be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.

5. Exempt contaminated soils must be placed in the landfarm so that they are physically separate (*i.e.,* bermed) from non-exempt contaminated soils. There may be no mixing of exempt and non-exempt soils.

6. Successive lifts of contaminated soils may not be spread until a laboratory measurement of total petroleum hydrocarbons (TPH) in the previous lift is less than 5000 parts per million (ppm), the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations must be maintained. Authorization from the OCD must be obtained prior to application of successive lifts and/or removal of the remediated soils.

7. Prior to removal of remediated soils from the facility the soils must be tested for TPH, BTEX and benzene content. The remediated soils may only be moved to another location when the level of TPH in the remediated soil is less than 100 ppm, BTEX is less than 50 ppm, and benzene is less than 10 ppm. Comprehensive records of the laboratory analyses, destination, and volume of remediated soils removed from the facility will be maintained at the facility for OCD review. Authorization form the OCD Santa Fe office must be obtained prior to removal of the remediated soils to sensitive areas.

   Equilon may request alternate remediation levels for soils to be used or deposited at a location if remediation standards described in the OCD surface impoundment closure guidelines are met. Alternate remediation levels shall be subject to approval on a case-by-case basis. Request shall be submitted to the Santa Fe OCD office for Review.

8. Soils to be left in place may be considered remediated when a laboratory measurement of TPH in the previous lift is less than 5000 ppm, the sum of all BTEX is less than 50 ppm, and benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations must be maintained.

9. Moisture may be added as necessary to enhance bioremediation and to control blowing dust. There may be no ponding, pooling or run-off of water allowed. Any ponding of precipitation must be removed within twenty-four (24) hours of discovery.

10. Enhanced bio-remediation through the application of microbes (bugs) and/or fertilizers requires prior approval from the OCD. Requests for application of microbes or fertilizers must include the location of the area designated for the program, the composition of additives, and the method, amount and frequency of application.

11. Any design changes to the landfarm facility must be submitted to the OCD Santa Fe office for approval and a copy must be sent to the Hobbs District office.

12. Landfarm inspection must be conducted on at least a weekly basis and immediately following each consequential rainstorm or windstorm. If any defect is noted, repairs must be made as soon as possible. If the defect will jeopardize the integrity of the landfarm the OCD Santa Fe and Hobbs offices must be notified within 24 hours and additional wastes may not be placed into the landfarm until repairs have been completed.

13. Within 24 hours of receiving notification from the OCD that an objectionable odor has been detected or reported, the facility must implement the following response procedure:

    a. log date and approximate time of notice that an odor exists;

    b. log investigative steps taken, including date and time, and conclusions reached; and

    c. log actions taken to alleviate the odor, which may include adjusting chemical treatment, air sparging, solidification, landfarming, or other similar responses.

    A copy of the log, signed and dated by the facility manager, must be maintained for OCD review.

WASTE ACCEPTANCE CRITERIA

1. The facility is authorized to accept only exempt and "non-hazardous" non-exempt oilfield wastes that are generated in the State of New Mexico by Equilon Enterprise, L.L.C.

2. The facility is authorized to accept only:

    a. Oilfield wastes that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.

b. "Non-hazardous" non-exempt oilfield wastes on a case-by-case basis after conducting a hazardous waste characterization including corrosivity, reactivity, ignitability, and toxic constituents. The samples for these analyses must be obtained from the wastes prior to removal from the point of origin and without dilution in accordance with EPA SW-846 sampling procedures. The test for hazardous characteristics for a particular waste may be effective for an extended period of time from the date of analysis if approved by the OCD. In addition the generator must certify that this waste does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.

3. At no time may any OCD-permitted surface waste management facility accept wastes that are hazardous by either listing or characteristic testing

4. No free liquids or soils with free liquids may be accepted at the facility.

5. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.

6. Comprehensive records of all material disposed of at the surface waste management facility must be maintained by the permit holder.

TREATMENT ZONE MONITORING

1. One (1) background soil sample must be taken from undisturbed ground within 20 feet of the landfarm boundary two (2) feet below the native ground surface prior to operation. The sample must be analyzed for total petroleum hydrocarbons (TPH), volatile aromatic organics (BTEX), major cations/anions and Water Quality Control Commission (WQCC) metals.

2. A treatment zone not to exceed three (3) feet beneath the landfarm native ground surface must be monitored. A minimum of one random soil sample must be taken from each individual cell, with no cell being larger than five (5) acres, six (6) months after the first contaminated soils are received in the cell and then quarterly thereafter. The sample must be taken at two (2) to three (3) feet below the native ground surface.

3. The soil samples must be analyzed using EPA-approved methods for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) quarterly and for major cations/anions and Water Quality Control Commission (WQCC) metals annually.

4. After soil samples are obtained, the boreholes must be filled with an impermeable material such as cement or bentonite.

REPORTING

1. Analytical results from the treatment zone monitoring including a sample location map will be submitted to the OCD Santa Fe office **by August 18 of each year**.

2. Background sample analytical results must be submitted to the OCD Santa Fe office **within thirty (30) days** of receipt from the laboratory.

3. The applicant must notify the **OCD Hobbs District office within 24 hours** of any fire, break, leak, spill, blowout or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.

4. All records of testing and monitoring must be retained for a period of five (5) years.

5. The OCD must be notified prior to the installation of any pipelines or wells or other construction within the boundaries of the facility.

FINANCIAL ASSURANCE

1. Pursuant to OCD Rule 711.B.3.a., financial assurance in a form approved by the Director is required from Equilon Enterprises, L.L.C. in the amount of **$25,000** for this facility or **$50,000** for all of Equilon Enterprises, L.L.C.'s centralized surface waste management facilities in the state.

2. Financial assurance must be submitted by **September 18, 2000.**

3. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility will be reviewed no later than five (5) years from the date of this approval.

CLOSURE

1. The OCD Santa Fe and Hobbs offices must be notified when operation of the facility is to be discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Within six (6) months after discontinuing use or within 30 days of deciding to dismantle the facility a closure plan must be submitted to the OCD Santa Fe office for approval. The operator must complete cleanup of constructed facilities and restoration of the facility site within six (6) months of receiving the closure plan approval, unless an extension of time is granted by the Director.

2. A closure plan to include the following procedures must be submitted to the OCD Santa Fe office for approval:

   a. When the facility is to be closed no new material will be accepted.

   b. Existing landfarm soils will be remediated until they meet the OCD standards in effect at the time of closure.

   c. The treatment zone soils beneath the landfarm cells will be characterized as to the total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content in order to determine potential migration of contamination beneath the facility.

   d. The area will be contoured, seeded with native grasses and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, or fences for future alternative uses the structures, berms, or fences may be left in place.

   e. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

CERTIFICATION

Equilon Enterprises, L.L.C., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Equilon Enterprises, L.L.C. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Accepted:

EQUILON ENTERPRISES, L.L.C.

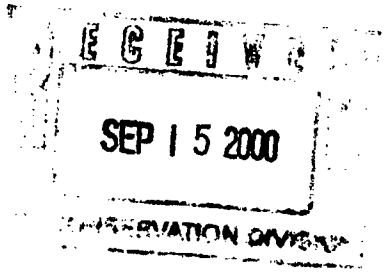
Signature _____ Title_____ Date _____

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

August 18, 2000



CERTIFIED MAIL
RETURN RECEIPT NO. Z-559-573-335

Mr. Kyle Landreneau
Equilon Enterprises L.L.C.
28510 C Tomball Parkway PMB Suite 406
Tomball, TX 77375

RE: OCD Rule 711 Permit Approval NM-02-0014
Equilon Enterprises, L.L.C.
Centralized Landfarm #1
SE/4 NE/4 of Section 23, Township 24 South, Range 36 East, NMPM,
Lea County, New Mexico

Dear Mr. Landreneau:

The permit application for the Equilon Enterprises L.L.C. (Equilon) centralized surface waste management facility (Landfarm #1) located in the SE/4 NE/4 of Section 23, Township 24 South, Range 36 East, NMPM, Lea County, New Mexico, is hereby approved in accordance with New Mexico Oil Conservation Division (OCD) Rule 711 under the conditions contained in the enclosed attachment. **This permit approval is conditional upon the receipt and approval by the Director of financial assurance in the amount of $25,000 for this facility or a $50,000 blanket financial assurance for all of Equilon's centralized surface waste management facilities.** The application consists of the permit application Form C-137 dated November 11, 1999, the public notice dated March 16, 2000, and supplemental materials dated December 22, 1999 and March 27, 2000.

The operation, monitoring and reporting shall be as specified in the enclosed attachment. All modifications and alternatives to the approved landfarming methods must receive prior OCD approval. Equilon is required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

Please be advised approval of this facility permit does not relieve Equilon of liability should your operation result in pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve Equilon of responsibility for compliance with other federal, state or local laws and/or regulations.

Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered nonhazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs or open receptacles.

The facility is subject to periodic inspections by the OCD. The conditions of this permit will be reviewed by the OCD no later than five (5) years from the date of this approval and the facility will be inspected at least once a year.

Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the OCD Santa Fe Office within five working days of receipt of this letter.**

If you have any questions please do not hesitate to contact Martyne J. Kieling at (505) 827-7153.

Sincerely,

Lori Wrotenbery

Lori Wrotenbery
Director

LW/mjk

xc with attachments:
Hobbs OCD Office

ATTACHMENT TO OCD 711 PERMIT APPROVAL
PERMIT NM-02-0014
EQUILON ENTERPRISES L.L.C.
Landfarm #1
SE/4 NE/4 of Section 23, Township 24 South, Range 36 East, NMPM,
Lea County, New Mexico
(August 18, 2000)

LANDFARM CONSTRUCTION

1. Construction must commence on the landfarm area within one (1) year of the permit approval date. If construction does not commence within one (1) year of the permit approval date, this permit will be of no effect.

2. The facility must be fenced and have a sign at the entrance. The sign must be legible from at least fifty (50) feet and contain the following information: a) name of the facility; b) location by section, township and range; and c) emergency phone number.

3. Contaminated soils may not be placed within five (5) feet of the boundary of the facility and the landfarm facility may not be constructed within one hundred (100) feet of adjacent landowners' property.

4. Contaminated soils may not be placed within twenty (20) feet of any pipeline crossing the landfarm. In addition, no equipment may be operated within ten (10) feet of a pipeline. All pipelines crossing the facility must have surface markers identifying the location of the pipelines.

5. The portion of the facility containing contaminated soils must be bermed to prevent runoff and runon. A perimeter berm no less than two (2) feet above grade with a base of at least four (4) feet must be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for the specific region. Individual cells must be contained with a berm no less than two (2) feet above grade with a base of at least four (4) feet.

6. All above-ground tanks, saddle tanks or drums located at the facility and containing materials other than fresh water must be placed on an impermeable pad with curb containment. The pad and curb containment must be able to hold one and one-third the volume of the largest tank or all interconnected tanks. The tanks and containers must be labeled as to contents and hazards.

LANDFARM OPERATION

1. Disposal may occur only when an attendant is on duty. The facility must be secured when no attendant is present.

2. All contaminated soils received at the facility must be spread and disked within 72 hours of receipt.

3. Soils must be spread on the surface in lifts of six inches or less.

4. Soils must be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.

5. Exempt contaminated soils must be placed in the landfarm so that they are physically separate (*i.e.,* bermed) from non-exempt contaminated soils. There may be no mixing of exempt and non-exempt soils.

6. Successive lifts of contaminated soils may not be spread until a laboratory measurement of total petroleum hydrocarbons (TPH) in the previous lift is less than 5000 parts per million (ppm), the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations must be maintained. Authorization from the OCD must be obtained prior to application of successive lifts and/or removal of the remediated soils.

7. Prior to removal of remediated soils from the facility the soils must be tested for TPH, BTEX and benzene content. The remediated soils may only be moved to another location when the level of TPH in the remediated soil is less than 100 ppm, BTEX is less than 50 ppm, and benzene is less than 10 ppm. Comprehensive records of the laboratory analyses, destination, and volume of remediated soils removed from the facility will be maintained at the facility for OCD review. Authorization form the OCD Santa Fe office must be obtained prior to removal of the remediated soils to sensitive areas.

   Equilon may request alternate remediation levels for soils to be used or deposited at a location if remediation standards described in the OCD surface impoundment closure guidelines are met. Alternate remediation levels shall be subject to approval on a case-by-case basis. Request shall be submitted to the Santa Fe OCD office for Review.

8. Soils to be left in place may be considered remediated when a laboratory measurement of TPH in the previous lift is less than 5000 ppm, the sum of all BTEX is less than 50 ppm, and benzene is less than 10 ppm. Comprehensive records of the laboratory analyses andthe sampling locations must be maintained.

9. Moisture may be added as necessary to enhance bioremediation and to control blowing dust. There may be no ponding, pooling or run-off of water allowed. Any ponding of precipitation must be removed within twenty-four (24) hours of discovery.

10. Enhanced bio-remediation through the application of microbes (bugs) and/or fertilizers requires prior approval from the OCD. Requests for application of microbes or fertilizers must include the location of the area designated for the program, the composition of additives, and the method, amount and frequency of application.

11. Any design changes to the landfarm facility must be submitted to the OCD Santa Fe office for approval and a copy must be sent to the Hobbs District office.

12. Landfarm inspection must be conducted on at least a weekly basis and immediately following each consequential rainstorm or windstorm. If any defect is noted, repairs must be made as soon as possible. If the defect will jeopardize the integrity of the landfarm the OCD Santa Fe and Hobbs offices must be notified within 24 hours and additional wastes may not be placed into the landfarm until repairs have been completed.

13. Within 24 hours of receiving notification from the OCD that an objectionable odor has been detected or reported, the facility must implement the following response procedure:

    a. log date and approximate time of notice that an odor exists;

    b. log investigative steps taken, including date and time, and conclusions reached; and

    c. log actions taken to alleviate the odor, which may include adjusting chemical treatment, air sparging, solidification, landfarming, or other similar responses.

    A copy of the log, signed and dated by the facility manager, must be maintained for OCD review.

WASTE ACCEPTANCE CRITERIA

1. The facility is authorized to accept only exempt and "non-hazardous" non-exempt oilfield wastes that are generated in the State of New Mexico by Equilon Enterprise, L.L.C.

2. The facility is authorized to accept only:

    a. Oilfield wastes that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.

b. "Non-hazardous" non-exempt oilfield wastes on a case-by-case basis after conducting a hazardous waste characterization including corrosivity, reactivity, ignitability, and toxic constituents. The samples for these analyses must be obtained from the wastes prior to removal from the point of origin and without dilution in accordance with EPA SW-846 sampling procedures. The test for hazardous characteristics for a particular waste may be effective for an extended period of time from the date of analysis if approved by the OCD. In addition the generator must certify that this waste does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.

3. At no time may any OCD-permitted surface waste management facility accept wastes that are hazardous by either listing or characteristic testing

4. No free liquids or soils with free liquids may be accepted at the facility.

5. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.

6. Comprehensive records of all material disposed of at the surface waste management facility must be maintained by the permit holder.

TREATMENT ZONE MONITORING

1. One (1) background soil sample must be taken from undisturbed ground within 20 feet of the landfarm boundary two (2) feet below the native ground surface prior to operation. The sample must be analyzed for total petroleum hydrocarbons (TPH), volatile aromatic organics (BTEX), major cations/anions and Water Quality Control Commission (WQCC) metals.

2. A treatment zone not to exceed three (3) feet beneath the landfarm native ground surface must be monitored. A minimum of one random soil sample must be taken from each individual cell, with no cell being larger than five (5) acres, six (6) months after the first contaminated soils are received in the cell and then quarterly thereafter. The sample must be taken at two (2) to three (3) feet below the native ground surface.

3. The soil samples must be analyzed using EPA-approved methods for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) quarterly and for major cations/anions and Water Quality Control Commission (WQCC) metals annually.

4. After soil samples are obtained, the boreholes must be filled with an impermeable material such as cement or bentonite.

REPORTING

1. Analytical results from the treatment zone monitoring including a sample location map will be submitted to the OCD Santa Fe office **by August 18 of each year**.

2. Background sample analytical results must be submitted to the OCD Santa Fe office **within thirty (30) days** of receipt from the laboratory.

3. The applicant must notify the **OCD Hobbs District office within 24 hours** of any fire, break, leak, spill, blowout or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.

4. All records of testing and monitoring must be retained for a period of five (5) years.

5. The OCD must be notified prior to the installation of any pipelines or wells or other construction within the boundaries of the facility.

FINANCIAL ASSURANCE

1. Pursuant to OCD Rule 711.B.3.a., financial assurance in a form approved by the Director is required from Equilon Enterprises, L.L.C. in the amount of **$25,000** for this facility or **$50,000** for all of Equilon Enterprises, L.L.C.'s centralized surface waste management facilities in the state.

2. Financial assurance must be submitted by **September 18, 2000.**

3. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility will be reviewed no later than five (5) years from the date of this approval.

CLOSURE

1. The OCD Santa Fe and Hobbs offices must be notified when operation of the facility is to be discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Within six (6) months after discontinuing use or within 30 days of deciding to dismantle the facility a closure plan must be submitted to the OCD Santa Fe office for approval. The operator must complete cleanup of constructed facilities and restoration of the facility site within six (6) months of receiving the closure plan approval, unless an extension of time is granted by the Director.

2. A closure plan to include the following procedures must be submitted to the OCD Santa Fe office for approval:

   a. When the facility is to be closed no new material will be accepted.

   b. Existing landfarm soils will be remediated until they meet the OCD standards in effect at the time of closure.

   c. The treatment zone soils beneath the landfarm cells will be characterized as to the total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content in order to determine potential migration of contamination beneath the facility.

   d. The area will be contoured, seeded with native grasses and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, or fences for future alternative uses the structures, berms, or fences may be left in place.

   e. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

CERTIFICATION

Equilon Enterprises, L.L.C., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Equilon Enterprises, L.L.C. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Accepted:

EQUILON ENTERPRISES, L.L.C.

Signature J. Baker Title G.M. OPERATIONS Date 9/12/00

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

February 19, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. 7900-3200-0000-5051-2047

Mr. Kyle Landreneau
Equilon Enterprises L.L.C.
PMB FM 1960 West
Houston, TX 77090

RE: Closure Plan for Equilon Enterprises, L.L.C.
Landfarm #1, #2, #3 and #4
Permits NM-02-0014, NM-02-0015, NM-02-0016 and NM-02-0017
Lea County, New Mexico

Dear Mr. Landreneau:

The New Mexico Oil Conservation Division (OCD) is in receipt of Equilon Enterprises L.L.C.'s (Equilon) Closure Plan dated November 20, 2000 and supplemental information dated January 12, 2001 at the above referenced landfarms. Based on the data provided by Equilon the cells within landfarms #1, #2, #3 and #4 have been remediated to OCD standards. **The OCD hereby approves of the closure plan with the following condition:**

Additional wastes may not be disposed of or managed on the property. Equilon shall submit a final closure report to the OCD Santa Fe office and a copy to the Hobbs District office when closure is complete.

Please be advised that OCD approval does not relieve Equilon of liability should any remaining contaminants result in pollution of the ground water, surface water or the environment. In addition, OCD approval does not relieve Equilon of the responsibility for compliance with other federal, state, or local laws and/or regulations.

If you have any questions please do not hesitate to contact me at (505) 476-3488. Please note our address change.

Sincerely,

Martyne J. Kieling
Environmental Geologist

xc: OCD Hobbs Office

ENERCON SERVICES, INC.
An Employee Owned Company

2775 Villa Creek, Suite 120
Dallas, TX 75234
(972) 484-3854
Fax: (972) 484-8835

January 12, 2001

Ms. Martyne J. Kieling
Environmental Geologist
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, NM 87505

RE: Additional Laboratory Analysis
Sam Cooper Centralized Landfarms
Landfarm #1 NM-02-0014
Landfarm #2 NM-02-0015
Landfarm #3 NM-02-0016
Landfarm #4 NM-02-0017
Lea County, New Mexico

Dear Ms. Kieling:

Mr. Kyle Landreneau, Environmental Geologist with Equiva Services, LLC, previously forwarded to your office a Facility Closure Plan for the above referenced landfarms. After reviewing the Closure Plan, you expressed to me in a telephone conversation the need for additional information regarding those facilities. Accordingly, you will find attached laboratory analytical results from recent sampling performed at the landfarms. Specifically, additional Treatment Zone monitoring results for major cations/anions, alkalinity, ion chromatography, and Water Quality Control Commission (WQCC) metals are attached. In addition, maps showing sampling locations at each landfarm cell have been prepared for your review.

I believe this answers all of your requests for additional information regarding these landfarms. If you have any questions or comments, or if I have overlooked something, please call either me at (972) 484-3854 or Mr. Landreneau at (281) 353-2069. Thank you for your assistance with this project.

Sincerely yours,
Enercon Services, Inc.

Don R. Parsons, Jr., C.P.G.
Senior Project Manager

Cc: Kyle Landreneau – Equiva Services, LLC

TRACE ANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

ANALYTICAL RESULTS FOR
ENERCON SERVICES, INC.
Attention: Jeff Kindley
306 W. Wall Suite 1312
Midland, Texas 79701

December 26, 2000
Receiving Date: 12/09/00
Sample Type: Soil
Project No: ES-347
Project Name: Jal/Cooper Cemetery Land Farms
Project Loc: Jal, New Mexico

Prep Date: 12/13/00
Analysis Date: 12/22/00
Sampling Date: 12/08/00
Sample Condition: I & C
Sample Received by: JS

TA#	Field Code	TOTAL Ca (mg/kg)	TOTAL Mg (mg/kg)	TOTAL Na (mg/kg)	TOTAL K (mg/kg)
T160494	Landfarm 1 Cell A (2')	2,650	630	575	890
T160495	Landfarm 1 Cell B (2')	3,490	700	600	970
T160496	Landfarm 1 Cell C (2')	3,920	1,030	700	1,440
T160497	Landfarm 1 Cell D (2')	2,330	560	460	806
T160498	Landfarm 2 (2')	9,700	720	690	900
T160499	Landfarm 3 (2')	8,550	600	600	790
T160500	Landfarm 4 Cell A (2')	940	680	650	1,080
T160501	Landfarm 4 Cell B (2')	1,270	690	470	1,130
T160502	Landfarm 4 Cell C (2')	970	720	650	1,160
T160503	Landfarm 4 Cell D (2')	980	740	560	1,170
ICV		23.9	24.3	25.7	23.9
CCV		26.3	26.7	25.5	23.8
Reporting Limit		0.50	0.50	0.50	0.50
RPD		3	1	1	1
% Extraction Accuracy		109	103	109	108
% Instrument Accuracy		105	107	102	95

METHODS: EPA SW 846-6010B, 3050A
CHEMIST: RR
TOTAL SPIKE: 10,000 mg/Kg Ca, Mg, Na, K
TOTAL CV: 25 mg/L Ca, Mg, Na, K

Director, Dr. Blair Leftwich

12-26-00
Date

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
155 McCutcheon, Suite H El Paso, Texas 79932 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Jeff Kindley
Enercon Services Inc.
306 W. Wall Suite 1312
Midland, Tx. 79701

Report Date: December 26, 2000

Order ID Number: A00121112

Project Number: ES-347
Project Name: Jal/Cooper Cemetery Land Farms
Project Location: Jal,New Mexico

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
160494	Landfarm 1 Cell A (2')	Soil	12/8/00	:	12/9/00
160495	Landfarm 1 Cell B (2')	Soil	12/8/00	:	12/9/00
160496	Landfarm 1 Cell C (2')	Soil	12/8/00	:	12/9/00
160497	Landfarm 1 Cell D (2')	Soil	12/8/00	:	12/9/00
160498	Landfarm 2 (2')	Soil	12/8/00	:	12/9/00
160499	Landfarm 3 (2')	Soil	12/8/00	:	12/9/00
160500	Landfarm 4 Cell A (2')	Soil	12/8/00	:	12/9/00
160501	Landfarm 4 Cell B (2')	Soil	12/8/00	:	12/9/00
160502	Landfarm 4 Cell C (2')	Soil	12/8/00	:	12/9/00
160503	Landfarm 4 Cell D (2')	Soil	12/8/00	:	12/9/00

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

Dr. Blair Leftwich, Director

Analytical and Quality Control Report

Sample: 160494 - Landfarm 1 Cell A (2')

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC07525	Date Analyzed:	12/19/00
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB06576	Date Prepared:	12/15/00

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Bicarbonate Alkalinity		170	mg/Kg as CaCo3	1	1
Total Alkalinity		170	mg/Kg as CaCo3	1	1

Sample: 160494 - Landfarm 1 Cell A (2')

Analysis:	Hg, Total	Analytical Method:	S 7471A	QC Batch:	QC07322	Date Analyzed:	12/12/00
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB06386	Date Prepared:	12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		2.56	mg/Kg	1	0.19

Sample: 160494 - Landfarm 1 Cell A (2')

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC07491	Date Analyzed:	12/15/00
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB06543	Date Prepared:	12/15/00

Param	Flag	Result	Units	Dilution	RDL
CL		33	mg/Kg	1	1
Fluoride	[1]	<1.0	mg/Kg	1	0.50
Nitrate-N		2.2	mg/Kg	1	0.20
Sulfate	[2]	24	mg/Kg	1	2

Sample: 160494 - Landfarm 1 Cell A (2')

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC07612	Date Analyzed:	12/22/00
Analyst:	RR	Preparation Method:	E 3050B	Prep Batch:	PB06376	Date Prepared:	12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<5	mg/Kg	100	0.05
Total Barium		30	mg/Kg	100	0.05
Total Cadmium		<2	mg/Kg	100	0.02
Total Chromium		<5	mg/Kg	100	0.05
Total Lead		<5	mg/Kg	100	0.05
Total Selenium		<5	mg/Kg	100	0.05
Total Silver		<1	mg/Kg	100	0.01

Sample: 160495 - Landfarm 1 Cell B (2')

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC07525	Date Analyzed:	12/19/00
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB06576	Date Prepared:	12/15/00

[1]Fluoride re-ran on IC121800-2.sch. ICV %IA = 105; CCV %IA = 106; matrix spikes RPD = 11; matrix spikes %EA = 92.
[2]Sulfate re-ran on IC121800-2.sch. ICV %IA = 103; CCV %IA = 103; matrix spikes RPD = 1; matrix spikes %EA = 102.

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Bicarbonate Alkalinity		130	mg/Kg as CaCo3	1	1
Total Alkalinity		130	mg/Kg as CaCo3	1	1

Sample: 160495 - Landfarm 1 Cell B (2')

Analysis: Hg, Total | Analytical Method: S 7471A | QC Batch: QC07322 | Date Analyzed: 12/12/00
Analyst: SSC | Preparation Method: N/A | Prep Batch: PB06386 | Date Prepared: 12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.19	mg/Kg	1	0.19

Sample: 160495 - Landfarm 1 Cell B (2')

Analysis: Ion Chromatography (IC) | Analytical Method: E 300.0 | QC Batch: QC07491 | Date Analyzed: 12/15/00
Analyst: JS | Preparation Method: N/A | Prep Batch: PB06543 | Date Prepared: 12/15/00

Param	Flag	Result	Units	Dilution	RDL
CL		7.8	mg/Kg	1	1
Fluoride	[3]	<1.0	mg/Kg	1	0.50
Nitrate-N		1.6	mg/Kg	1	0.20
Sulfate	[4]	16	mg/Kg	1	2

Sample: 160495 - Landfarm 1 Cell B (2')

Analysis: Total Metals | Analytical Method: S 6010B | QC Batch: QC07612 | Date Analyzed: 12/22/00
Analyst: RR | Preparation Method: E 3050B | Prep Batch: PB06376 | Date Prepared: 12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<5	mg/Kg	100	0.05
Total Barium		24.5	mg/Kg	100	0.05
Total Cadmium		<2	mg/Kg	100	0.02
Total Chromium		<5	mg/Kg	100	0.05
Total Lead		<5	mg/Kg	100	0.05
Total Selenium		<5	mg/Kg	100	0.05
Total Silver		<1	mg/Kg	100	0.01

Sample: 160496 - Landfarm 1 Cell C (2')

Analysis: Alkalinity | Analytical Method: E 310.1 | QC Batch: QC07525 | Date Analyzed: 12/19/00
Analyst: JS | Preparation Method: N/A | Prep Batch: PB06576 | Date Prepared: 12/15/00

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Bicarbonate Alkalinity		754	mg/Kg as CaCo3	1	1
Total Alkalinity		754	mg/Kg as CaCo3	1	1

[3]Fluoride re-ran on IC121800-2.sch. ICV %IA = 105; CCV %IA = 106; matrix spikes RPD = 11; matrix spikes %EA = 92.
[4]Sulfate re-ran on IC121800-2.sch. ICV %IA = 103; CCV %IA = 103; matrix spikes RPD = 1; matrix spikes %EA = 102.

Sample: 160496 - Landfarm 1 Cell C (2')

Analysis:	Hg, Total	Analytical Method:	S 7471A	QC Batch:	QC07322	Date Analyzed:	12/12/00
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB06386	Date Prepared:	12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.19	mg/Kg	1	0.19

Sample: 160496 - Landfarm 1 Cell C (2')

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC07492	Date Analyzed:	12/15/00
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB06543	Date Prepared:	12/15/00

Param	Flag	Result	Units	Dilution	RDL
CL		9.8	mg/Kg	1	1
Fluoride	[5]	<1.0	mg/Kg	1	0.50
Nitrate-N		1.2	mg/Kg	1	0.20
Sulfate	[6]	18	mg/Kg	1	2

Sample: 160496 - Landfarm 1 Cell C (2')

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC07612	Date Analyzed:	12/22/00
Analyst:	RR	Preparation Method:	E 3050B	Prep Batch:	PB06376	Date Prepared:	12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<5	mg/Kg	100	0.05
Total Barium		48.3	mg/Kg	100	0.05
Total Cadmium		<2	mg/Kg	100	0.02
Total Chromium		<5	mg/Kg	100	0.05
Total Lead		<5	mg/Kg	100	0.05
Total Selenium		<5	mg/Kg	100	0.05
Total Silver		<1	mg/Kg	100	0.01

Sample: 160497 - Landfarm 1 Cell D (2')

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC07525	Date Analyzed:	12/19/00
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB06576	Date Prepared:	12/15/00

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Bicarbonate Alkalinity		318	mg/Kg as CaCo3	1	1
Total Alkalinity		318	mg/Kg as CaCo3	1	1

Sample: 160497 - Landfarm 1 Cell D (2')

Analysis:	Hg, Total	Analytical Method:	S 7471A	QC Batch:	QC07323	Date Analyzed:	12/12/00
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB06386	Date Prepared:	12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.19	mg/Kg	1	0.19

[5]Fluoride re-ran on IC121800-2.sch. ICV %IA = 105; CCV %IA = 106; matrix spikes RPD = 11; matrix spikes %EA = 92.
[6]Sulfate re-ran on IC121800-2.sch. ICV %IA = 103; CCV %IA = 103; matrix spikes RPD = 1; matrix spikes %EA = 102.

Sample: 160497 - Landfarm 1 Cell D (2')

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC07491 Date Analyzed: 12/15/00
Analyst: JS Preparation Method: N/A Prep Batch: PB06543 Date Prepared: 12/15/00

Param	Flag	Result	Units	Dilution	RDL
CL		11	mg/Kg	1	1
Fluoride	[7]	<1.0	mg/Kg	1	0.50
Nitrate-N		<1.0	mg/Kg	1	0.20
Sulfate	[8]	15	mg/Kg	1	2

Sample: 160497 - Landfarm 1 Cell D (2')

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC07612 Date Analyzed: 12/22/00
Analyst: RR Preparation Method: E 3050B Prep Batch: PB06376 Date Prepared: 12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<5	mg/Kg	100	0.05
Total Barium		20.5	mg/Kg	100	0.05
Total Cadmium		<2	mg/Kg	100	0.02
Total Chromium		<5	mg/Kg	100	0.05
Total Lead		<5	mg/Kg	100	0.05
Total Selenium		<5	mg/Kg	100	0.05
Total Silver		<1	mg/Kg	100	0.01

Sample: 160498 - Landfarm 2 (2')

Analysis: Alkalinity Analytical Method: E 310.1 QC Batch: QC07525 Date Analyzed: 12/19/00
Analyst: JS Preparation Method: N/A Prep Batch: PB06576 Date Prepared: 12/15/00

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Bicarbonate Alkalinity		365	mg/Kg as CaCo3	1	1
Total Alkalinity		365	mg/Kg as CaCo3	1	1

Sample: 160498 - Landfarm 2 (2')

Analysis: Hg, Total Analytical Method: S 7471A QC Batch: QC07323 Date Analyzed: 12/12/00
Analyst: SSC Preparation Method: N/A Prep Batch: PB06386 Date Prepared: 12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.19	mg/Kg	1	0.19

Sample: 160498 - Landfarm 2 (2')

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC07491 Date Analyzed: 12/15/00
Analyst: JS Preparation Method: N/A Prep Batch: PB06543 Date Prepared: 12/15/00

Param	Flag	Result	Units	Dilution	RDL
CL		7.6	mg/Kg	1	1

Continued ...

[7] Fluoride re-ran on IC121800-2.sch. ICV %IA = 105; CCV %IA = 106; matrix spikes RPD = 11; matrix spikes %EA = 92.
[8] Sulfate re-ran on IC121800-2.sch. ICV %IA = 103; CCV %IA = 103; matrix spikes RPD = 1; matrix spikes %EA = 102.

... Continued Sample: 160498 Analysis: Ion Chromatography (IC)

Param	Flag	Result	Units	Dilution	RDL
Fluoride	[9]	<1.0	mg/Kg	1	0.50
Nitrate-N		2.0	mg/Kg	1	0.20
Sulfate	[10]	9.6	mg/Kg	1	2

Sample: 160498 - Landfarm 2 (2')

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC07612 Date Analyzed: 12/22/00
Analyst: RR Preparation Method: E 3050B Prep Batch: PB06376 Date Prepared: 12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<5	mg/Kg	100	0.05
Total Barium		106	mg/Kg	100	0.05
Total Cadmium		<2	mg/Kg	100	0.02
Total Chromium		<5	mg/Kg	100	0.05
Total Lead		<5	mg/Kg	100	0.05
Total Selenium		<5	mg/Kg	100	0.05
Total Silver		<1	mg/Kg	100	0.01

Sample: 160499 - Landfarm 3 (2')

Analysis: Alkalinity Analytical Method: E 310.1 QC Batch: QC07525 Date Analyzed: 12/19/00
Analyst: JS Preparation Method: N/A Prep Batch: PB06576 Date Prepared: 12/15/00

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Bicarbonate Alkalinity		178	mg/Kg as CaCo3	1	1
Total Alkalinity		178	mg/Kg as CaCo3	1	1

Sample: 160499 - Landfarm 3 (2')

Analysis: Hg, Total Analytical Method: S 7471A QC Batch: QC07323 Date Analyzed: 12/12/00
Analyst: SSC Preparation Method: N/A Prep Batch: PB06386 Date Prepared: 12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.19	mg/Kg	1	0.19

Sample: 160499 - Landfarm 3 (2')

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC07491 Date Analyzed: 12/15/00
Analyst: JS Preparation Method: N/A Prep Batch: PB06543 Date Prepared: 12/15/00

Param	Flag	Result	Units	Dilution	RDL
CL		10	mg/Kg	1	1
Fluoride	[11]	<1.0	mg/Kg	1	0.50
Nitrate-N		1.7	mg/Kg	1	0.20
Sulfate	[12]	11	mg/Kg	1	2

[9] Fluoride re-ran on IC121800-2.sch. ICV %IA = 105; CCV %IA = 106; matrix spikes RPD = 11; matrix spikes %EA = 92.
[10] Sulfate re-ran on IC121800-2.sch. ICV %IA = 103; CCV %IA = 103; matrix spikes RPD = 1; matrix spikes %EA = 102.
[11] Fluoride re-ran on IC121800-2.sch. ICV %IA = 105; CCV %IA = 106; matrix spikes RPD = 11; matrix spikes %EA = 92.
[12] Sulfate re-ran on IC121800-2.sch. ICV %IA = 103; CCV %IA = 103; matrix spikes RPD = 1; matrix spikes %EA = 102.

Sample: 160499 - Landfarm 3 (2')

Analysis: Total Metals | Analytical Method: S 6010B | QC Batch: QC07612 | Date Analyzed: 12/22/00
Analyst: RR | Preparation Method: E 3050B | Prep Batch: PB06376 | Date Prepared: 12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<5	mg/Kg	100	0.05
Total Barium		91	mg/Kg	100	0.05
Total Cadmium		<2	mg/Kg	100	0.02
Total Chromium		<5	mg/Kg	100	0.05
Total Lead		<5	mg/Kg	100	0.05
Total Selenium		<5	mg/Kg	100	0.05
Total Silver		<1	mg/Kg	100	0.01

Sample: 160500 - Landfarm 4 Cell A (2')

Analysis: Alkalinity | Analytical Method: E 310.1 | QC Batch: QC07525 | Date Analyzed: 12/19/00
Analyst: JS | Preparation Method: N/A | Prep Batch: PB06576 | Date Prepared: 12/15/00

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Bicarbonate Alkalinity		86	mg/Kg as CaCo3	1	1
Total Alkalinity		86	mg/Kg as CaCo3	1	1

Sample: 160500 - Landfarm 4 Cell A (2')

Analysis: Hg, Total | Analytical Method: S 7471A | QC Batch: QC07323 | Date Analyzed: 12/12/00
Analyst: SSC | Preparation Method: N/A | Prep Batch: PB06386 | Date Prepared: 12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.19	mg/Kg	1	0.19

Sample: 160500 - Landfarm 4 Cell A (2')

Analysis: Ion Chromatography (IC) | Analytical Method: E 300.0 | QC Batch: QC07492 | Date Analyzed: 12/15/00
Analyst: JS | Preparation Method: N/A | Prep Batch: PB06543 | Date Prepared: 12/15/00

Param	Flag	Result	Units	Dilution	RDL
CL		14	mg/Kg	1	1
Fluoride	[13]	<1.0	mg/Kg	1	0.50
Nitrate-N		<1.0	mg/Kg	1	0.20
Sulfate	[14]	8.2	mg/Kg	1	2

Sample: 160500 - Landfarm 4 Cell A (2')

Analysis: Total Metals | Analytical Method: S 6010B | QC Batch: QC07612 | Date Analyzed: 12/22/00
Analyst: RR | Preparation Method: E 3050B | Prep Batch: PB06376 | Date Prepared: 12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<5	mg/Kg	100	0.05

Continued ...

[13] Fluoride re-ran on IC121800-2.sch. ICV %IA = 105; CCV %IA = 106; matrix spikes RPD = 11; matrix spikes %EA = 92.
[14] Sulfate re-ran on IC121800-2.sch. ICV %IA = 103; CCV %IA = 103; matrix spikes RPD = 1; matrix spikes %EA = 102.

... *Continued* Sample: 160500 Analysis: Total Metals

Param	Flag	Result	Units	Dilution	RDL
Total Barium		24.7	mg/Kg	100	0.05
Total Cadmium		<2	mg/Kg	100	0.02
Total Chromium		<5	mg/Kg	100	0.05
Total Lead		<5	mg/Kg	100	0.05
Total Selenium		<5	mg/Kg	100	0.05
Total Silver		<1	mg/Kg	100	0.01

Sample: 160501 - Landfarm 4 Cell B (2')

Analysis: Alkalinity Analytical Method: E 310.1 QC Batch: QC07525 Date Analyzed: 12/19/00
Analyst: JS Preparation Method: N/A Prep Batch: PB06576 Date Prepared: 12/15/00

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Bicarbonate Alkalinity		81	mg/Kg as CaCo3	1	1
Total Alkalinity		81	mg/Kg as CaCo3	1	1

Sample: 160501 - Landfarm 4 Cell B (2')

Analysis: Hg, Total Analytical Method: S 7471A QC Batch: QC07323 Date Analyzed: 12/12/00
Analyst: SSC Preparation Method: N/A Prep Batch: PB06386 Date Prepared: 12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.19	mg/Kg	1	0.19

Sample: 160501 - Landfarm 4 Cell B (2')

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC07492 Date Analyzed: 12/15/00
Analyst: JS Preparation Method: N/A Prep Batch: PB06543 Date Prepared: 12/15/00

Param	Flag	Result	Units	Dilution	RDL
CL		20	mg/Kg	1	1
Fluoride	[15]	<1.0	mg/Kg	1	0.50
Nitrate-N		<1.0	mg/Kg	1	0.20
Sulfate	[16]	8.8	mg/Kg	1	2

Sample: 160501 - Landfarm 4 Cell B (2')

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC07612 Date Analyzed: 12/22/00
Analyst: RR Preparation Method: E 3050B Prep Batch: PB06376 Date Prepared: 12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<5	mg/Kg	100	0.05
Total Barium		25.6	mg/Kg	100	0.05
Total Cadmium		<2	mg/Kg	100	0.02
Total Chromium		<5	mg/Kg	100	0.05
Total Lead		<5	mg/Kg	100	0.05

Continued ...

[15]Fluoride re-ran on IC121800-2.sch. ICV %IA = 105; CCV %IA = 106; matrix spikes RPD = 11; matrix spikes %EA = 92.
[16]Sulfate re-ran on IC121800-2.sch. ICV %IA = 103; CCV %IA = 103; matrix spikes RPD = 1; matrix spikes %EA = 102.

... *Continued* Sample: 160501 Analysis: Total Metals

Param	Flag	Result	Units	Dilution	RDL
Total Selenium		<5	mg/Kg	100	0.05
Total Silver		<1	mg/Kg	100	0.01

Sample: 160502 - Landfarm 4 Cell C (2')

Analysis: Alkalinity Analytical Method: E 310.1 QC Batch: QC07525 Date Analyzed: 12/19/00
Analyst: JS Preparation Method: N/A Prep Batch: PB06576 Date Prepared: 12/15/00

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Bicarbonate Alkalinity		109	mg/Kg as CaCo3	1	1
Total Alkalinity		109	mg/Kg as CaCo3	1	1

Sample: 160502 - Landfarm 4 Cell C (2')

Analysis: Hg, Total Analytical Method: S 7471A QC Batch: QC07323 Date Analyzed: 12/12/00
Analyst: SSC Preparation Method: N/A Prep Batch: PB06386 Date Prepared: 12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.19	mg/Kg	1	0.19

Sample: 160502 - Landfarm 4 Cell C (2')

Analysis: Ion Chromatography (IC) Analytical Method: E 300.0 QC Batch: QC07492 Date Analyzed: 12/15/00
Analyst: JS Preparation Method: N/A Prep Batch: PB06543 Date Prepared: 12/15/00

Param	Flag	Result	Units	Dilution	RDL
CL		18	mg/Kg	1	1
Fluoride	[17]	<1.0	mg/Kg	1	0.50
Nitrate-N		<1.0	mg/Kg	1	0.20
Sulfate	[18]	8.0	mg/Kg	1	2

Sample: 160502 - Landfarm 4 Cell C (2')

Analysis: Total Metals Analytical Method: S 6010B QC Batch: QC07612 Date Analyzed: 12/22/00
Analyst: RR Preparation Method: E 3050B Prep Batch: PB06376 Date Prepared: 12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<5	mg/Kg	100	0.05
Total Barium		23.6	mg/Kg	100	0.05
Total Cadmium		<2	mg/Kg	100	0.02
Total Chromium		<5	mg/Kg	100	0.05
Total Lead		<5	mg/Kg	100	0.05
Total Selenium		<5	mg/Kg	100	0.05
Total Silver		<1	mg/Kg	100	0.01

[17] Fluoride re-ran on IC121800-2.sch. ICV %IA = 105; CCV %IA = 106; matrix spikes RPD = 11; matrix spikes %EA = 92.
[18] Sulfate re-ran on IC121800-2.sch. ICV %IA = 103; CCV %IA = 103; matrix spikes RPD = 1; matrix spikes %EA = 102.

Sample: 160503 - Landfarm 4 Cell D (2')

Analysis:	Alkalinity	Analytical Method:	E 310.1	QC Batch:	QC07525	Date Analyzed:	12/19/00
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB06576	Date Prepared:	12/15/00

Param	Flag	Result	Units	Dilution	RDL
Hydroxide Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1	1
Bicarbonate Alkalinity		103	mg/Kg as CaCo3	1	1
Total Alkalinity		103	mg/Kg as CaCo3	1	1

Sample: 160503 - Landfarm 4 Cell D (2')

Analysis:	Hg, Total	Analytical Method:	S 7471A	QC Batch:	QC07323	Date Analyzed:	12/12/00
Analyst:	SSC	Preparation Method:	N/A	Prep Batch:	PB06386	Date Prepared:	12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Mercury		<0.19	mg/Kg	1	0.19

Sample: 160503 - Landfarm 4 Cell D (2')

Analysis:	Ion Chromatography (IC)	Analytical Method:	E 300.0	QC Batch:	QC07492	Date Analyzed:	12/15/00
Analyst:	JS	Preparation Method:	N/A	Prep Batch:	PB06543	Date Prepared:	12/15/00

Param	Flag	Result	Units	Dilution	RDL
CL		82	mg/Kg	1	1
Fluoride	[19]	<1.0	mg/Kg	1	0.50
Nitrate-N		<1.0	mg/Kg	1	0.20
Sulfate	[20]	8.4	mg/Kg	1	2

Sample: 160503 - Landfarm 4 Cell D (2')

Analysis:	Total Metals	Analytical Method:	S 6010B	QC Batch:	QC07612	Date Analyzed:	12/22/00
Analyst:	RR	Preparation Method:	E 3050B	Prep Batch:	PB06376	Date Prepared:	12/12/00

Param	Flag	Result	Units	Dilution	RDL
Total Arsenic		<5	mg/Kg	100	0.05
Total Barium		24.1	mg/Kg	100	0.05
Total Cadmium		<2	mg/Kg	100	0.02
Total Chromium		<5	mg/Kg	100	0.05
Total Lead		<5	mg/Kg	100	0.05
Total Selenium		<5	mg/Kg	100	0.05
Total Silver		<1	mg/Kg	100	0.01

Quality Control Report
Method Blank

Sample: Method Blank

QCBatch: QC07322

[19]Fluoride re-ran on IC121800-2.sch. ICV %IA = 105; CCV %IA = 106; matrix spikes RPD = 11; matrix spikes %EA = 92.
[20]Sulfate re-ran on IC121800-2.sch. ICV %IA = 103; CCV %IA = 103; matrix spikes RPD = 1; matrix spikes %EA = 102.

Param	Flag	Results	Units	Reporting Limit
Total Mercury		<0.19	mg/Kg	0.19

Sample: Method Blank QCBatch: QC07323

Param	Flag	Results	Units	Reporting Limit
Total Mercury		<0.19	mg/Kg	0.19

Sample: Method Blank QCBatch: QC07491

Param	Flag	Results	Units	Reporting Limit
CL		7.76	mg/Kg	1
Fluoride		0.50	mg/Kg	0.50
Nitrate-N		<0.2	mg/Kg	0.20
Sulfate		11.10	mg/Kg	2

Sample: Method Blank QCBatch: QC07492

Param	Flag	Results	Units	Reporting Limit
CL		7.80	mg/Kg	1
Fluoride		0.51	mg/Kg	0.50
Nitrate-N		<0.2	mg/Kg	0.20
Sulfate		11.01	mg/Kg	2

Sample: Method Blank QCBatch: QC07525

Param	Flag	Results	Units	Reporting Limit
Hydroxide Alkalinity		<1.0	mg/Kg as CaCo3	1
Carbonate Alkalinity		<1.0	mg/Kg as CaCo3	1
Bicarbonate Alkalinity		<6.0	mg/Kg as CaCo3	1
Total Alkalinity		<6.0	mg/Kg as CaCo3	1

Sample: Method Blank QCBatch: QC07612

Param	Flag	Results	Units	Reporting Limit
Total Arsenic		<0.05	mg/Kg	0.05
Total Barium		<0.05	mg/Kg	0.05
Total Cadmium		<0.02	mg/Kg	0.02
Total Chromium		<0.05	mg/Kg	0.05
Total Lead		<0.05	mg/Kg	0.05

Continued ...

... Continued

Param	Flag	Results	Units	Reporting Limit
Total Selenium		<0.05	mg/Kg	0.05
Total Silver		<0.01	mg/Kg	0.01

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Sample: LCS QC Batch: QC07322

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		2.65	mg/Kg	1	2.50	<0.19	106		80 - 120	20

Sample: LCSD QC Batch: QC07322

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury		2.67	mg/Kg	1	2.50	<0.19	106	1	80 - 120	20

Sample: LCS QC Batch: QC07491

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL	[21]	20.28	mg/Kg	1	12.50	7.76	162		80 - 120	25

Sample: LCSD QC Batch: QC07491

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL	[22]	20.34	mg/Kg	1	12.50	7.76	162	0	80 - 120	25

Sample: LCS QC Batch: QC07492

[21] Sample master did not subtract matrix blank from the blank spikes. The correct %EA = 100.
[22] Sample master did not subtract matrix blank from the blank spikes. The correct %EA = 100.

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL	[23]	20.33	mg/Kg	1	12.50	7.80	162		80 - 120	25
Nitrate-N	[24]	2.79	mg/Kg	1	2.50	<0.2	111		80 - 120	20

Sample: LCSD QC Batch: QC07492

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL	[25]	20.38	mg/Kg	1	12.50	7.80	163	0	80 - 120	25
Nitrate-N	[26]	2.82	mg/Kg	1	2.50	<0.2	112	1	80 - 120	20

Sample: LCS QC Batch: QC07612

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Arsenic		106	mg/Kg	100	100	<0.05	106		75 - 125	20
Total Barium		232	mg/Kg	100	200	<0.05	116		75 - 125	20
Total Cadmium		21.7	mg/Kg	100	20	<0.02	108		75 - 125	20
Total Chromium		46	mg/Kg	100	40	<0.05	115		75 - 125	20
Total Lead		111	mg/Kg	100	100	<0.05	111		75 - 125	20
Total Selenium		96.7	mg/Kg	100	100	<0.05	96		75 - 125	20
Total Silver		7.78	mg/Kg	100	10	<0.01	77		75 - 125	20

Sample: LCSD QC Batch: QC07612

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Arsenic		113	mg/Kg	100	100	<0.05	113	6	75 - 125	20
Total Barium		242	mg/Kg	100	200	<0.05	121	4	75 - 125	20
Total Cadmium		22.8	mg/Kg	100	20	<0.02	114	5	75 - 125	20
Total Chromium		48.4	mg/Kg	100	40	<0.05	121	5	75 - 125	20
Total Lead		116	mg/Kg	100	100	<0.05	116	4	75 - 125	20
Total Selenium		102	mg/Kg	100	100	<0.05	102	5	75 - 125	20
Total Silver		9.28	mg/Kg	100	10	<0.01	92	18	75 - 125	20

Quality Control Report
Matrix Spikes and Duplicate Spikes

[23]Sample master did not subtract matrix blank from the blank spikes. The correct %EA = 100.
[24]Sample master did not subtract matrix blank from the blank spikes. The correct %EA = 106.
[25]Sample master did not subtract matrix blank from the blank spikes. The correct %EA = 100.
[26]Sample master did not subtract matrix blank from the blank spikes. The correct %EA = 106.

Sample: MS QC Batch: QC07322

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury	[27]	43.0	mg/Kg	1	2.50	29.2	552		80 - 120	20

Sample: MSD QC Batch: QC07322

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Mercury	[28]	34.5	mg/Kg	1	2.50	29.2	212	89	80 - 120	20

Sample: MS QC Batch: QC07491

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL		94.50	mg/Kg	1	62.50	33	98		75 - 106	25

Sample: MSD QC Batch: QC07491

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL		93.99	mg/Kg	1	12.50	33	97	1	75 - 106	25

Sample: MS QC Batch: QC07492

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL		70.93	mg/Kg	1	62.50	9.8	97		75 - 106	25
Nitrate-N		14.52	mg/Kg	1	12.50	1.2	106		69 - 118	20
Nitrate-N		14.52	mg/Kg	1	12.50	1.2	106		69 - 120	20

Sample: MSD QC Batch: QC07492

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
CL		71.17	mg/Kg	1	62.50	9.8	98	0	75 - 106	25
Nitrate-N		14.44	mg/Kg	1	12.50	1.2	105	1	69 - 118	20

[27]Used LCS/LCSD for RPD & %EA. Poort recovery due to matrix effects of spiked sample.
[28]Used LCS/LCSD for RPD & %EA. Poort recovery due to matrix effects of spiked sample.

Sample: MS QC Batch: QC07612

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Arsenic		116	mg/Kg	100	100	<5	116		75 - 125	20
Total Barium		269	mg/Kg	100	200	30	119		75 - 125	20
Total Cadmium		22.7	mg/Kg	100	20	<2	113		75 - 125	20
Total Chromium		53.1	mg/Kg	100	40	<5	132		75 - 125	20
Total Lead		117	mg/Kg	100	100	<5	117		75 - 125	20
Total Selenium		98.8	mg/Kg	100	100	<5	98		75 - 125	20
Total Silver		10	mg/Kg	100	10	<1	100		75 - 125	20

Sample: MSD QC Batch: QC07612

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Total Arsenic		115	mg/Kg	100	100	<5	115	1	75 - 125	20
Total Barium		269	mg/Kg	100	200	30	119	0	75 - 125	20
Total Cadmium		22.5	mg/Kg	100	20	<2	112	1	75 - 125	20
Total Chromium		53.6	mg/Kg	100	40	<5	134	1	75 - 125	20
Total Lead		117	mg/Kg	100	100	<5	117	0	75 - 125	20
Total Selenium		99.8	mg/Kg	100	100	<5	99	1	75 - 125	20
Total Silver		7.5	mg/Kg	100	10	<1	75	28	75 - 125	20

Quality Control Report
Duplicate Samples

Sample: Duplicate QC Batch: QC07525

Param	Flag	Duplicate Result	Sample Result	Units	Dilution	RPD	RPD Limit
Hydroxide Alkalinity		<1.0	<1.0	mg/Kg as CaCo3	1	0	11
Carbonate Alkalinity		<1.0	<1.0	mg/Kg as CaCo3	1	0	11
Bicarbonate Alkalinity		110	103	mg/Kg as CaCo3	1	6	11
Total Alkalinity		110	103	mg/Kg as CaCo3	1	6	11

Quality Control Report
Continuing Calibration Verification Standards

Sample: CCV (1) QC Batch: QC07322

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.005	0.00491	98	80 - 120	12/12/00

Sample: ICV (1) QC Batch: QC07322

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Mercury		mg/L	0.005	0.00542	108	80 - 120	12/12/00

Sample: CCV (1) QC Batch: QC07491

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
CL		mg/L	12.50	12.82	102	80 - 120	12/15/00

Sample: ICV (1) QC Batch: QC07491

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
CL		mg/L	12.50	12.70	101	80 - 120	12/15/00

Sample: CCV (1) QC Batch: QC07492

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.97	118	80 - 120	12/15/00
CL		mg/L	12.50	12.94	103	80 - 120	12/15/00
Fluoride		mg/L	2.50	2.84	113	80 - 120	12/15/00
Nitrate-N		mg/L	2.50	2.75	110	80 - 120	12/15/00
Sulfate		mg/L	12.50	13.66	109	80 - 120	12/15/00

Sample: ICV (1) QC Batch: QC07492

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Bromide		mg/L	2.50	2.84	113	80 - 120	12/15/00
CL		mg/L	12.50	12.82	102	80 - 120	12/15/00
Fluoride		mg/L	2.50	2.79	111	80 - 120	12/15/00
Nitrate-N		mg/L	2.50	2.73	109	80 - 120	12/15/00
Sulfate		mg/L	12.50	13.49	107	80 - 120	12/15/00

Sample: CCV (1) QC Batch: QC07525

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	11	0	80 - 120	12/19/00
Carbonate Alkalinity		mg/L as CaCo3	0	234	0	80 - 120	12/19/00
Bicarbonate Alkalinity		mg/L as CaCo3	0	<1.0	0	80 - 120	12/19/00
Total Alkalinity		mg/L as CaCo3	250	245	98	80 - 120	12/19/00

Sample: ICV (1)

QC Batch: QC07525

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Hydroxide Alkalinity		mg/L as CaCo3	0	31	0	80 - 120	12/19/00
Carbonate Alkalinity		mg/L as CaCo3	0	210	0	80 - 120	12/19/00
Bicarbonate Alkalinity		mg/L as CaCo3	0	<1.0	0	80 - 120	12/19/00
Total Alkalinity		mg/L as CaCo3	250	241	96	80 - 120	12/19/00

Sample: CCV (1)

QC Batch: QC07612

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		mg/L	2.50	2.5	100	75 - 125	12/22/00
Total Barium		mg/L	5	4.97	99	75 - 125	12/22/00
Total Cadmium		mg/L	0.50	0.486	97	75 - 125	12/22/00
Total Chromium		mg/L	1	0.982	98	75 - 125	12/22/00
Total Lead		mg/L	2.50	2.48	99	75 - 125	12/22/00
Total Selenium		mg/L	2.50	2.5	100	75 - 125	12/22/00
Total Silver		mg/L	0.50	0.492	98	75 - 125	12/22/00

Sample: ICV (1)

QC Batch: QC07612

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Arsenic		mg/L	2.50	2.49	99	75 - 125	12/22/00
Total Barium		mg/L	5	5	100	75 - 125	12/22/00
Total Cadmium		mg/L	0.50	0.487	97	75 - 125	12/22/00
Total Chromium		mg/L	1	0.979	97	75 - 125	12/22/00
Total Lead		mg/L	2.50	2.47	98	75 - 125	12/22/00
Total Selenium		mg/L	2.50	2.48	99	75 - 125	12/22/00
Total Silver		mg/L	0.50	0.493	98	75 - 125	12/22/00

160494-503

Page ____ of ____

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A0012111 2

Company Name: Enercon Services Inc
Phone #: 915 - 570 - 8726

Address: (Street, City, Zip) 3306 West Wall Suite 1312, Midland, Tx 79701
Fax #: 915 - 684 - 7587

Contact Person: Jeffrey Kindley

Invoice to: (If different from above) Kyle Landreneau, Equiva Services

Project #: ES-347
Project Name: Jal Cooper Cemetery

Project Location: Jal, Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	NaHSO4	H2SO4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
160494	Landfarm 1 Cell A (2')	2	4oz		✓									✓	12/8/00	
95	Landfarm 1 Cell D (2')	2	4oz		✓									✓	12/8/00	
96	Landfarm 1 Cell C (2')	2	4oz		✓									✓	12/8/00	
97	Landfarm 1 Cell D (2')	2	4oz		✓									✓	12/8/00	
98	Landfarm 2 (2')	2	4oz		✓									✓	12/8/00	
99	Landfarm 3 (2')	2	4oz		✓									✓	12/8/00	
500	Landfarm 4 Cell A (2')	2	4oz		✓									✓	12/8/00	
501	Landfarm 4 Cell B (2')	2	4oz		✓									✓	12/8/00	
502	Landfarm 4 Cell C (2')	2	4oz		✓									✓	12/8/00	
503	Landfarm 4 Cell D (2')	2	4oz		✓									✓	12/8/00	

	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	BCRA Metals Hg	Calcium / Anions			Turn Around Time if different from standard	Hold
160494																✓	✓				
95																✓	✓				
96																✓	✓				
97																✓	✓				
98																✓	✓				
99																✓	✓				
500																✓	✓				
501																✓	✓				
502																✓	✓				
503																✓	✓				

Relinquished by: Jeffrey Kindley	Date: 12/08/00	Time:	Received by: [redacted]	Date: 12/8	Time: 2:40
Relinquished by: [redacted]	Date: 12/8	Time: 5:30p	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received at Laboratory by: Jennifer Schmidt	Date: 12/9	Time: 0930

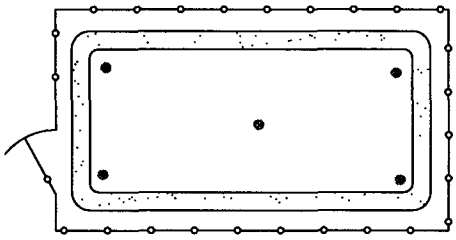
LAB USE ONLY
Intact Y / N
Headspace Y / N
Temp -1 °
Log-in Review JMS

REMARKS:
Normal
12/27/00

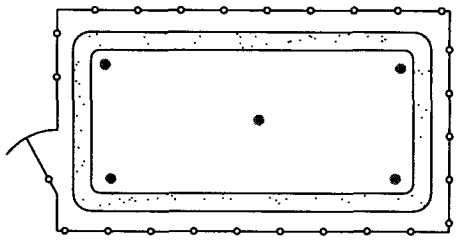
Carrier # Bus 163-573-4052

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

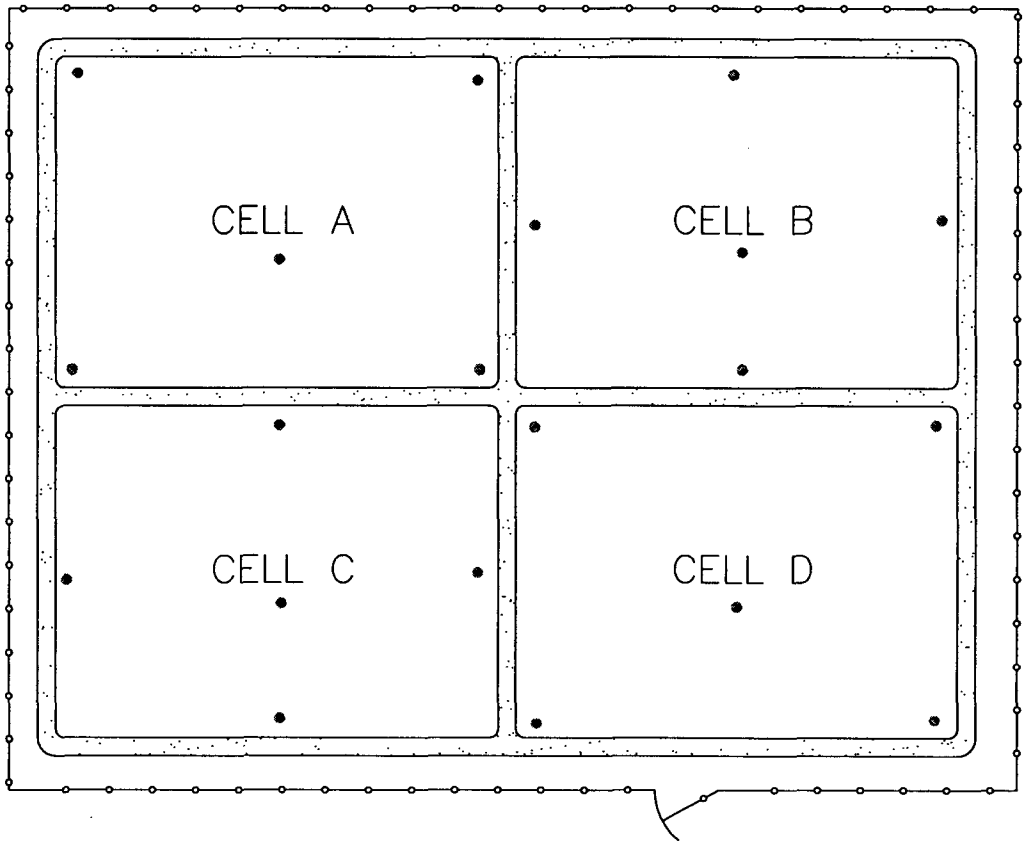
ORIGINAL COPY



LANDFARM #2
FIGURE 2

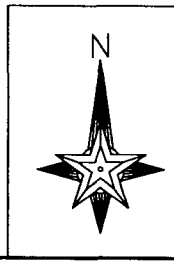


LANDFARM #3
FIGURE 3



• COMPOSITE SAMPLE POINTS
FENCE
BERM

LANDFARM #4
FIGURE 4



LANDFARM SITE MAPS

OCT, 2000

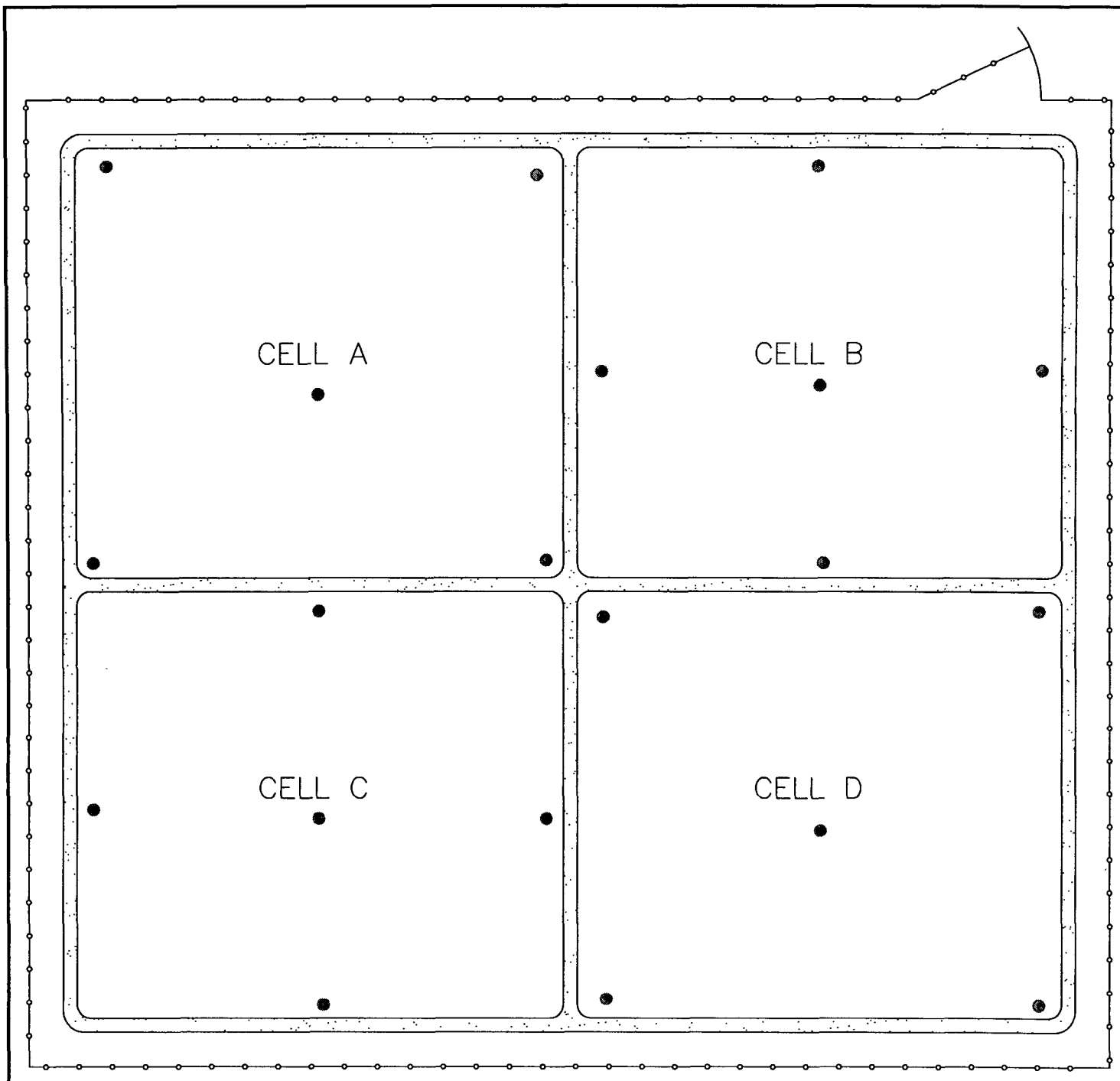
PREPARED FOR:
JAL – COOPER RANCH
LEA COUNTY, NEW MEXICO

PREPARED BY:
ENERCON SERVICES, INC.
306 WEST WALL, SUITE 1312
MIDLAND, TEXAS 79701
915/570-8726

PROJECT NUMBER: ES-347

DRAWN BY: S. GOOD

SCALE 1"=100'



● COMPOSITE SAMPLE POINTS

FENCE

BERM

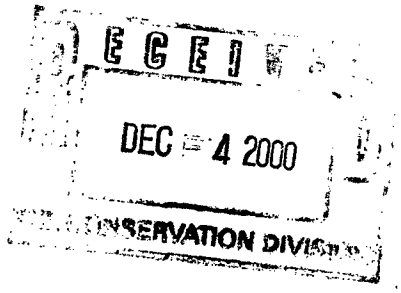
LANDFARM #1

FIGURE 1

LANDFARM SITE MAPS		OCT, 2000	
PREPARED FOR: JAL – COOPER RANCH, LEA COUNTY, NEW MEXICO	PREPARED BY: ENERCON SERVICES, INC. 306 WEST WALL, SUITE 1312 MIDLAND, TEXAS 79701 915/570-8726	PROJECT NUMBER: ES-347	SCALE 1"=100'
		DRAWN BY: S. GOOD	

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 20, 2000



Ms. Martyne J. Kieling
Environmental Geologist
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

RE: Facility Closure Plan
Sam Cooper Centralized Landfarms
Landfarm #1 NM-02-0014
Landfarm #2 NM-02-0015
Landfarm #3 NM-02-0016
Landfarm #4 NM-02-0017
Lea County, New Mexico

Dear Ms. Kieling:

Remediation of crude oil impacted soils was initiated on the above referenced landfarms approximately one year ago. Recent laboratory analytical results of soil samples obtained from landfarm cell materials indicate that bioremediation is now complete. This correspondence is intended to serve as Equiva Services, LLC's (Equiva) notification of intent to close the above referenced landfarms in accordance with OCD requirements.

Closure Plan

Background

In November, 1999 Equiva submitted to the NMOCD applications for waste management facilities for the four landfarms referenced above. The landfarms were permitted as centralized facilities used to treat RCRA Subtitle C exempt soils from the applicant's own leases. Intrinsic bioremediation of hydrocarbon (crude oil) impacted soils was estimated to require one year to complete. Following excavation of the impacted soil from the spill sites, the landfarm cells were loaded in 6-inch lifts, watered to stimulate bioremediation and control dust, and monitored quarterly to evaluate the progress of the bioremediation. Treatment zone soils beneath the landfarm cells were also monitored for BTEX and TPH in order to determine if contamination was migrating to the soils beneath each cell. Laboratory analytical results of soil samples obtained during the quarterly monitoring events showed a steady decrease in contaminant concentration, indicating that bioremediation was proceeding as anticipated. Laboratory analytical results of soil samples obtained from the treatment zone indicated that no vertical migration of contaminants was occurring.

Laboratory analytical results of soil samples obtained during the September, 2000 monitoring event indicate that the cell contents have been bioremediated to OCD standards for the soils to be left in place. Laboratory analytical results for the September, 2000 monitoring event are presented in Table 1, below, and in Appendix A.

PMB 174, 269 Cypresswood, Spring Texas 77388
Phone 281-353-2069 Facsimile 281-825-0024

TABLE 1
Laboratory Analytical Results
September, 2000 Sampling Event

Sample Location	DRO mg/kg	GRO mg/kg	Total TPH mg/kg	NMOCD Guideline mg/kg
Landfarm #1 - Cell A	467	<5	467	5,000
Landfarm #1 – Cell B	1,210	<5	1,210	5,000
Landfarm #2	<50	<5	<50	5,000
Landfarm #3	176	<5	176	5,000
Landfarm #4 – Cell A	1,830	<5	1,830	5,000
Landfarm #4 – Cell B	1,390	<5	1,390	5,000
Landfarm #4 – Cell C	621	<5	621	5,000
Landfarm #4 – Cell D	1,570	<5	1,570	5,000

Soil samples analysis obtained immediately after initial cell loading indicated BTEX and RCRA metals concentrations below NMOCD guidelines. Since no soil has been added to the cells since the initial loading, BTEX and RCRA metals concentrations are expected to remain below NMOCD guidelines.

Closure Procedures

Based upon the analytical results presented in Table 1, above, Equiva proposes to cease bioremediation operations and permanently close the referenced landfarms. Equiva proposes the following procedures for the permanent closure of these facilities:

1) No material has been added to landfarm cells since the initial loading and no new material will be accepted.

2) The treatment zone beneath the landfarm cells will be characterized as to TPH and BTEX content in order to determine potential migration of contaminants beneath the facility. Soil samples will be obtained with a hand auger from a depth of two to three feet below ground surface, in accordance with the NMOCD publication "*Guidelines for Permit Application, Design, and Construction of Waste Management Facilities (Revised 7-97)*" and in accordance with the Attachment (Treatment Zone Monitoring) to the OCD Rule 711 Permit Approvals. All treatment zone samples will be forwarded to an accepted analytical laboratory for appropriate analysis.

3) The berms surrounding each landfarm cell will be broken out and mixed with the bioremediated material, disked into the on-site soils and contoured approximately to natural grade.

4) The leveled remediated material will be covered with a layer of clean soil, reseeded with native grasses, and irrigated one time to encourage seed germination.

5) All fences, gates, and signs securing the original landfarms will be removed and properly disposed.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

Upon completion of the above procedures, a letter report will be prepared and presented to the OCD documenting laboratory analytical results, describing the work performed in accordance with the outlined procedures, and presenting photographs documenting that the cells have been properly closed.

Thank you for your assistance on this project. If you have any questions or comments, please do not hesitate to call me at (281) 353-2069.

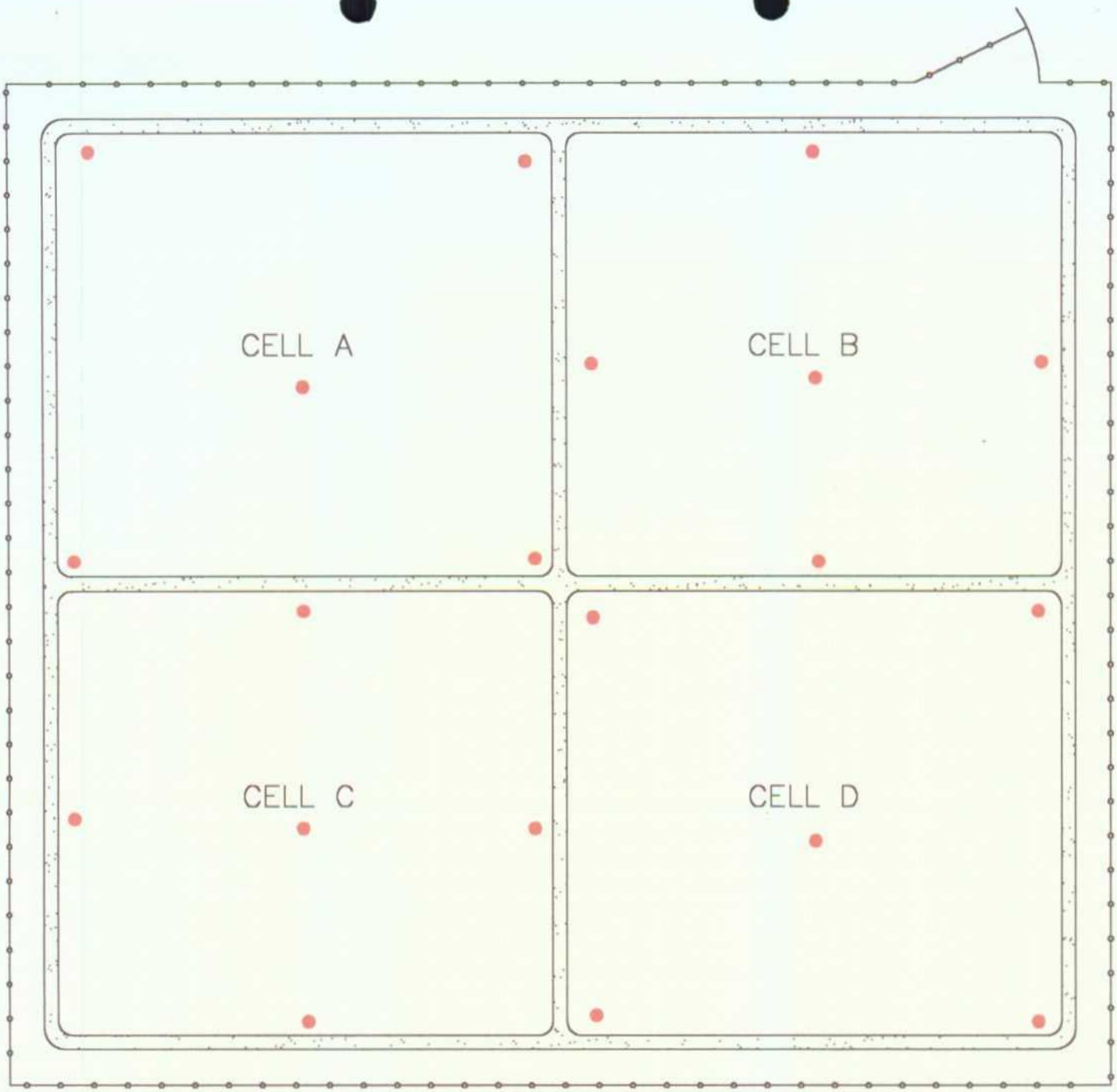
Sincerely
EQUIVA SERVICES LLC

Kyle Landreneau
Environmental Geologist
SHE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

Cc: Donna Williams – New Mexico OCD, Hobbs District Office
Don R. Parsons – Enercon Services, Inc.

PMB 174, 269 Cypresswood, Spring Texas 77388
Phone 281-353-2069 Facsimile 281-825-0024



● COMPOSITE SAMPLE POINTS

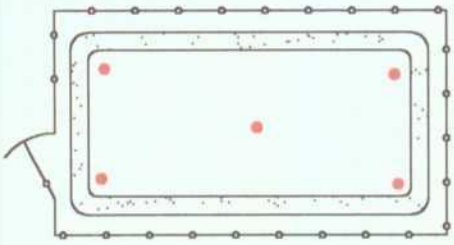
FENCE

BERM

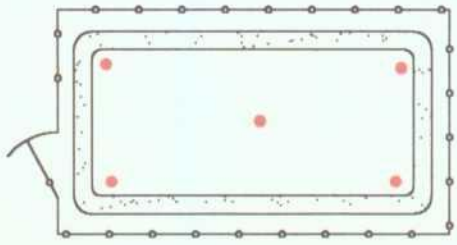
LANDFARM #1

FIGURE 1

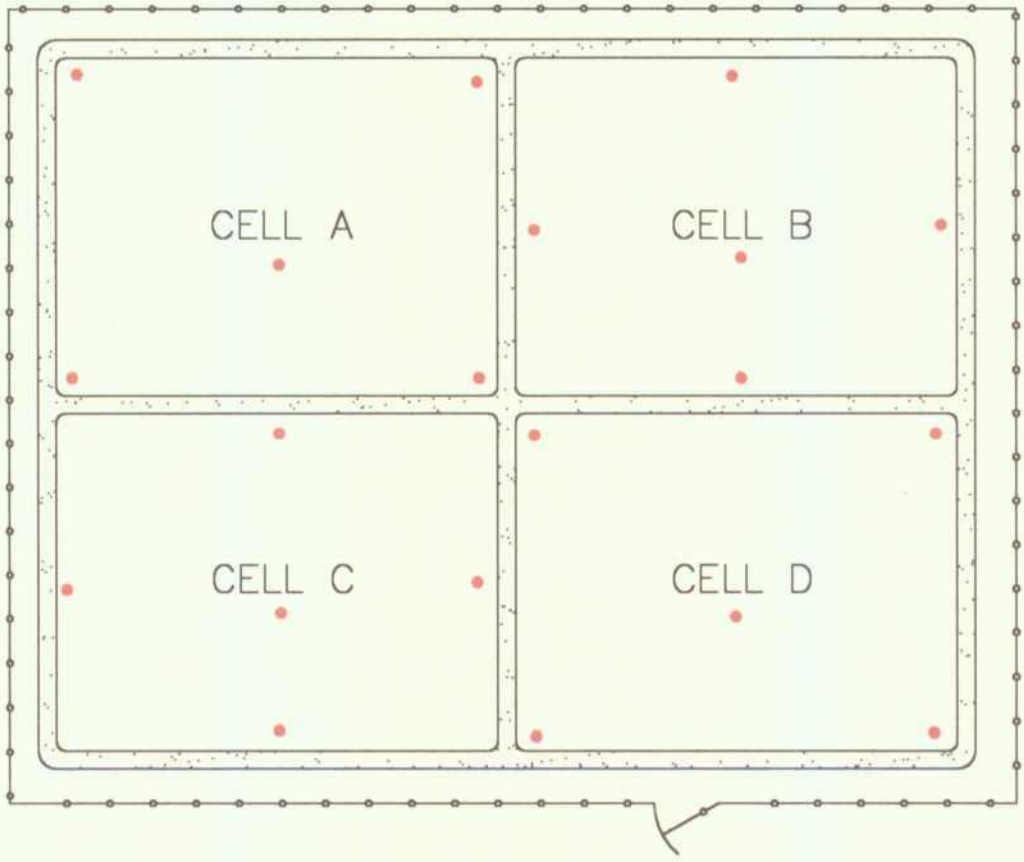
LANDFARM SITE MAPS		OCT, 2000	
PREPARED FOR: JAL – COOPER RANCH, LEA COUNTY, NEW MEXICO	PREPARED BY: ENERCON SERVICES, INC. 306 WEST WALL, SUITE 1312 MIDLAND, TEXAS 79701 915/570-8726	PROJECT NUMBER: ES-347	SCALE: 1"=100'
		DRAWN BY: S. GOOD	



LANDFARM #2
FIGURE 2



LANDFARM #3
FIGURE 3



• COMPOSITE SAMPLE POINTS

FENCE

BERM

LANDFARM #4
FIGURE 4

N

LANDFARM SITE MAPS

OCT, 2000

PREPARED FOR:
JAL – COOPER RANCH
LEA COUNTY, NEW MEXICO

PREPARED BY:
ENERCON SERVICES, INC.
306 WEST WALL, SUITE 1312
MIDLAND, TEXAS 79701
915/570-8726

PROJECT NUMBER: ES-347

SCALE: 1"=100'

DRAWN BY: S. GOOD

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296

TraceAnalysis, Inc.

4725 Ripley Dr., Ste A
El Paso, Texas 79922-1028
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # A00101005

Company Name: Environ Services Inc
Phone #: (915) 570-8726
Address: (Street, City, Zip) 306 West Wall, Suite 1312, Midland, Tx 79701
Fax #: (915) 684-7587
Contact Person: Jeffrey Kindley
Invoice to: (If different from above) Equiva Services, LLC, Kyle Landreneau, PMB 174, 269 Cypresswood, Spring, Tx 77388
Project #: ES-347
Project Name: Jal / Cooper Cemetery
Project Location: Jal, Lea County, New Mexico
Sampler Signature: Jeffrey Kindley

ANALYSIS REQUEST
(Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCL	HNO3	NaHSO4	H2SO4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC-MS Vol. 8260B/624	GC/MS Semi. Vol. 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD, TSS, pH	TPH 8015 Modified (DRO & GRO)			Turn Around Time if different from standard	Hold
155629	Landfarm #1 Cell A 2'	1	4oz		✓									✓	10/06/00	1215		✓														✓				
30	Landfarm #1 Cell B 2'	1	4oz		✓									✓	10/06/00	1240		✓														✓				
31	Landfarm #1 Cell C 2'	1	4oz		✓									✓	10/06/00	1300		✓														✓				
32	Landfarm #1 Cell D 2'	1	4oz		✓									✓	10/06/00	1312		✓														✓				
33	Landfarm #2	1	4oz		✓									✓	10/06/00	1040		✓														✓				
34	Landfarm #3	1	4oz		✓									✓	10/06/00	1110		✓														✓				
35	Landfarm #4 Cell A 2'	1	4oz		✓									✓	10/06/00	1400		✓														✓				
36	Landfarm #4 Cell B 2'	1	4oz		✓									✓	10/06/00	1414		✓														✓				
37	Landfarm #4 Cell C 2'	1	4oz		✓									✓	10/06/00	1423		✓														✓				
38	Landfarm #4 Cell D 2'	1	4oz		✓									✓	10/06/00	1440		✓														✓				

Relinquished by: Jeffrey Kindley Date: October 9, 2000 Time: 2:20pm
Received by: Helen Shelton Date: 10/9/00 Time: 2:20 PM

Relinquished by: Helen Shelton Date: 10/9/00 Time: 6:30pm
Received by: — Date: Time:

Relinquished by: — Date: Time:
Received at Laboratory by: Rick Hensley Date: 10-10-00 Time: 10:00

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C. 10 samples - ITS

ORIGINAL COPY

LAB USE ONLY

Intact (Y) / N
Headspace Y / N
Temp 3° °
Log-in Review MB

REMARKS:
Normal Turnaround
9-26

Carrier # Greyhound 159-380-857-5

TRACEANALYSIS, INC.

6701 Aberdeen Avenue, Suite 9 Lubbock, Texas 79424 800•378•1296 806•794•1296 FAX 806•794•1298
4725 Ripley Avenue, Suite A El Paso, Texas 79922 888•588•3443 915•585•3443 FAX 915•585•4944
E-Mail: lab@traceanalysis.com

Analytical and Quality Control Report

Equilon Pipeline Co.
Kyle Landreneau
PMB 174 269 CypressWood
Spring, Tx. 77388

Report Date: October 25, 2000

Order ID Number: A00101005

Project: ES-347
TA Job Code: Jal/Cooper Cemetery Land Farms
Casualty Code: Jal,New Mexico
Project Location: ES-347
Project Address:
Enercon Services Inc. / Midland / Jeff Kindley

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

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
155629	Landfarm #1 Cell A 2'	Soil	10/6/00	12:15	10/10/00
155630	Landfarm #1 Cell B 2'	Soil	10/6/00	12:40	10/10/00
155631	Landfarm #1 Cell C 2'	Soil	10/6/00	13:00	10/10/00
155632	Landfarm #1 Cell D 2'	Soil	10/6/00	13:12	10/10/00
155633	Landfarm #2	Soil	10/6/00	10:40	10/10/00
155634	Landfarm #3	Soil	10/6/00	11:10	10/10/00
155635	Landfarm #4 Cell A 2'	Soil	10/6/00	14:00	10/10/00
155636	Landfarm #4 Cell B 2'	Soil	10/6/00	14:14	10/10/00
155637	Landfarm #4 Cell C 2'	Soil	10/6/00	14:23	10/10/00
155638	Landfarm #4 Cell D 2'	Soil	10/6/00	14:40	10/10/00

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

Dr. Blair Leftwich, Director

Analytical and Quality Control Report

Sample: 155629 - Landfarm #1 Cell A 2'

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC05783	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB05060	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		0.115	mg/Kg	50	0.001
Benzene		<0.05	mg/Kg	50	0.001
Toluene		<0.05	mg/Kg	50	0.001
Ethylbenzene		<0.05	mg/Kg	50	0.001
M,P,O-Xylene		<0.05	mg/Kg	50	0.001
Total BTEX		<0.05	mg/Kg	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		5.08	mg/Kg	1	0.10	101	72 - 128
4-BFB		5.26	mg/Kg	1	0.10	105	72 - 128

Sample: 155629 - Landfarm #1 Cell A 2'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC05663	Date Analyzed:	10/16/00
Analyst:	BP	Preparation Method:	3550 B	Prep Batch:	PB04953	Date Prepared:	10/16/00

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Sample: 155629 - Landfarm #1 Cell A 2'

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC05781	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB05061	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
GRO		<5	mg/Kg	1	0.10

Sample: 155630 - Landfarm #1 Cell B 2'

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC05783	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB05060	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.05	mg/Kg	50	0.001
Benzene		<0.05	mg/Kg	50	0.001
Toluene		<0.05	mg/Kg	50	0.001
Ethylbenzene		<0.05	mg/Kg	50	0.001
M,P,O-Xylene		<0.05	mg/Kg	50	0.001
Total BTEX		<0.05	mg/Kg	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		5	mg/Kg	1	0.10	100	72 - 128
4-BFB		5.21	mg/Kg	1	0.10	104	72 - 128

Sample: 155630 - Landfarm #1 Cell B 2'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC05663	Date Analyzed:	10/16/00
Analyst:	BP	Preparation Method:	3550 B	Prep Batch:	PB04953	Date Prepared:	10/16/00

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Sample: 155630 - Landfarm #1 Cell B 2'

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC05781	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB05061	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
GRO		<5	mg/Kg	1	0.10

Sample: 155631 - Landfarm #1 Cell C 2'

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC05783	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB05060	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.05	mg/Kg	50	0.001
Benzene		<0.05	mg/Kg	50	0.001
Toluene		<0.05	mg/Kg	50	0.001
Ethylbenzene		<0.05	mg/Kg	50	0.001
M,P,O-Xylene		<0.05	mg/Kg	50	0.001
Total BTEX		<0.05	mg/Kg	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		5.1	mg/Kg	1	0.10	102	72 - 128
4-BFB		5.19	mg/Kg	1	0.10	103	72 - 128

Sample: 155631 - Landfarm #1 Cell C 2'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC05663	Date Analyzed:	10/16/00
Analyst:	BP	Preparation Method:	3550 B	Prep Batch:	PB04953	Date Prepared:	10/16/00

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Sample: 155631 - Landfarm #1 Cell C 2'

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC05781	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB05061	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
GRO		<5	mg/Kg	1	0.10

Sample: 155632 - Landfarm #1 Cell D 2'

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC05783	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB05060	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.05	mg/Kg	50	0.001
Benzene		<0.05	mg/Kg	50	0.001
Toluene		<0.05	mg/Kg	50	0.001
Ethylbenzene		<0.05	mg/Kg	50	0.001
M,P,O-Xylene		<0.05	mg/Kg	50	0.001
Total BTEX		<0.05	mg/Kg	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		4.54	mg/Kg	1	0.10	90	72 - 128
4-BFB		4.78	mg/Kg	1	0.10	95	72 - 128

Sample: 155632 - Landfarm #1 Cell D 2'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC05663	Date Analyzed:	10/16/00
Analyst:	BP	Preparation Method:	3550 B	Prep Batch:	PB04953	Date Prepared:	10/16/00

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Sample: 155632 - Landfarm #1 Cell D 2'

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC05781	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB05061	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
GRO		<5	mg/Kg	1	0.10

Sample: 155633 - Landfarm #2

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC05783	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB05060	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		0.058	mg/Kg	50	0.001
Benzene		<0.05	mg/Kg	50	0.001

Continued ...

... *Continued* Sample: 155633 Analysis: BTEX

Param	Flag	Result	Units	Dilution	RDL
Toluene		<0.05	mg/Kg	50	0.001
Ethylbenzene		<0.05	mg/Kg	50	0.001
M,P,O-Xylene		<0.05	mg/Kg	50	0.001
Total BTEX		<0.05	mg/Kg	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		5.2	mg/Kg	1	0.10	104	72 - 128
4-BFB		5.32	mg/Kg	1	0.10	106	72 - 128

Sample: 155633 - Landfarm #2

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC05663 Date Analyzed: 10/16/00
Analyst: BP Preparation Method: 3550 B Prep Batch: PB04953 Date Prepared: 10/16/00

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Sample: 155633 - Landfarm #2

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC05781 Date Analyzed: 10/20/00
Analyst: RC Preparation Method: N/A Prep Batch: PB05061 Date Prepared: 10/20/00

Param	Flag	Result	Units	Dilution	RDL
GRO		<5	mg/Kg	1	0.10

Sample: 155634 - Landfarm #3

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC05783 Date Analyzed: 10/20/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB05060 Date Prepared: 10/20/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.05	mg/Kg	50	0.001
Benzene		<0.05	mg/Kg	50	0.001
Toluene		<0.05	mg/Kg	50	0.001
Ethylbenzene		<0.05	mg/Kg	50	0.001
M,P,O-Xylene		<0.05	mg/Kg	50	0.001
Total BTEX		<0.05	mg/Kg	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		4.98	mg/Kg	1	0.10	99	72 - 128
4-BFB		5.11	mg/Kg	1	0.10	102	72 - 128

Sample: 155634 - Landfarm #3

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC05663	Date Analyzed:	10/16/00
Analyst:	BP	Preparation Method:	3550 B	Prep Batch:	PB04953	Date Prepared:	10/16/00

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Sample: 155634 - Landfarm #3

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC05781	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB05061	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
GRO		<5	mg/Kg	1	0.10

Sample: 155635 - Landfarm #4 Cell A 2'

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC05783	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB05060	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.05	mg/Kg	50	0.001
Benzene		<0.05	mg/Kg	50	0.001
Toluene		<0.05	mg/Kg	50	0.001
Ethylbenzene		<0.05	mg/Kg	50	0.001
M,P,O-Xylene		<0.05	mg/Kg	50	0.001
Total BTEX		<0.05	mg/Kg	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		5.12	mg/Kg	1	0.10	102	72 - 128
4-BFB		5.2	mg/Kg	1	0.10	104	72 - 128

Sample: 155635 - Landfarm #4 Cell A 2'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC05663	Date Analyzed:	10/16/00
Analyst:	BP	Preparation Method:	3550 B	Prep Batch:	PB04953	Date Prepared:	10/16/00

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Sample: 155635 - Landfarm #4 Cell A 2'

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC05781	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB05061	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
GRO		<5	mg/Kg	1	0.10

Sample: 155636 - Landfarm #4 Cell B 2'

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC05783	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB05060	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.05	mg/Kg	50	0.001
Benzene		<0.05	mg/Kg	50	0.001
Toluene		<0.05	mg/Kg	50	0.001
Ethylbenzene		<0.05	mg/Kg	50	0.001
M,P,O-Xylene		<0.05	mg/Kg	50	0.001
Total BTEX		<0.05	mg/Kg	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		5.22	mg/Kg	1	0.10	104	72 - 128
4-BFB		5.44	mg/Kg	1	0.10	108	72 - 128

Sample: 155636 - Landfarm #4 Cell B 2'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	QC Batch:	QC05663	Date Analyzed:	10/16/00
Analyst:	BP	Preparation Method:	3550 B	Prep Batch:	PB04953	Date Prepared:	10/16/00

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Sample: 155636 - Landfarm #4 Cell B 2'

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC05781	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB05061	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
GRO		<5	mg/Kg	1	0.10

Sample: 155637 - Landfarm #4 Cell C 2'

Analysis:	BTEX	Analytical Method:	S 8021B	QC Batch:	QC05783	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	5035	Prep Batch:	PB05060	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.05	mg/Kg	50	0.001
Benzene		<0.05	mg/Kg	50	0.001
Toluene		<0.05	mg/Kg	50	0.001
Ethylbenzene		<0.05	mg/Kg	50	0.001
M,P,O-Xylene		<0.05	mg/Kg	50	0.001
Total BTEX		<0.05	mg/Kg	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		4.04	mg/Kg	1	0.10	80	72 - 128

Continued ...

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
4-BFB		4.3	mg/Kg	1	0.10	86	72 - 128

Sample: 155637 - Landfarm #4 Cell C 2'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC05663 Date Analyzed: 10/16/00
Analyst: BP Preparation Method: 3550 B Prep Batch: PB04953 Date Prepared: 10/16/00

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Sample: 155637 - Landfarm #4 Cell C 2'

Analysis: TPH GRO Analytical Method: 8015B QC Batch: QC05781 Date Analyzed: 10/20/00
Analyst: RC Preparation Method: N/A Prep Batch: PB05061 Date Prepared: 10/20/00

Param	Flag	Result	Units	Dilution	RDL
GRO		<5	mg/Kg	1	0.10

Sample: 155638 - Landfarm #4 Cell D 2'

Analysis: BTEX Analytical Method: S 8021B QC Batch: QC05783 Date Analyzed: 10/20/00
Analyst: RC Preparation Method: 5035 Prep Batch: PB05060 Date Prepared: 10/20/00

Param	Flag	Result	Units	Dilution	RDL
MTBE		<0.05	mg/Kg	50	0.001
Benzene		<0.05	mg/Kg	50	0.001
Toluene		<0.05	mg/Kg	50	0.001
Ethylbenzene		<0.05	mg/Kg	50	0.001
M,P,O-Xylene		<0.05	mg/Kg	50	0.001
Total BTEX		<0.05	mg/Kg	50	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
TFT		4.58	mg/Kg	1	0.10	91	72 - 128
4-BFB		4.77	mg/Kg	1	0.10	95	72 - 128

Sample: 155638 - Landfarm #4 Cell D 2'

Analysis: TPH DRO Analytical Method: Mod. 8015B QC Batch: QC05663 Date Analyzed: 10/16/00
Analyst: BP Preparation Method: 3550 B Prep Batch: PB04953 Date Prepared: 10/16/00

Param	Flag	Result	Units	Dilution	RDL
DRO		<50	mg/Kg	1	50

Sample: 155638 - Landfarm #4 Cell D 2'

Analysis:	TPH GRO	Analytical Method:	8015B	QC Batch:	QC05781	Date Analyzed:	10/20/00
Analyst:	RC	Preparation Method:	N/A	Prep Batch:	PB05061	Date Prepared:	10/20/00

Param	Flag	Result	Units	Dilution	RDL
GRO		<5	mg/Kg	1	0.10

Quality Control Report
Method Blank

Sample: Method Blank QCBatch: QC05663

Param	Flag	Results	Units	Reporting Limit
DRO		<50	mg/Kg	50

Sample: Method Blank QCBatch: QC05781

Param	Flag	Results	Units	Reporting Limit
GRO		<5	mg/Kg	0.10

Sample: Method Blank QCBatch: QC05783

Param	Flag	Results	Units	Reporting Limit
MTBE		<0.05	mg/Kg	0.001
Benzene		<0.05	mg/Kg	0.001
Toluene		<0.05	mg/Kg	0.001
Ethylbenzene		<0.05	mg/Kg	0.001
M,P,O-Xylene		<0.05	mg/Kg	0.001
Total BTEX		<0.05	mg/Kg	0.001

Surrogate	Flag	Result	Units	Spike Amount	Percent Recovery	Recovery Limit
TFT		5.35	mg/Kg	0.10	107	72 - 128
4-BFB		5.5	mg/Kg	0.10	110	72 - 128

Quality Control Report
Lab Control Spikes and Duplicate Spikes

Sample: LCS QC Batch: QC05663

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
DRO		<50	mg/Kg	1	250	<50	0		70 - 130	20

Sample: LCS QC Batch: QC05781

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
GRO		1.11	mg/Kg	1	1	<5	111		80 - 120	20

Sample: LCSD QC Batch: QC05781

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
GRO		1.08	mg/Kg	1	1	<5	108	3	80 - 120	20

Sample: LCS QC Batch: QC05783

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		4.6	mg/Kg	50	0.10	<0.05	92		80 - 120	20
Benzene		5.47	mg/Kg	50	0.10	<0.05	109		80 - 120	20
Toluene		5.5	mg/Kg	50	0.10	<0.05	110		80 - 120	20
Ethylbenzene		5.52	mg/Kg	50	0.10	<0.05	110		80 - 120	20
M,P,O-Xylene		16.6	mg/Kg	50	0.30	<0.05	110		80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		5.25	mg/Kg	50	0.10	105	72 - 128
4-BFB		5.19	mg/Kg	50	0.10	103	72 - 128

Sample: LCSD QC Batch: QC05783

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		4.47	mg/Kg	50	0.10	<0.05	89	3	80 - 120	20
Benzene		5.4	mg/Kg	50	0.10	<0.05	108	1	80 - 120	20

Continued ...

... *Continued*

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
Toluene		5.39	mg/Kg	50	0.10	<0.05	107	2	80 - 120	20
Ethylbenzene		5.41	mg/Kg	50	0.10	<0.05	108	2	80 - 120	20
M,P,O-Xylene		16.4	mg/Kg	50	0.30	<0.05	109	1	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		5.29	mg/Kg	50	0.10	105	72 - 128
4-BFB		5.17	mg/Kg	50	0.10	103	72 - 128

Quality Control Report
Matrix Spikes and Duplicate Spikes

Sample: MS QC Batch: QC05663

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
DRO		<50	mg/Kg	1	250	<50	0		70 - 130	20

Sample: MS QC Batch: QC05783

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		4.67	mg/Kg	50	0.10	<0.05	93	3	80 - 120	20
Benzene		5.3	mg/Kg	50	0.10	<0.05	106	1	80 - 120	20
Toluene		5.4	mg/Kg	50	0.10	<0.05	108	2	80 - 120	20
Ethylbenzene		5.43	mg/Kg	50	0.10	<0.05	108	2	80 - 120	20
M,P,O-Xylene		16.2	mg/Kg	50	0.30	<0.05	108	1	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		4.98	mg/Kg	50	0.10	99	72 - 128
4-BFB		4.91	mg/Kg	50	0.10	98	72 - 128

Sample: MSD QC Batch: QC05783

Param	Flag	Sample Result	Units	Dil.	Spike Amount Added	Matrix Result	% Rec.	RPD	% Rec. Limit	RPD Limit
MTBE		3.54	mg/Kg	50	0.10	<0.05	70	28	80 - 120	20
Benzene		3.71	mg/Kg	50	0.10	<0.05	74	35	80 - 120	20
Toluene		3.72	mg/Kg	50	0.10	<0.05	74	37	80 - 120	20
Ethylbenzene		3.77	mg/Kg	50	0.10	<0.05	75	36	80 - 120	20
M,P,O-Xylene		11.4	mg/Kg	50	0.30	<0.05	76	35	80 - 120	20

Surrogate	Flag	Result	Units	Dil.	Spike Amount	% Rec.	% Rec. Limit
TFT		3.97	mg/Kg	50	0.10	79	72 - 128
4-BFB		4.03	mg/Kg	50	0.10	80	72 - 128

Quality Control Report
Continuing Calibration Verification Standards

Sample: CCV (1) QC Batch: QC05663

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	238	95	70 - 130	10/16/00

Sample: ICV (1) QC Batch: QC05663

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	297	119	70 - 130	10/16/00

Sample: CCV (1) QC Batch: QC05781

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	1.16	116	80 - 120	10/20/00

Sample: ICV (1) QC Batch: QC05781

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/Kg	1	0.991	99	80 - 120	10/20/00

Sample: CCV (1)

QC Batch: QC05783

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.091	91	80 - 120	10/20/00
Benzene		mg/Kg	0.10	0.103	103	80 - 120	10/20/00
Toluene		mg/Kg	0.10	0.104	104	80 - 120	10/20/00
Ethylbenzene		mg/Kg	0.10	0.105	105	80 - 120	10/20/00
M,P,O-Xylene		mg/Kg	0.30	0.312	104	80 - 120	10/20/00

Sample: CCV (2)

QC Batch: QC05783

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.091	91	80 - 120	10/20/00
Benzene		mg/Kg	0.10	0.095	95	80 - 120	10/20/00
Toluene		mg/Kg	0.10	0.096	96	80 - 120	10/20/00
Ethylbenzene		mg/Kg	0.10	0.095	95	80 - 120	10/20/00
M,P,O-Xylene		mg/Kg	0.30	0.291	97	80 - 120	10/20/00

Sample: ICV (1)

QC Batch: QC05783

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
MTBE		mg/Kg	0.10	0.089	89	80 - 120	10/20/00
Benzene		mg/Kg	0.10	0.107	107	80 - 120	10/20/00
Toluene		mg/Kg	0.10	0.108	108	80 - 120	10/20/00
Ethylbenzene		mg/Kg	0.10	0.11	110	80 - 120	10/20/00
M,P,O-Xylene		mg/Kg	0.30	0.331	110	80 - 120	10/20/00

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

September 24, 2000

OIL CONSERVATION DIV.
00 SEP 28 AM 3:35

To: Martyne Keiling
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

Re: Surety Bond
Landfarm permits NM-02-0014, NM-02-0015, NM-02-0016, and NM-02-0017
Sam Cooper Ranch
Jal, New Mexico

Dear Ms. Keiling,

Attached is Surety Bond for Waste Management Facilities for the Equilon's permitted facilities listed above. Should you have any questions concerning this matter, please contact me at my new contact information listed on the bottom of this letter.

Sincerely
EQUIVA SERVICES LLC

Kyle Landreneau
Environmental Geologist
SHE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

PMB 174, 269 Cypresswood, Spring Texas 77388
Phone 281-353-2069 Facsimile 281-528-0024

Kieling, Martyne

From: Landreneau EK (Kyle)[SMTP:EKLandreneau@equiva.com]
Sent: Monday, August 21, 2000 11:52 AM
To: Kieling, Martyne
Subject: Sam Cooper Ranch, Landfarm Application

Marytne,

I have not received the landfarm permit yet for Equilon Pipeline. It may have been sent to my Tomball address which changed last week to the address listed below. If the permit has not been sent, please send it to my new address.

Thanks

Kyle Landreneau
Equiva Services LLC
SHE/Science & Engineering
PMB 174
269 Cypresswood
Spring Texas 77388

Office Phone 281-353-2069
Office Fax Temp. down/Call before faxing
Pager/Cell Phone 281-414-0490
9/80 Schedule "B"

Stress is when you wake up screaming and you realize you haven't fallen asleep yet.

FedEx USA Airbill

FedEx Tracking Number: 8160 5829 9854

Form I.D. No. 0215 — Recipient's Copy

RECIPIENT: PEEL HERE

1 From This portion can be removed for Recipient's records.

Date 11/22/99 — FedEx Tracking Number 816058299854

Sender's Name DON PARSONS — Phone 972 484-3854

Company ENERCON SERVICES INC

Address 2775 VILLA CREEK DR STE 120 — Dept./Floor/Suite/Room

City DALLAS — State TX — ZIP 75234

2 Your Internal Billing Reference

3 To

Recipient's Name Martyne Kieling — Phone 505 827-7153

Company New Mexico Oil Conservation Division

Address 2040 S. Pacheco — Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

To "HOLD" at FedEx location, print FedEx address here.

City Santa Fe — State NM — ZIP 87505

8160 5829 9854

0114548418

4a Express Package Service — *Packages up to 150 lbs.* Delivery commitment may be later in some areas.

- [ ] FedEx Priority Overnight — Next business morning
- [x] FedEx Standard Overnight — *Next business afternoon*
- [ ] FedEx First Overnight — Earliest next business morning delivery to select locations
- [ ] FedEx 2Day* — Second business day
- [ ] FedEx Express Saver* — Third business day

* FedEx Letter Rate not available. Minimum charge: One-pound rate

4b Express Freight Service — *Packages over 150 lbs.* Delivery commitment may be later in some areas.

- [ ] FedEx 1Day Freight* — Next business day
- [ ] FedEx 2Day Freight — Second business day
- [ ] FedEx 3Day Freight — Third business day

* Call for Confirmation: _____

5 Packaging — * Declared value limit $500

- [x] FedEx Letter*
- [ ] FedEx Pak*
- [ ] Other Pkg. — Includes FedEx Box, FedEx Tube, and customer pkg.

6 Special Handling

- [ ] **Saturday Delivery** — Available for FedEx Priority Overnight and FedEx 2Day to select ZIP codes
- [ ] **Sunday Delivery** — Available for FedEx Priority Overnight to select ZIP codes
- [ ] **HOLD Weekday at FedEx Location** — Not available with FedEx First Overnight
- [ ] **HOLD Saturday at FedEx Location** — Available for FedEx Priority Overnight and FedEx 2Day to select locations

Does this shipment contain dangerous goods? One box must be checked.

- [ ] No
- [ ] Yes — As per attached Shipper's Declaration
- [ ] Yes — Shipper's Declaration not required
- [ ] Dry Ice — Dry Ice, 9, UN 1845 ____ x ____ kg

Dangerous Goods cannot be shipped in FedEx packaging.

- [ ] Cargo Aircraft Only

7 Payment *Bill to:* — Enter FedEx Acct. No. or Credit Card No. below.

- [x] Sender — Acct. No. in Section will be billed
- [ ] Recipient
- [ ] Third Party
- [ ] Credit Card
- [ ] Cash/Check
- [ ] Obtain Recip. Acct. No.

Total Packages	Total Weight		Total Charges
			Credit Card Auth.

†Our liability is limited to $100 unless you declare a higher value. See the *FedEx Service Guide* for details.

8 Release Signature *Sign to authorize delivery without obtaining signature.*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

Questions? Call 1·800·Go·FedEx® (800-463-3339)

Visit our Web site at www.fedex.com

SRP 999 • Rev. Date 11/98 • Part #154813S • © 1994-98 FedEx • PRINTED IN U.S.A.

359

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

August 18, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. Z-559-573-336

Mr. Kyle Landreneau
Equilon Enterprises L.L.C.
28510 C Tomball Parkway PMB Suite 406
Tomball, TX 77375

RE: OCD Rule 711 Permit Approval NM-02-0015
Equilon Enterprises, L.L.C.
Centralized Landfarm #2
NW/4 NE/4 of Section 24, Township 24 South, Range 36 East, NMPM,
Lea County, New Mexico

Dear Mr. Landreneau:

The permit application for the Equilon Enterprises L.L.C. (Equilon) centralized surface waste management facility (Landfarm #2) located in the NW/4 NE/4 of Section 24, Township 24 South, Range 36 East, NMPM, Lea County, New Mexico, is hereby approved in accordance with New Mexico Oil Conservation Division (OCD) Rule 711 under the conditions contained in the enclosed attachment. **This permit approval is conditional upon the receipt and approval by the Director of financial assurance in the amount of $25,000 for this facility or a $50,000 blanket financial assurance for all of Equilon's centralized surface waste management facilities.** The application consists of the permit application Form C-137 dated November 11, 1999, the public notice dated March 16, 2000, and supplemental materials dated December 22, 1999 and March 27, 2000.

The operation, monitoring and reporting shall be as specified in the enclosed attachment. All modifications and alternatives to the approved landfarming methods must receive prior OCD approval. Equilon is required to notify the Director of any facility expansion or process modification and to file the appropriate materials with the Division.

Please be advised approval of this facility permit does not relieve Equilon of liability should your operation result in pollution of surface water, ground water, or the environment. In addition, OCD approval does not relieve Equilon of responsibility for compliance with other federal, state or local laws and/or regulations.

Please be advised that all tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted or otherwise rendered nonhazardous to migratory birds. In addition, OCD Rule 310 prohibits oil from being stored or retained in earthen reservoirs or open receptacles.

The facility is subject to periodic inspections by the OCD. The conditions of this permit will be reviewed by the OCD no later than five (5) years from the date of this approval and the facility will be inspected at least once a year.

Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the OCD Santa Fe Office within five working days of receipt of this letter.**

If you have any questions please do not hesitate to contact Martyne J. Kieling at (505) 827-7153.

Sincerely,

Lori Wrotenbery
Director

LW/mjk

xc with attachments:
Hobbs OCD Office

ATTACHMENT TO OCD 711 PERMIT APPROVAL
PERMIT NM-02-0015
EQUILON ENTERPRISES L.L.C.
Landfarm #2
NW/4 NE/4 of Section 24, Township 24 South, Range 36 East, NMPM,
Lea County, New Mexico
(August 18, 2000)

LANDFARM CONSTRUCTION

1. Construction must commence on the landfarm area within one (1) year of the permit approval date. If construction does not commence within one (1) year of the permit approval date, this permit will be of no effect.

2. The facility must be fenced and have a sign at the entrance. The sign must be legible from at least fifty (50) feet and contain the following information: a) name of the facility; b) location by section, township and range; and c) emergency phone number.

3. Contaminated soils may not be placed within five (5) feet of the boundary of the facility and the facility may not be constructed within one hundred (100) feet of adjacent landowners' property.

4. Contaminated soils may not be placed within twenty (20) feet of any pipeline crossing the landfarm. In addition, no equipmentmay be operated within ten (10) feet of a pipeline. All pipelines crossing the facility must have surface markers identifying the location of the pipelines.

5. The portion of the facility containing contaminated soils must be bermed to prevent runoff and runon. A perimeter berm no less than two (2) feet above grade with a base of at least four (4) feet must be constructed and maintained such that it is capable of containing precipitation from a one-hundred year flood for the specific region. Individual cells must be contained with a berm no less than two (2) feet above grade with a base of at least four (4) feet.

6. All above-ground tanks, saddle tanks or drums located at the facility and containing materials other than fresh water must be placed on an impermeable pad with curb containment. The pad and curb containment must be able to hold one and one-third the volume of the largest tank or all interconnected tanks. The tanks and containers must be labeled as to contents and hazards.

LANDFARM OPERATION

1. Disposal may occur only when an attendant is on duty. The facility must be secured when no attendant is present.

2. All contaminated soils received at the facility must be spread and disked within 72 hours of receipt.

3. Soils must be spread on the surface in lifts of six inches or less.

4. Soils must be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.

5. Exempt contaminated soils must be placed in the landfarm so that they are physically separate (*i.e.*, bermed) from non-exempt contaminated soils. There may be no mixing of exempt and non-exempt soils.

6. Successive lifts of contaminated soils may not be spread until a laboratory measurement of total petroleum hydrocarbons (TPH) in the previous lift is less than 5000 parts per million (ppm), the sum of all aromatic hydrocarbons (BTEX) is less than 50 ppm, and benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations must be maintained. Authorization from the OCD must be obtained prior to application of successive lifts and/or removal of the remediated soils.

7. Prior to removal of remediated soils from the facility the soils must be tested for TPH, BTEX and benzene content. The remediated soils may only be moved to another location when the level of TPH in the remediated soil is less than 100 ppm, BTEX is less than 50 ppm, and benzene is less than 10 ppm. Comprehensive records of the laboratory analyses, destination, and volume of remediated soils removed from the facility will be maintained at the facility for OCD review. Authorization form the OCD Santa Fe office must be obtained prior to removal of the remediated soils to sensitive areas.

   Equilon may request alternate remediation levels for soils to be used or deposited at a location if remediation standards described in the OCD surface impoundment closure guidelines are met. Alternate remediation levels shall be subject to approval on a case-by-case basis. Request shall be submitted to the Santa Fe OCD office for Review.

8. Soils to be left in place may be considered remediated when a laboratory measurement of TPH in the previous lift is less than 5000 ppm, the sum of all BTEX is less than 50 ppm, and benzene is less than 10 ppm. Comprehensive records of the laboratory analyses and the sampling locations must be maintained.

9. Moisture may be added as necessary to enhance bioremediation and to control blowing dust. There may be no ponding, pooling or run-off of water allowed. Any ponding of precipitation must be removed within twenty-four (24) hours of discovery.

10. Enhanced bio-remediation through the application of microbes (bugs) and/or fertilizers requires prior approval from the OCD. Requests for application of microbes or fertilizers must include the location of the area designated for the program, the composition of additives, and the method, amount and frequency of application.

11. Any design changes to the landfarm facility must be submitted to the OCD Santa Fe office for approval and a copy must be sent to the Hobbs District office.

12. Landfarm inspection must be conducted on at least a weekly basis and immediately following each consequential rainstorm or windstorm. If any defect is noted, repairs must be made as soon as possible. If the defect will jeopardize the integrity of the landfarm the OCD Santa Fe and Hobbs offices must be notified within 24 hours and additional wastes may not be placed into the landfarm until repairs have been completed.

13. Within 24 hours of receiving notification from the OCD that an objectionable odor has been detected or reported, the facility must implement the following response procedure:

    a. log date and approximate time of notice that an odor exists;

    b. log investigative steps taken, including date and time, and conclusions reached; and

    c. log actions taken to alleviate the odor, which may include adjusting chemical treatment, air sparging, solidification, landfarming, or other similar responses.

    A copy of the log, signed and dated by the facility manager, must be maintained for OCD review.

WASTE ACCEPTANCE CRITERIA

1. The facility is authorized to accept only exempt and "non-hazardous" non-exempt oilfield wastes that are generated in the State of New Mexico by Equilon Enterprise, L.L.C.

2. The facility is authorized to accept only:

    a. Oilfield wastes that are exempt from RCRA Subtitle C regulations and that do not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.

b. "Non-hazardous" non-exempt oilfield wastes on a case-by-case basis after conducting a hazardous waste characterization including corrosivity, reactivity, ignitability, and toxic constituents. The samples for these analyses must be obtained from the wastes prior to removal from the point of origin and without dilution in accordance with EPA SW-846 sampling procedures. The test for hazardous characteristics for a particular waste may be effective for an extended period of time from the date of analysis if approved by the OCD. In addition the generator must certify that this waste does not contain Naturally Occurring Radioactive Material (NORM) regulated pursuant to 20 NMAC 3.1 Subpart 1403.

3. At no time may any OCD-permitted surface waste management facility accept wastes that are hazardous by either listing or characteristic testing

4. No free liquids or soils with free liquids may be accepted at the facility.

5. The transporter of any wastes to the facility must supply a certification that wastes delivered are those wastes received from the generator and that no additional materials have been added.

6. Comprehensive records of all material disposed of at the surface waste management facility must be maintained by the permit holder.

TREATMENT ZONE MONITORING

1. One (1) background soil sample must be taken from undisturbed ground within 20 feet of the landfarm boundary two (2) feet below the native ground surface prior to operation. The sample must be analyzed for total petroleum hydrocarbons (TPH), volatile aromatic organics (BTEX), major cations/anions and Water Quality Control Commission (WQCC) metals.

2. A treatment zone not to exceed three (3) feet beneath the landfarm native ground surface must be monitored. A minimum of one random soil sample must be taken from each individual cell, with no cell being larger than five (5) acres, six (6) months after the first contaminated soils are received in the cell and then quarterly thereafter. The sample must be taken at two (2) to three (3) feet below the native ground surface.

3. The soil samples must be analyzed using EPA-approved methods for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) quarterly and for major cations/anions and Water Quality Control Commission (WQCC) metals annually.

4. After soil samples are obtained, the boreholes must be filled with an impermeable material such as cement or bentonite.

REPORTING

1. Analytical results from the treatment zone monitoring including a sample location map will be submitted to the OCD Santa Fe office **by August 18 of each year**.

2. Background sample analytical results must be submitted to the OCD Santa Fe office **within thirty (30) days** of receipt from the laboratory.

3. The applicant must notify the **OCD Hobbs District office within 24 hours** of any fire, break, leak, spill, blowout or any other circumstance that could constitute a hazard or contamination in accordance with OCD Rule 116.

4. All records of testing and monitoring must be retained for a period of five (5) years.

5. The OCD must be notified prior to the installation of any pipelines or wells or other construction within the boundaries of the facility.

FINANCIAL ASSURANCE

1. Pursuant to OCD Rule 711.B.3.a., financial assurance in a form approved by the Director is required from Equilon Enterprises, L.L.C. in the amount of **$25,000** for this facility or **$50,000** for all of Equilon Enterprises, L.L.C.'s centralized surface waste management facilities in the state.

2. Financial assurance must be submitted by **September 18, 2000.**

3. The facility is subject to periodic inspections by the OCD. The conditions of this permit and the facility will be reviewed no later than five (5) years from the date of this approval.

CLOSURE

1. The OCD Santa Fe and Hobbs offices must be notified when operation of the facility is to be discontinued for a period in excess of six (6) months or when the facility is to be dismantled. Within six (6) months after discontinuing use or within 30 days of deciding to dismantle the facility a closure plan must be submitted to the OCD Santa Fe office for approval. The operator must complete cleanup of constructed facilities and restoration of the facility site within six (6) months of receiving the closure plan approval, unless an extension of time is granted by the Director.

2. A closure plan to include the following procedures must be submitted to the OCD Santa Fe office for approval:

   a. When the facility is to be closed no new material will be accepted.

   b. Existing landfarm soils will be remediated until they meet the OCD standards in effect at the time of closure.

   c. The treatment zone soils beneath the landfarm cells will be characterized as to the total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) content in order to determine potential migration of contamination beneath the facility.

   d. The area will be contoured, seeded with native grasses and allowed to return to its natural state. If the landowner desires to keep existing structures, berms, or fences for future alternative uses the structures, berms, or fences may be left in place.

   e. Closure will be pursuant to all OCD requirements in effect at the time of closure, and any other applicable local, state and/or federal regulations.

CERTIFICATION

Equilon Enterprises, L.L.C., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Equilon Enterprises, L.L.C. further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Accepted:

EQUILON ENTERPRISES, L.L.C.

Signature _____ Title G.M. OPERATIONS Date 9/13/00

THE REPRODUCTION OF

THE

FOLLOWING

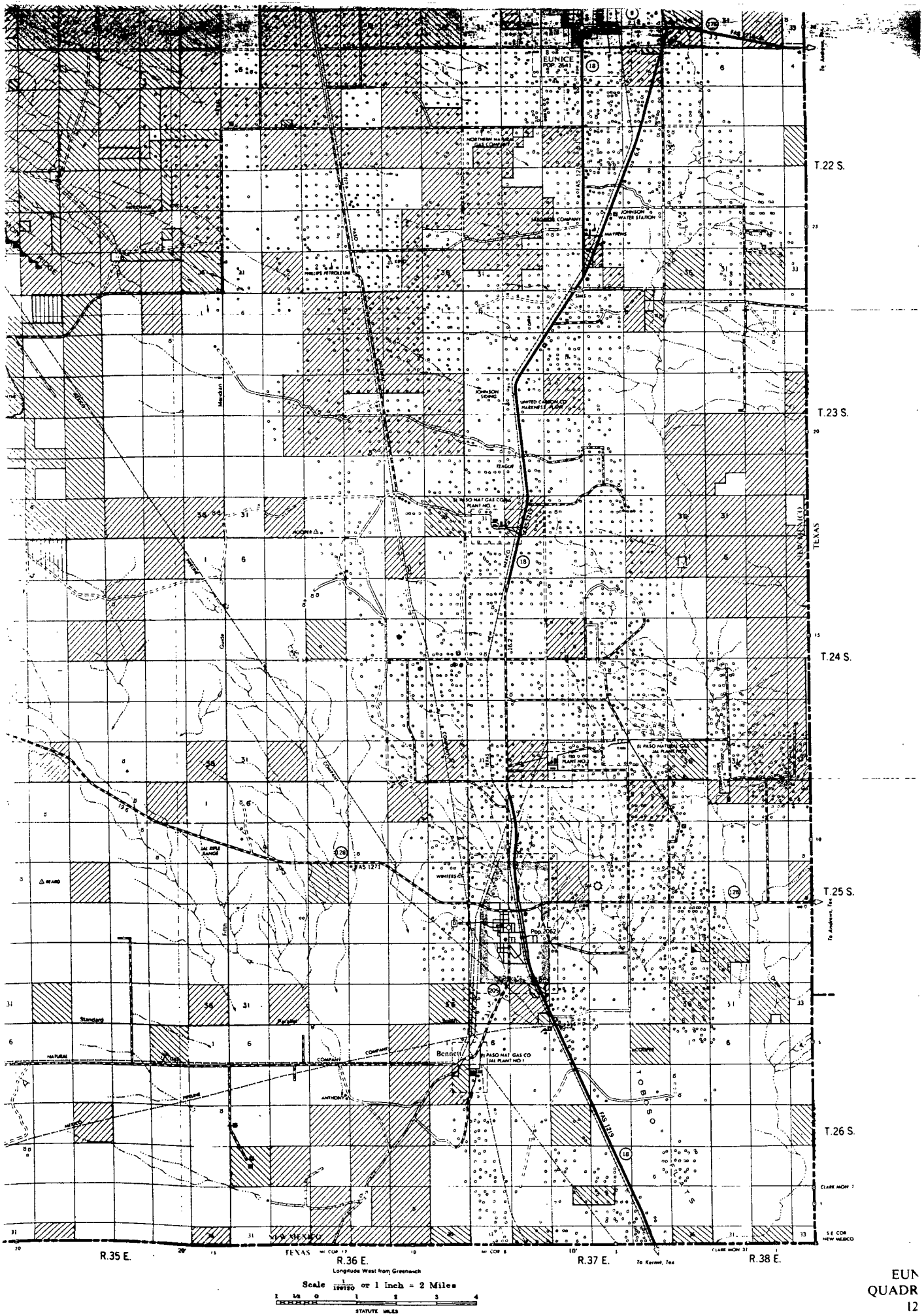
DOCUMENT (S)

CANNOT BE IMPROVED

DUE TO

THE CONDITION OF

THE ORIGINAL


EUNICE
Pop. 2641
T.22 S.
T.23 S.
T.24 S.
T.25 S.
T.26 S.
JAL
Pop. 2062
NEW MEXICO
TEXAS
R.35 E.
R.36 E.
R.37 E.
R.38 E.
Longitude West from Greenwich
Scale 1/126720 or 1 Inch = 2 Miles
STATUTE MILES

EUN
QUADR
12

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

July 26, 2000

Ms. Martyne J. Kieling
Environmental Geologist
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

RE: Request for Change in Landfarm Closure Requirements
Sam Cooper Landfarms #1, #2, #3, #4
SE/4 NE/4 Section 23, T24S, R36E
NW/4 NE/4 Section 24, T24S, R36E
NE/4 NE/4 Section 24, T24S, R36E
SE/4 NW/4 Section 14, T24S, R36E
Lea County, New Mexico

Dear Ms. Kieling:

In November 1999, Equilon Enterprises, LLC (Equilon) applied for a permit to construct four 711 surface waste management facilities at the above locations. The purpose of these surface waste management facilities is to remediate crude oil impacted soil excavated from on-site. The impacted soil was the result of historical leaks along a crude oil gathering system.

The purpose of this letter is to request modified closure values for the four landfarm sites referenced above. Equilon is requesting that, in accordance with NMOCD risk-based soil remediation levels, the closure requirements for these four sites be changed to:

Total Petroleum Hydrocarbons (TPH) – 5,000 ppm
Benzene, toluene, ethylbenzene, total xylenes (BTEX) – 50 ppm
Benzene – 10 ppm

A brief description of the geology/hydrogeology of the subject sites and a rationale for the request of modified TPH/BTEX closure criteria is presented below:

Geology/Hydrogeology:

The Sam Cooper Ranch lies in extreme southern Lea County, approximately 5.6 miles north-northwest of Jal, New Mexico. The area lies within both the Llano Estacado and the Permian Basin and is characterized by an arid climate. Topography is relatively flat and the surface is covered with scrub vegetation. Rainfall averages 12.5 inches per year. Regional drainage within the subject area is generally to the east at approximately 35 feet per mile. There are no perennial or intermittent streams or other surface bodies of water within a one-mile radius of the subject site, nor are there any groundwater discharge sites. A water well search was performed by Environmental Data Resources, Inc. (EDR). Results of the search indicated that a total of 6 water wells were located within a one-mile radius of the subject site. Wells A1 and A2 are domestic supply wells for the Cooper Ranch house, while wells B3, B4, and B5 are situated within and slightly outside of the Jal-Cooper Cemetery, which is adjacent to and

south of County Road 7. The wells are reportedly completed in the Ogallala formation. Water level, as measured by Enercon, ranges between 133 and 177 feet below ground surface (bgs). Total dissolved solids in a water sample obtained from one of the Jal-Cooper Cemetery wells was 782 mg/l. Groundwater flow direction at the subject site, as determined by observing the surface gradient and by observing water levels in the wells plotted on the EDR report, appears to be to the east.

On-site soils consist of alluvial red beds from the surface to a depth of approximately 5 feet bgs. The red beds are underlain by caliche and discontinuous sand stringers from 5 feet bgs to approximately 130 feet bgs. The Ogallala, consisting of consolidated beach sand, is encountered at a depth of approximately 130 feet bgs and extends to 220-250 feet bgs.

Justification for Modified Closure Criteria:

Site assessment information for the four landfarm sites was presented to the NMOCD in a November 16, 1999 letter to Mr. Chris Williams, District I Supervisor. The information presented therein indicated that the sites lie approximately 5.6 miles from the nearest populated town, in an area utilized exclusively for ranching and oil & gas production. Depth to groundwater varies between 133 and 177 feet below ground surface. The landfarm sites are greater than 1,000 feet from the nearest surface water body, greater than 1,000 feet from a water source, and greater than 200 feet from a private domestic water source. Onsite soils consist of redbeds overlying caliche. Prior to the excavation of crude oil impacted areas, the NMOCD Ranking Criteria (from *Guidelines for Remediation of Leaks, Spills and Releases*, NMOCD, August 13, 1993) was determined for each affected site. According to the NMOCD publication "*The general site characteristics obtained during the site assessment will be used to determine the appropriate soil remediation action levels using a risk based approach. Soils which are contaminated by petroleum constituents will be scored according to the ranking criteria ... to determine their relative threat to public health, fresh waters, and the environment.*"

Using the ranking criteria established by the NMOCD, cleanup levels for crude oil impacted soils at the Sam Cooper landfarm sites would be determined as follows:

Table 1 – Ranking Criteria

Parameter	Ranking Score	Site Score
Depth to Groundwater		
<50 feet	20	
50 – 99 feet	10	
>100 feet	0	**0**
I. Wellhead Protection Area		
<1,000 feet from a water source, or; <200 feet from private domestic water source		
Yes	20	
No	0	**0**
II. Distance to Surface Water Body		
<200 horizontal feet	20	
200 – 1,000 horizontal feet	10	
>1,000 horizontal feet	0	**0**
TOTAL SITE SCORE		**0**

Based upon the total site ranking score, as shown above, the recommended remediation levels are shown in Table 2, below:

Table 2 – Remediation Action Level

Total Ranking Score			
	>19	**10 - 19**	**0 - 9**
Benzene (ppm)	10	10	10
BTEX (ppm)	50	50	50
TPH (ppm)	100	1,000	5,000

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

Since the NMOCD has determined that these contaminant concentration levels are protective of public health, fresh waters, and the environment, and, therefore, acceptable remediation levels for crude oil impacted soil cleanup, Equiva respectfully requests that the closure criteria for the Sam Cooper landfarm sites be modified to reflect these concentrations.

Thank you for your continuing cooperation and assistance with this project. If you have any questions or comments, please do not hesitate to call me at (281) 252-6914.

Sincerely yours,
Equiva Services, Inc.

Kyle Landreneau

Kyle Landreneau
Environmental Geologist
SHE Science and Engineering

Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

Cc: Don Parsons – Enercon Services, Inc
Donna Williams – NMOCD

28510C Tomball Parkway PMB Suite 406, Tomball TX 77375
Phone 281-252-6914 Facsimile 281-252-6917

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

May 18, 2000

Via Certified Mail

RECEIVED
MAY 30 2000
OIL CONSERVATION DIVISION

Ms. Martyne Kieling
Environmental Geologist
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

RE: Response to April 20, 2000 Letter

Dear Ms. Kieling:

Equilon Enterprises, LLC has received your letter, dated April 20, 2000, detailing the results of your recent inspection of Equilon Landfarms 1, 2, 3, and 4 on the Sam Cooper Ranch, located in Lea County, New Mexico.

In that letter and the accompanying attachments, you noted a permit deficiency in the form of wind eroded berms at Landfarm #4. At the time of your inspection, maintenance work was in progress on each of the landfarm cells. The eroded berms have been repaired, and each of the facilities should now be in full compliance. The berms were repaired by mobilizing to the site a backhoe/loader belonging to Walton Construction Company of Hobbs, New Mexico and placing clean soil obtained from elsewhere on the site on the damaged portions of the berms. Bi-weekly inspection of these facilities will continue throughout their operating lifetime to assure continuing compliance with all NMOCD rules and regulations.

We have obtained a copy of the appropriate financial assurance forms, which will be submitted to the NMOCD within 30 days of receipt of permit approval.

Thank you for your continuing assistance with this project. If you have any questions or comments, please do not hesitate to call me at (281) 252-6914.

Sincerely
EQUIVA SERVICES LLC

K. L. Landreneau

Kyle Landreneau
Environmental Geologist
SHE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

Cc: Don Parsons – Enercon Services, Inc.
Donna Williams – NMOCD, Hobbs, NM

28510C Tomball Parkway PMB Suite 406, Tomball TX 77375
Phone 281-252-6914 Facsimile 281-252-6917

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

April 20, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. Z-559-573-299

Mr. Kyle Landreneau
Equilon Enterprises L.L.C.
28510C Tomball Parkway PMB Suite 406
Tomball, Texas, 77375

RE: Centralized Surface Waste Management Facilities Inspection Report
Equilon Enterprises L.L.C.
Landfarm #1 SE/4 NE/4 Section 23, Township 24 South, Range 36 East;
Landfarm #2 NW/4 NE/4 Section 24, Township 24 South, Range 36 East;
Landfarm #3 NE/4 NE/4 Section 24, Township 24 South, Range 36 East; and
Landfarm #4 SE/4 NW/4 Section 14, Township 24 South, Range 36 East,
N.M.P.M., Lea County, New Mexico

Dear Mr. Landreneau:

The New Mexico Oil Conservation Division (OCD) inspected the Equilon Enterprises L.L.C. (Equilon) surface waste management facility at the above location on April 12, 2000.

Overall the OCD found Equilon to have a well maintained landfarm with good security. The OCD inspection and file review of Equilon indicates some permit deficiencies. Attachment 1 lists the permit deficiencies found at Equilon during the inspection and file review. Attachment 2 contains photographs taken during the inspection. Equilon shall provide OCD with a detailed description of how the corrections will be made and a time table of when each of the corrections will be completed. Equilon must respond to the permit deficiencies by May 22, 2000.

Please be advised that the financial assurance in the amount of $50,000 will need to be submitted for approval within 30 days of receiving the permit approval. If you do not have a copy of the OCD surface waste management facility financial assurance forms you may obtain them from the OCD web site http://www.emnrd.state.nm.us/ocd/.

If you have any questions please do not hesitate to contact me at (505) 827-7153.

Sincerely,

Martyne J. Kieling
Environmental Geologist

Attachments
xc: Hobbs OCD Office

ATTACHMENT 1
INSPECTION REPORT
EQUILON ENTERPRISES L.L.C.
Landfarm #1 SE/4 NE/4 Section 23, Township 24 South, Range 36 East;
Landfarm #2 NW/4 NE/4 Section 24, Township 24 South, Range 36 East;
Landfarm #3 NE/4 NE/4 Section 24, Township 24 South, Range 36 East; and
Landfarm #4 SE/4 NW/4 Section 14, Township 24 South, Range 36 East,
N.M.P.M., Lea County, New Mexico
(April 20, 2000)

1. Fencing and Signs: The facility will be fenced and have a sign at the entrance. The sign shall be maintained in good condition and shall be legible from at least fifty (50) feet and contain the following information : a) name of facility, b) location by section, township and range, and c) emergency phone number.

   Landfarms 1, 2, 3, and 4 are secured with a fence and locking gate and have a sign at the entrance (see photos 2, 3, 4 and 7).

2. Berming: An adequate berm will be constructed and maintained to prevent runoff and runon for that portion of the facility containing contaminated soils.

   Cell berms are in good shape and well maintained at landfarms 1, 2 and 3. Landfarm 4 berms have sustained some wind erosion and need repair (see photos 7, 8 and 9)

3. Setbacks: All new landfarm facilities or modifications to existing landfarm facilities must have a setbacks along the facility boundary and along any pipelines crossing the landfarm. Contaminated soils may not be placed within five (5) feet of the boundary of the facility and the landfarm facility may not be constructed within one hundred (100) feet of adjacent landowners' property. No contaminated soil will be placed within twenty (20) feet of any pipelines crossing the landfarm. In addition, no equipment will be operated within ten (10) feet of a pipeline. All pipelines crossing the facility will have surface markers identifying the location of the pipelines.

   The facility setbacks are maintained. There are no pipelines crossing landfarms 1, 2, 3, and 4.

4. Soil Spreading, Disking and Lift Thickness: All contaminated soils received at the facility will be spread and disked within 72 hours of receipt. Soils will be spread on the surface in six inch lifts or less. Soils will be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants.

   At the time of inspection, soils in each cell had been spread and disked accordingly.

5. Free Liquids: No free liquids or soils with free liquids will be accepted at the facility.

No free liquids were observed within the landfarm.

6. Trash and Potentially Hazardous Materials: All trash and potentially hazardous materials should be properly disposed of.

Landfarms 1, 2, 3 and 4 looked clean.

7. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable pad within the berm so that leaks can be identified.

N/A There are no above ground tanks located at landfarms 1, 2, 3 and 4.

8. Sumps and Valve Catchments: All sumps and catchments must be kept empty so that leaks can be identified and to prevent overflow onto the ground.

N/A There are no sumps or valve catchments located at landfarms 1, 2, 3 and 4.

9. Concrete Mixing Impoundment: Adequate freeboard must be maintained to prevent any overtopping or slop over of material. Material received at the impoundment must be mixed and stabilized immediately.

N/A There are no impoundment located at landfarms 1, 2, 3 and 4.

10. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets should also be stored on an impermeable pad and curb type containment.

N/A There are no drums located at landfarms 1, 2, 3 and 4..

All drums and chemical containers should be clearly labeled to identify their contents and other emergency information necessary if they were to rupture, spill or ignite.

11. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.

N/A There are no saddle tanks located at landfarms 1, 2, 3 and 4..

12. Tank Labeling: All tanks, drums and containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill or ignite.

N/A

13. Migratory Bird Protection: All tanks exceeding 16 feet in diameter and exposed pits, ponds or lagoons must be screened, netted, covered or otherwise rendered not hazardous to migratory birds.

N/A

14. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116 to the appropriate OCD District Office.

At the time of inspection, there were no spills evident at landfarms 1, 2, 3 and 4.

15. Regular Facility Inspections: Cells must be disked a minimum of one time every two weeks (biweekly) to enhance biodegradation of contaminants. Facility inspections and maintenance must be conducted on at least a biweekly basis and immediately following each consequential rainstorm or windstorm.

Facility Records were not checked during this inspection.

16. H_2S Screening: H_2S screening must be recorded and maintained.

N/A

17. Waste Acceptance and Disposal Documentation: The records for each load must include: 1) generator; 2) origin; 3) date received; 4) quantity; 5) certification; 6) NORM status declaration; 7) transporter; 8) exact cell location; and 9) any addition of microbes moisture, fertilizers, *etc.*

Facility Records were not checked during this inspection.

ATTACHMENT 2:
Equilon Enterprises L.L.C.

Photo 1 04-12-00 Landfarm 1

Photo 2 04-12-00 Landfarm 1

Photo 3 04-12-00 Landfarm 2

Photo 4 04-12-00 Landfarm 3

Photo 5 04-12-00 Landfarm 3

Photo 6 04-12-00 Landfarm 3

Photo 7 04-12-00 Landfarm 4

Photo 8 04-12-00 Landfarm 4

Photo 9 04-12-00 Landfarm 4

ENERCON SERVICES, INC.
An Employee Owned Company

2775 Villa Creek, Suite 120
Dallas, TX 75234
(972) 484-3854
Fax: (972) 484-8835

November 22, 1999

Ms. Martyne Kieling
Environmental Geologist
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

RE: Application for Waste Management Facility

Dear Ms. Kieling:

Attached you will find an original and one copy of Equilon Enterprises LLC's application for a waste management facility. As we discussed, Equilon intends to apply for a permit for four landfarm locations, all within the same general area. Items 1 through 4 on the attached Form C-137s are specific to the location of each proposed landfarm. The responses to items 5 through 15 will be the same for each proposed location; hence, only one generic set of responses has been presented.

An additional copy of this application is being sent to Ms. Donna Williams at the Hobbs, NM NMOCD office.

Thank you for your assistance with this matter. I will look forward to working with you in the future. If you have any comments or questions, please do not hesitate to call me at (972) 484-3854.

Sincerely yours,

ENERCON SERVICES, INC.

Don R. Parsons, Jr., C.P.G.
Senior Project Manager

Don R. Parsons
Senior Project Manager
Environmental Engineers and Consultants

ENERCON SERVICES, INC.
An Employee Owned Company

2775 Villa Creek
Suite 120
Dallas, TX 75234-7420
www.enercon.com

(972) 484-3854
FAX (972) 484-8835
E-mail: don@dal-e.enercon.com

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-137
Revised March 17, 1999

Submit Original Plus 1
Copy to Santa Fe
1 Copy Appropriate
District Office

APPLICATION FOR WASTE MANAGEMENT FACILITY

(Refer to the OCD Guidelines for assistance in completing the application)

Landfarm #2

☐ Commercial ☒ Centralized

1. Type: ☐ Evaporation ☐ Injection ☐ Other
   ☒ Solids/Landfarm ☐ Treating Plant

2. Operator: Equilon Enterprises LLC

   Address: 28510C Tomball Parkway PMB Suite 406, Tomball, TX 77375

   Contact Person: Kyle Landreneau (Equiva Services LLC) Phone: (281)-252-6914

3. Location: NW /4 NE /4 Section 24 Township 24S Range 36E
   Submit large scale topographic map showing exact location

4. Is this a modification of an existing facility? ☐ Yes ☒ No

5. Attach the name and address of the landowner of the facility site and landowners of record within one mile of the site.

6. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.

7. Attach designs prepared in accordance with Division guidelines for the construction/installation of the following: pits or ponds, leak detection systems, aerations systems, enhanced evaporation (spray) systems, waste treating systems, security systems, and landfarm facilities.

8. Attach a contingency plan for reporting and clean-up for spills or releases.

9. Attach a routine inspection and maintenance plan to ensure permit compliance.

10. Attach a closure plan.

11. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact groundwater. Depth to and quality of ground water must be included.

12. Attach proof that the notice requirements of OCD Rule 711 have been met.

13. Attach a contingency plan in the event of a release of H_2S.

14. Attach such other information as necessary to demonstrate compliance with any other OCD rules, regulations and orders.

15. CERTIFICATION
    I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Kyle Landreneau Title: Environmental Geologist

Signature: Kyle Landreneau Date: 11/17/99

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
Districts III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-137
Revised March 17, 1999

Submit Original Plus 1
Copy to Santa Fe
1 Copy Appropriate
District Office

APPLICATION FOR WASTE MANAGEMENT FACILITY

(Refer to the OCD Guidelines for assistance in completing the application)

Landfarm #3

☐ Commercial ☒ Centralized

1. Type: ☐ Evaporation ☐ Injection ☐ Other
☒ Solids/Landfarm ☐ Treating Plant

2. Operator: Equilon Enterprises LLC

Address: 28510C Tomball Parkway PMB Suite 406, Tomball, TX 77375

Contact Person: Kyle Landreneau (Equiva Services LLC) Phone: (281) 252-6914

3. Location: NE /4 NE /4 Section 24 Township 24S Range 36E
Submit large scale topographic map showing exact location

4. Is this a modification of an existing facility? ☐ Yes ☒ No

5. Attach the name and address of the landowner of the facility site and landowners of record within one mile of the site.

6. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.

7. Attach designs prepared in accordance with Division guidelines for the construction/installation of the following: pits or ponds, leak-detection systems, aerations systems, enhanced evaporation (spray) systems, waste treating systems, security systems, and landfarm facilities.

8. Attach a contingency plan for reporting and clean-up for spills or releases.

9. Attach a routine inspection and maintenance plan to ensure permit compliance.

10. Attach a closure plan.

11. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact groundwater. Depth to and quality of ground water must be included.

12. Attach proof that the notice requirements of OCD Rule 711 have been met.

13. ~~Attach a contingency plan in the event of a release of H_2S.~~

14. Attach such other information as necessary to demonstrate compliance with any other OCD rules, regulations and orders.

15. CERTIFICATION
I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Kyle Landreneau Title: Environmental Geologist

Signature: Kyle Landreneau Date: 11/17/99

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-137
Revised March 17, 1999

Submit Original Plus 1
Copy to Santa Fe
1 Copy Appropriate
District Office

APPLICATION FOR WASTE MANAGEMENT FACILITY

(Refer to the OCD Guidelines for assistance in completing the application)

Landfarm #4

☐ Commercial ☒ Centralized

1. Type: ☐ Evaporation ☐ Injection ☐ Other
☒ Solids/Landfarm ☐ Treating Plant

2. Operator: Equilon Enterprises LLC

Address: 28510C Tomball Parkway PMB Suite 406, Tomball, TX 77375

Contact Person: Kyle Landreneau (Equiva Services LLC) Phone: (281) 252-6914

3. Location: SE /4 NW /4 Section 14 Township 24S Range 36E
Submit large scale topographic map showing exact location

4. Is this a modification of an existing facility? ☐ Yes ☒ No

5. Attach the name and address of the landowner of the facility site and landowners of record within one mile of the site.

6. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.

7. Attach designs prepared in accordance with Division guidelines for the construction/installation of the following: pits or ponds, leak-detection systems, aerations systems, enhanced evaporation (spray) systems, waste treating systems, security systems, and landfarm facilities.

8. Attach a contingency plan for reporting and clean-up for spills or releases.

9. Attach a routine inspection and maintenance plan to ensure permit compliance.

10. Attach a closure plan.

11. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact groundwater. Depth to and quality of ground water must be included.

12. Attach proof that the notice requirements of OCD Rule 711 have been met.

13. Attach a contingency plan in the event of a release of H_2S.

14. Attach such other information as necessary to demonstrate compliance with any other OCD rules, regulations and orders.

15. CERTIFICATION
I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Kyle Landreneau Title: Environmental Geologist

Signature: Kyle Landreneau Date: 11/17/99

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-137
Revised March 17, 1999

Submit Original Plus 1
Copy to Santa Fe
1 Copy Appropriate
District Office

APPLICATION FOR WASTE MANAGEMENT FACILITY

(Refer to the OCD Guidelines for assistance in completing the application)

Landfarm #1

☐ Commercial ☒ Centralized

1. Type: ☐ Evaporation ☐ Injection ☐ Other
☒ Solids/Landfarm ☐ Treating Plant

2. Operator: Equilon Enterprises LLC

Address: 28510C Tomball Parkway PMB Suite 406, Tomball, TX 77375

Contact Person: Kyle Landreneau (Equiva Services LLC) Phone: (281) 252-6914

3. Location: SE /4 NE /4 Section 23 Township 24S Range 36E
Submit large scale topographic map showing exact location

4. Is this a modification of an existing facility? ☐ Yes ☒ No

5. Attach the name and address of the landowner of the facility site and landowners of record within one mile of the site.

6. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.

7. Attach designs prepared in accordance with Division guidelines for the construction/installation of the following: pits or ponds, leak-detection systems, aerations systems, enhanced evaporation (spray) systems, waste treating systems, security systems, and landfarm facilities.

8. Attach a contingency plan for reporting and clean-up for spills or releases.

9. Attach a routine inspection and maintenance plan to ensure permit compliance.

10. Attach a closure plan.

11. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact groundwater. Depth to and quality of ground water must be included.

12. Attach proof that the notice requirements of OCD Rule 711 have been met.

13. Attach a contingency plan in the event of a release of H_2S.

14. Attach such other information as necessary to demonstrate compliance with any other OCD rules, regulations and orders.

15. CERTIFICATION
I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Kyle Landreneau Title: Environmental Geologist

Signature: K L Landreneau Date: 11/17/99

5.0 Names and Addresses of Site Landowner and Landowners of Record Within One Mile

Landowner:
Sam Cooper
Rural Route 1
Box 141
Blossom, Texas 75416

Landowners of Record Within One Mile:

Jal Public Library Fund
C.D. Woolworth Trust
P.O. Box 178
Jal, NM 88252

Whitten/Lea Ltd.
Real Estate Tax Service
P.O. Box 771
Abilene, TX 79604

George W. Poage III
P.O. Box 106
Rankin, TX 79778

Elena Bell Grobe &
William Jarvis Grobe Trust
Drawer G
Jal, NM 88252

Henry H. Harrison, Jr. &
Ronald M. Harrison
1700 N. Big Spring Street
Midland, TX 79701

Deep Wells Ranch, Inc.
Combest Ranch
Star Route
Jal, NM 88252

Burl H. Alexander
Box 913
Jal, NM 88252

J.T. Crawford
Drawer T
Jal, NM 88252

Jimmy Joe Doom
Star Route
Jal, NM 88252

Ludean E. Cantrell
c/o C. Pruett
4501 N. Central Road
Bethany, OK 73088

Texas-New Mexico Railroad
Real Estate Tax Services
P.O. Box 202378
Austin, TX 78720

City of Jal
Jal, NM 88252

Transwestern Pipeline Co.
Property Tax Department
P.O. Box 1188
Houston, TX 77251

6.0 Facility Description

6.1 Materials to be Treated

Intrinsic bioremediation of hydrocarbon (crude oil) impacted soils will be conducted at the permitted facilities. The facilities will be centralized and used to treat RCRA Subtitle C Exempt soil from the applicant's own leases. The crude oil impacted soils to be treated were generated by minor leaks and spills from historical operations of a crude oil gathering system. No impacted soils originating elsewhere and no impacted liquids will be permitted within the landfarm cells.

6.2 Description of On-Site Facilities

A total of four landfarm sites will be constructed; each will be located in the immediate vicinity of an historic crude oil spill. Four separate sites are being constructed instead of one central site in order to mitigate transportation costs. The sites will be constructed in the locations shown on the attached topographic map, Figure 1. Each site will contain one cell, with the exception of Landfarm Site #1, which, because of its size, will contain 3 cells. Landfarm cells will not exceed five acres in size and will be unlined. The bottom of each cell will rest on undisturbed native soil. Berms constructed of native soil and at least two feet in height will completely surround each cell in order to prevent runon/runoff. The berms surrounding each cell will be capable of containing precipitation from a 100-year rainfall event. No effluent from landfarming will be discharged on site during the operation of the landfarm. It is intended that each cell will be loaded only once and that when the initial load is successfully remediated to OCD standards, the cells will be properly abandoned. When bioremediation of the impacted material is complete and laboratory analytical results indicate that concentrations of the contaminants of concern are at or below OCD requirements, the landfarm cells will be broken out and the treated material will be tilled into the native soil, approximately to grade. Following tilling of the remediated material, a layer of soil will be placed over the remediated material, and the area will be reseeded with native grasses.

6.3 Diagrams of the Facilities

See Appendix A.

7.0 Landfarm Design

Four separate sites, as shown in Figures 2 through 5 (Appendix A), will be constructed to handle the bioremediation of the impacted soil. Each site will contain one landfarm cell, with the exception of Landfarm Site #1, which, due to its size, will contain three cells. The cells will be unlined, and native soil berms, at least two feet in height, will surround each cell to prevent runon/runoff. Hydrocarbon (crude oil) impacted soil will be excavated and placed into the cells in 6-inch lifts for treatment. Each cell will be tilled on a bi-weekly schedule in order to aerate the impacted material efficiently. Walton Construction Company, Inc., of Hobbs, New Mexico, will be used to maintain and till the landfarm cells. Walton Construction has constructed two commercial landfarms in the area and is aware of the requirements for water dispersal and diversion. Walton has farm tractors and cultivation equipment to disk, till, or roto-till up to 18 inches in depth. Equipment available for tilling operations include an International Farm-All 1468, John Deere 730, and an International TD18. Walton also has a vacuum truck as well as pumps and portable pipe to remove water from the landfill cells. Any water which may be removed from the landfarm cells will be disposed at a permitted disposal well for oilfield products, such as Key Disposal in Eunice, NM.

At present, it is anticipated that indigenous microbes will metabolize the contaminants without the introduction of additional microbes or nutrients. The impacted material in each cell will be sampled and analyzed after the material is initially emplaced in the cell, and quarterly thereafter. Samples will be analyzed for total petroleum hydrocarbons (TPH); benzene, toluene, ethylbenzene, total xylenes (BTEX); and RCRA Metals during the first sampling event. If, after the initial sampling event, RCRA metals and BTEX concentrations are below NMOCD guidelines for soil to remain in place, no further BTEX and RCRA metals analysis will be performed. If quarterly analytical results indicate that bioremediation is not progressing as rapidly as envisioned, additional nutrients, in the form of commercial fertilizer or manure, may be added to the cells. Water may be added to the landfarm cells, as necessary, to enhance bioremediation; however, no ponding of water will be allowed.

Each landfarm site will be fenced to protect livestock. In accordance with regulations, a sign, not less than 12" x 24" shall be posted in a conspicuous place on the fence surrounding each facility. The sign shall identify the operator of the landfarm; the location of the facility by quarter-quarter section, township and range; and shall provide emergency telephone numbers. Sign lettering will be at least two inches high.

8.0 Contingency Plan for Reporting and Clean-up of Spills and Releases

The sites will be inspected at least once per week and immediately after any significant rainfall or windstorm event. Since no liquids are to be treated or allowed within the landfarm cells, the only potential spills which could be envisioned would be a spill of impacted soil outside of the bermed area following a significant rainfall event and resulting breaching of the berm. Although such a situation is highly unlikely, the first step in cleaning up such an occurrence would be to notify the OCD pursuant to OCD Rule 116 or New Mexico Water Quality Control Commission regulation 1-203. Notification is to be made immediately upon discovery of the release. Earthmoving equipment will be mobilized to the site to repair the breach and to pick up the released material and return it to the landfarm cell. Confirmatory sampling and analysis (TPH) will be performed on the surface soil within the release area and compared to previously obtained background analytical results to verify that the released materials have been successfully cleaned up.

Ponding, pooling, or runon of precipitation will be removed with either a vacuum truck or by pumps, depending upon the extent. All liquids will be containerized and transported to a permitted disposal facility for proper disposal.

Quarterly treatment zone monitoring is designed to determine if contaminants have migrated into the native soils in unacceptable concentrations. In the highly unlikely event that such a situation occurs, numerous alternatives could be evaluated to mitigate such an occurrence. The most expedient and cost-effective solution would be to add additional nutrients, moisture, and oxygenating compounds, such as ORC®, in order to accelerate the bioremediation process.

9.0 Operation and Maintenance Plan

9.1 Purpose and Operation

The purpose of the landfarming operations proposed within this permit application is to naturally attenuate hydrocarbon (crude oil) impacted soils. Landfarming operations are to be centralized facilities for the remediation of RCRA Subtitle C Exempt soil from the applicant's operations only. No commercial materials or materials from outside sources will be accepted at the landfarms for which this permit application applies. No impacted liquids will be treated at these facilities. Natural attenuation will be accomplished by indigenous aerobic microbes, oxygenated by a bi-weekly disking program.

9.2 Sampling and Analysis

9.2.1 Baseline sampling and analysis

Soil samples will be obtained from native soil two feet below surface grade within the proposed landfarm cells prior to placing impacted soil in the cell for treatment. The samples will be analyzed for TPH, BTEX, and RCRA Metals using EPA Methods 8015M, 8021B, and 6010B, respectively. For those cells where landfarming activities have already begun, baseline samples will be obtained from native soil two feet below surface grade outside of and within a 20-foot radius of the cell.

9.2.2 Treatment zone sampling and analysis

The treatment zone 2-3 feet below surface grade within the landfarm cells will be monitored on a regular schedule. The first monitoring event will occur 6 months after the first contaminated soils are received, and quarterly, thereafter. One hand auger boring will be installed at random to a depth no greater than 2 feet below ground surface. The soil sample obtained from that boring will be collected using EPA-approved techniques and sent to an approved analytical laboratory. On the first sampling event, and annually thereafter, the soil sample will be analyzed for TPH, BTEX, major anions/cations, and RCRA metals. Soil samples from the quarterly sampling events will be analyzed for TPH and BTEX. After samples are obtained, the hand auger boring will be plugged with cement, hydrated bentonite chips, or similar impermeable material.

9.2.3 Bioremediation monitoring

Soils undergoing treatment within the landfarm cells will be sampled quarterly to monitor the progress of the natural attenuation. Samples will be analyzed for TPH; BTEX; and RCRA Metals during the first sampling event. If, after the initial sampling event, RCRA metals and BTEX concentrations are below NMOCD guidelines for soil to remain in place, no further BTEX and RCRA metals analysis will be performed. If quarterly analytical results indicate that bioremediation is not progressing as rapidly as envisioned, additional nutrients, in the form of commercial fertilizer or manure, may be added to the cells. Water may also be added, as necessary, to enhance bioremediation. No liquids will be allowed to pool within the landfarm cells.

9.3 Inspection and Nuisance Mitigation

The landfarming operations will be inspected, at minimum, on a weekly basis to assure that operations are proceeding according to plan and that the integrity of the landfarm cells is maintained. In the event of any significant rainfall or windstorm, the landfarm cells will be inspected immediately following such event. Any damage to or erosion of the surrounding berms is to be repaired immediately. Berms are to be maintained such that they are no less than two feet high, in order to contain the precipitation of a 100-year flood. The landfarming of impacted soil from these historic crude oil spills is not anticipated to generate noxious odors; therefore, no measures to mitigate odors will be required. Soil being treated in the landfarm cells will be wetted, as necessary, to prevent wind erosion and to stimulate the bioremediation process. Water will not be allowed to pond within the cells during wetting operations or at any other time.

10.0 Closure Plan

It is anticipated that bioremediation of crude oil impacted soils will require approximately one year. Landfarm cells will be loaded initially, and no additional material will be placed into the cells thereafter. Remediation progress, as previously stated, will be monitored on a quarterly basis. Remediation will continue until quarterly sampling and analysis indicates that landfarm soils have been remediated to the OCD standards in effect at the time of closure. When laboratory analytical results indicate that remediation is complete according to OCD standards, Equilon Pipeline Company shall notify the OCD of cessation of operations. Equilon will then close the landfarm operations in accordance with all applicable local, state, and/or federal regulations which may be in effect at the time of closure. Closure operations will be complete within six months of notification of cessation of operations.

Closure of landfarming operations shall consist of breaking out the surrounding berms, and spreading and tilling the remediated and berm material into on-site native soils, approximately to grade. The leveled, remediated material will then be covered with a layer of clean soil, and reseeded with native grasses. One application of water for irrigation purposes will then be made.

11.0 Groundwater Protection

The Sam Cooper Ranch lies in extreme southern Lea County, approximately 5.6 miles north-northwest of Jal, New Mexico. The area lies within both the Llano Estacado and the Permian Basin and is characterized by an arid climate. Topography is relatively flat and the surface is covered with scrub vegetation. Rainfall averages 12.5 inches per year. Regional drainage within the subject area is generally to the east at approximately 35 feet per mile. There are no perennial or intermittent streams or other surface bodies of water within a one-mile radius of the subject site, nor are there any groundwater discharge sites. A water well search was performed by Environmental Data Resources, Inc. (EDR). Results of the search indicated that a total of 6 water wells were located within a one-mile radius of the subject site. The clusters of wells (A1, A2, B3, B4, and B5 on the EDR map) are mis-located approximately 700 feet south of their actual location. Wells A1 and A2 are domestic supply wells for the Cooper Ranch house, while wells B3, B4, and B5 are situated within and slightly outside of the Jal-Cooper Cemetery, which is adjacent to and south of County Road 7. The wells are reportedly completed in the Ogallala formation and water level, as measured by Enercon, ranges between 133 and 177 feet below ground surface (bgs). Total dissolved solids in a water sample obtained from one of the Jal-Cooper Cemetery wells was 782 mg/l. Groundwater flow direction at the subject site, as determined by observing the surface gradient and by observing water levels in the wells plotted on the EDR report, appears to be to the east.

On-site soils consist of alluvial red beds from the surface to a depth of approximately 5 feet bgs. The red beds are underlain by caliche and discontinuous sand stringers from 5 feet bgs to approximately 130 feet bgs. The Ogallala, consisting of consolidated beach sand, is encountered at a depth of approximately 130 feet bgs and extends to 220-250 feet bgs.

The flooding potential for this site is low. Soil berms, at least two feet high and designed to contain a 100-year flood, will be constructed around the landfarm cells. In addition, diversion dams, approximately two feet high, will be constructed to divert surface runoff away from the containment berms. The sites will be inspected at least once per week and immediately after any significant rainfall or windstorm event. In the event of flooding or washout, the first step in cleaning up such an occurrence would be to notify the OCD pursuant to OCD Rule 116 or New Mexico Water Quality Control Commission regulation 1-203. Notification is to be made immediately upon discovery of the release.

12.0 Proof of Notification

Copies of notification letters are presented in Appendix C. These letters were mailed by Certified Mail on November 16, 1999. Copies of the signed receipts will be forwarded to OCD upon receipt by Equiva.

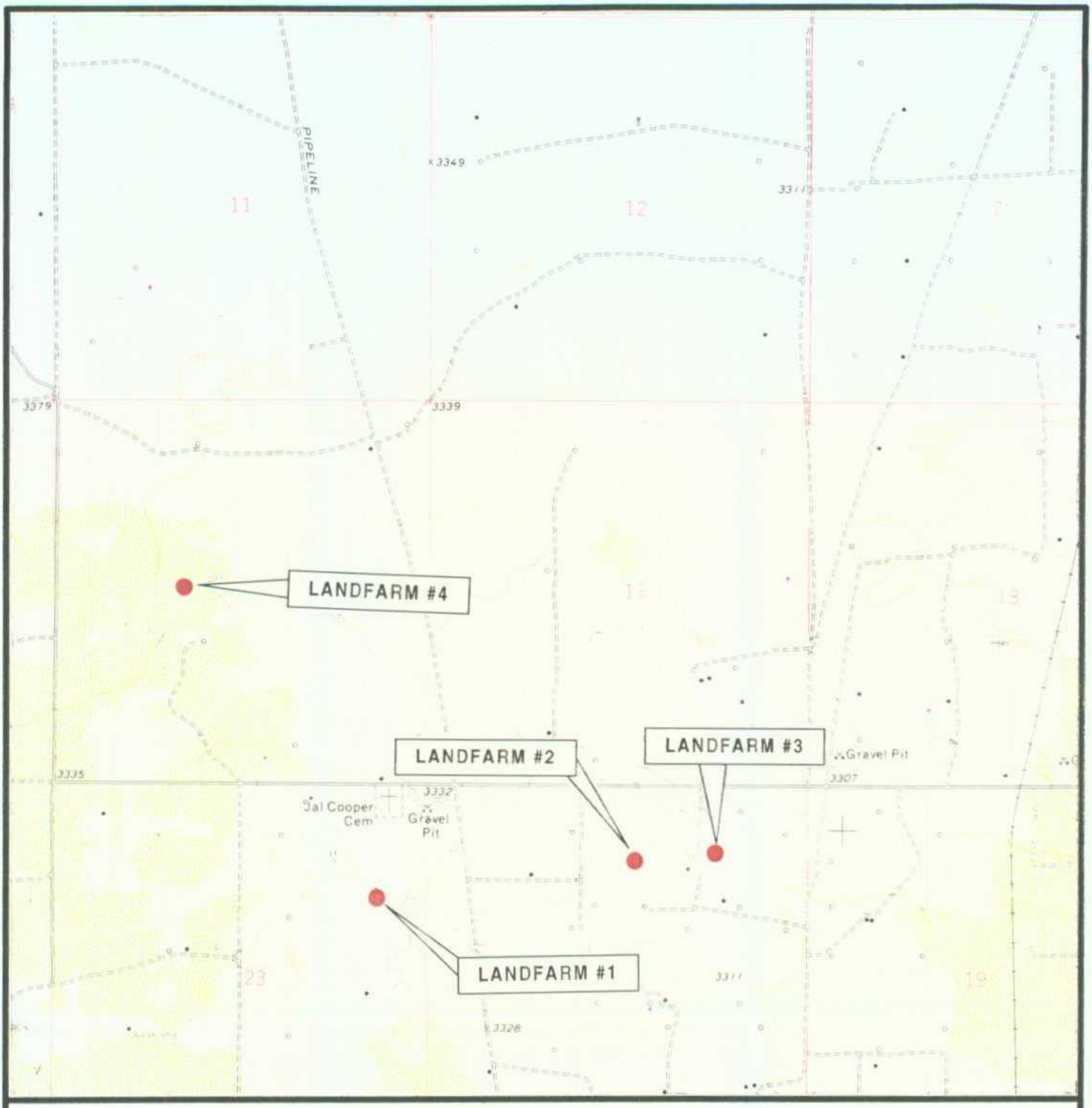
13.0 H_2S Contingency Plan

Since the proposed Surface Waste Management Facility is a landfarm, which is not expected to generate H_2S, the requirement for an H_2S Contingency Plan is not applicable.

14.0 Other Information to Demonstrate Compliance with OCD Rules, Regulations, and Orders

Not Applicable

APPENDIX A



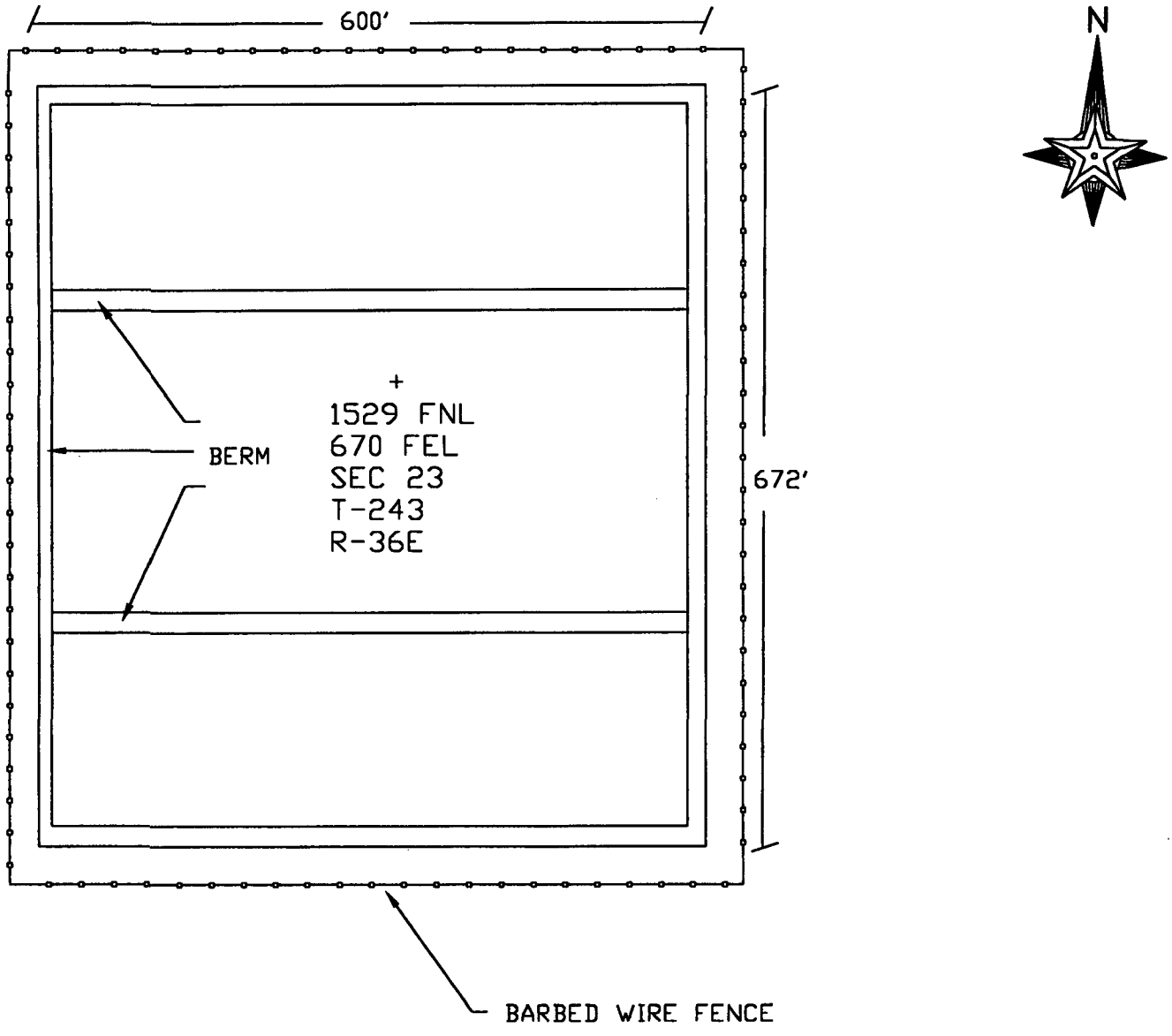
U.S.G.S. Topographic Map
Jal, NM Quandrangle
Photorevised 1979

N

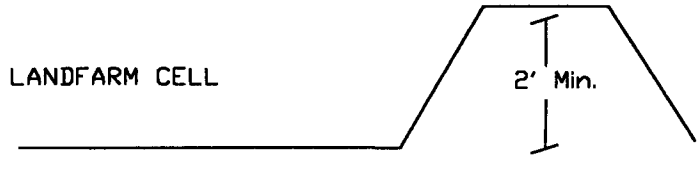
LANDFARM LOCATION MAP
Scale: 1" = 24,000'
Figure 1

EQUIVA SERVICES, INC.

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 120
DALLAS, TX 75234-7420
(972) 484-3854



BERM DIAGRAM



NOT TO SCALE

LANDFARM #1 DIAGRAM

NOVEMBER 16, 1999

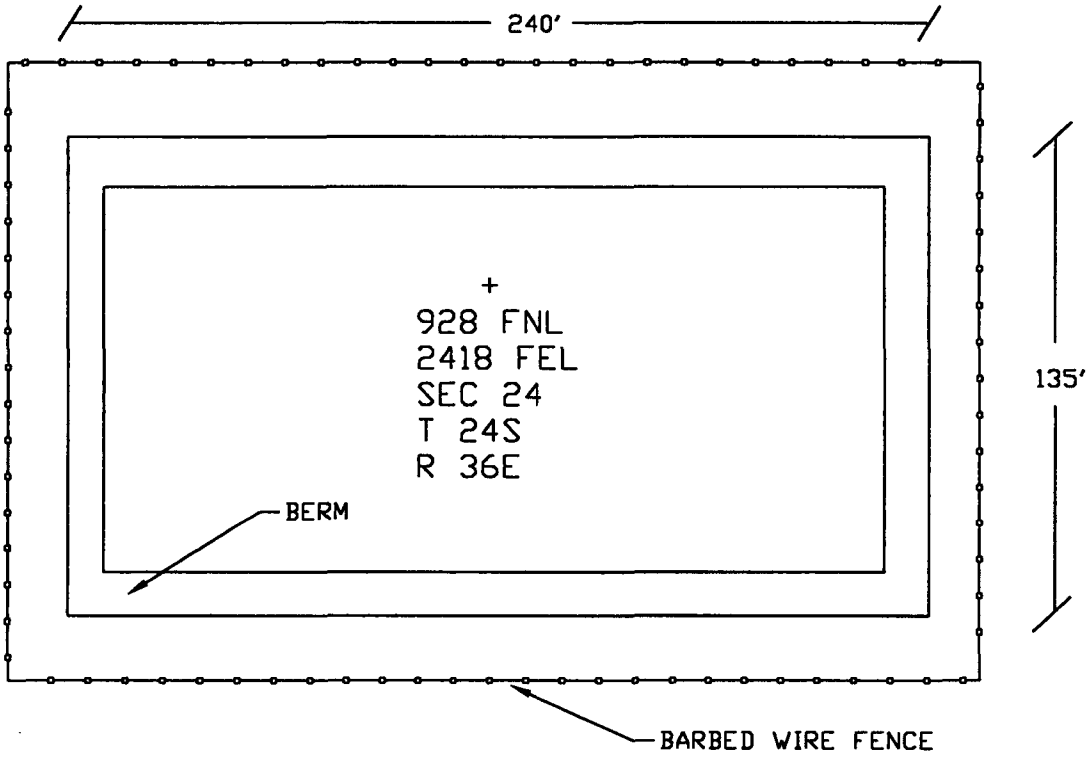
PREPARED FOR:
EQUIVA SERVICES, INC.

PREPARED BY:
ENERCON SERVICES, INC.
2775 VILLA CREEK, SUITE 120
DALLAS, TX 75234
972/484-3854

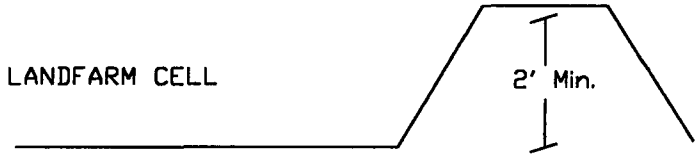
DRAWN BY: B. Mc

PROJECT NUMBER: ES-347

FIGURE 2

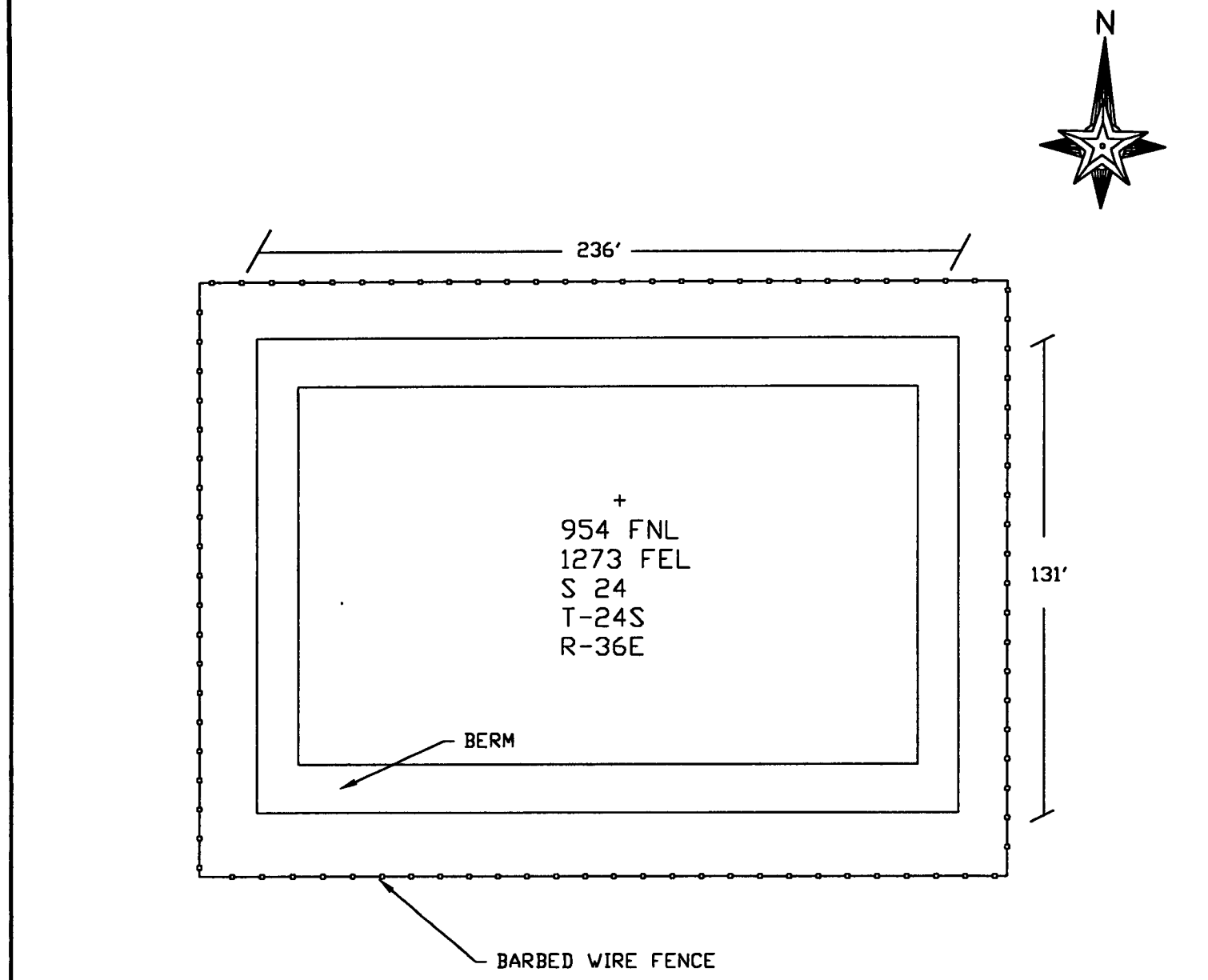


BERM DIAGRAM

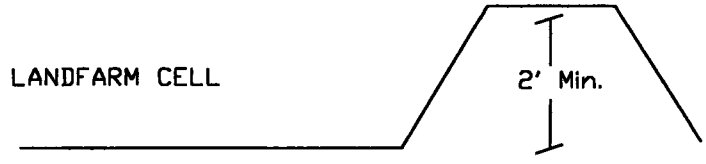


NOT TO SCALE

LANDFARM #2 DIAGRAM		NOVEMBER 16, 1999	
PREPARED FOR: EQUIVA SERVICES, INC.	PREPARED BY: ENERCON SERVICES, INC. 2775 VILLA CREEK, SUITE 120 DALLAS, TX 75234 972/484-3854	DRAWN BY: B. Mc PROJECT NUMBER: ES-347	FIGURE 3

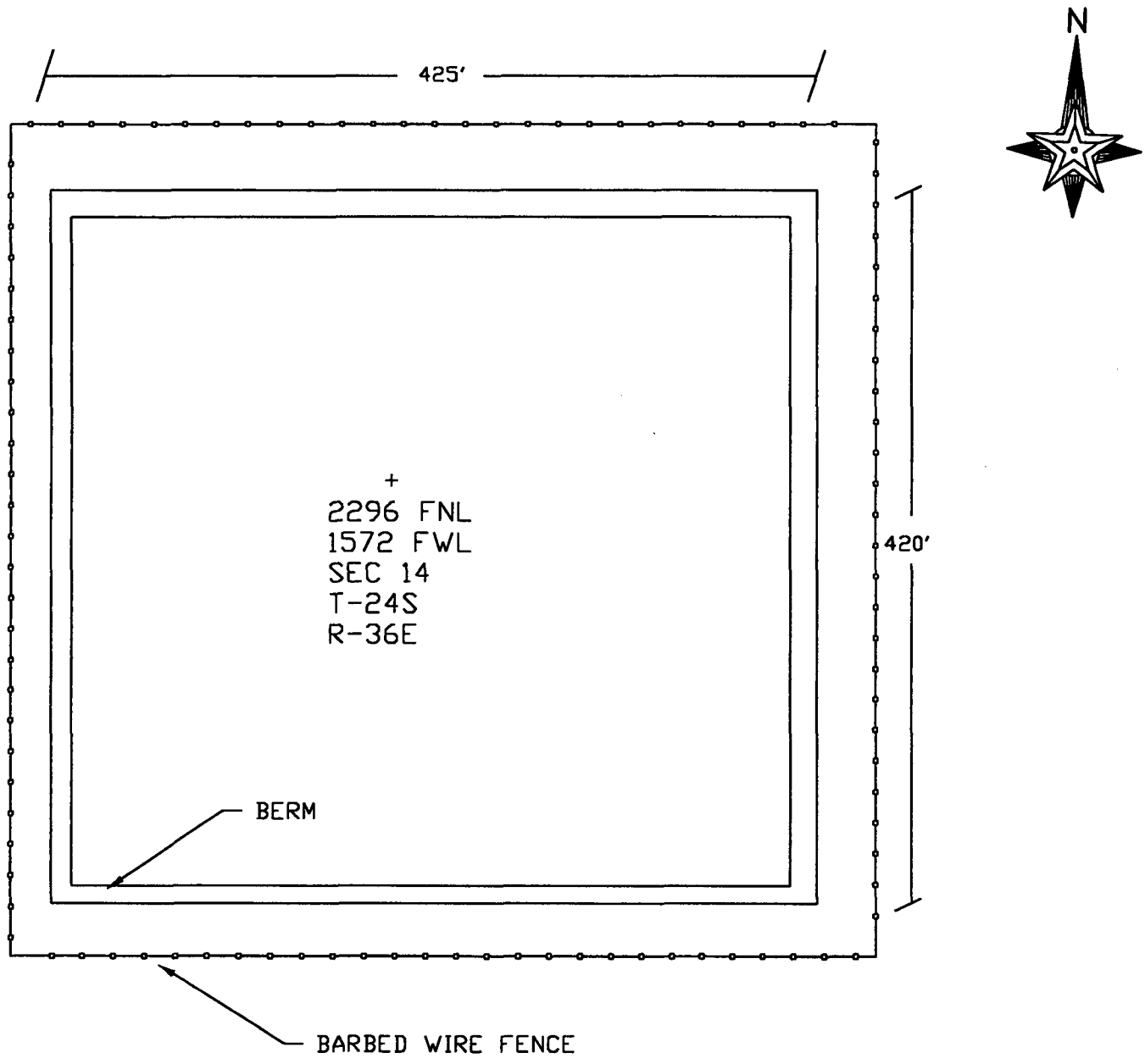


BERM DIAGRAM

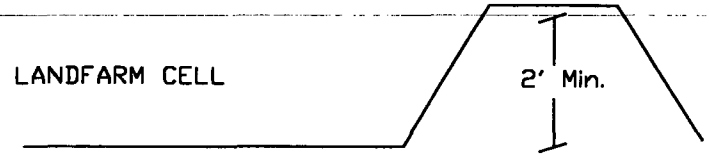


NOT TO SCALE

LANDFARM #3 DIAGRAM		NOVEMBER 16, 1999	
PREPARED FOR: EQUIVA SERVICES, INC.	PREPARED BY: ENERCON SERVICES, INC. 2775 VILLA CREEK, SUITE 120 DALLAS, TX 75234 972/484-3854	DRAWN BY: B. Mc	FIGURE 4
		PROJECT NUMBER: ES-347	



BERM DIAGRAM



NOT TO SCALE

LANDFARM #4 DIAGRAM		NOVEMBER 16, 1999	
PREPARED FOR: EQUIVA SERVICES, INC.	PREPARED BY: ENERCON SERVICES, INC. 2775 VILLA CREEK, SUITE 120 DALLAS, TX 75234 972/484-3854	DRAWN BY: B. Mc PROJECT NUMBER: ES-347	FIGURE 5

APPENDIX B

The EDR-GeoCheck® Report

Jal Cooper Ranch
Lea County
Jal, NM 88252

Inquiry Number: 427872.1s

November 01, 1999

Environmental Data Resources, Inc.
an edr company

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

THE EDR GEOCHECK™ REPORT

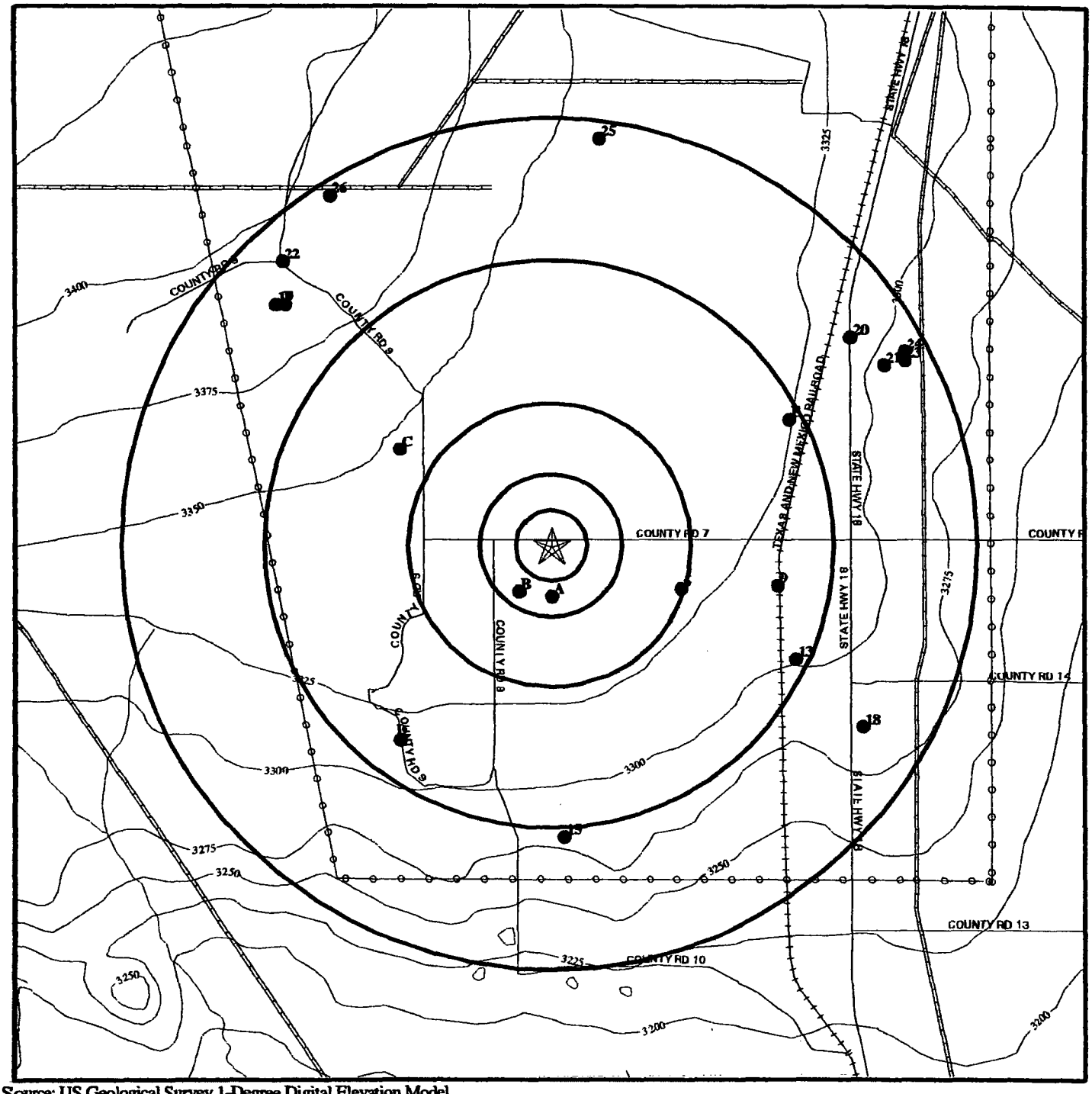
The EDR GeoCheck™ Report is a screening tool designed to assist in the hydrogeological assessment of a particular geographic area based upon publicly available information.

The EDR GeoCheck™ Report consists of the following information within a customer specified radius of the target property.

- topography (25 foot intervals unless otherwise shown)
- major roads
- surface water bodies
- railroad tracks
- flood plains (available in selected counties)
- wetlands (available in selected counties)
- wells including depth to water table and water level variability (in federal and selected state databases)
- public water supply wells (including violations information)
- geologic data
- radon data.

The EDR GeoCheck™ Report is a general area study. It may or may not be accurate at any specific location.

TOPOGRAPHIC MAP –427872.1s –'Enercon Services, Inc.'



Source: US Geological Survey 1-Degree Digital Elevation Model
Compiled 09/15/92

0 1/2 1 2
scale in miles

–Major Roads
–Contour lines (25 foot interval unless otherwise shown)
–Waterways
–Wells within search distance to Target Property
–Earthquake Epicenters (Richter 5 or greater)
–Power lines
–Pipe lines
–Fault lines
–Water

N

TARGET PROPERTY:	Jal Cooper Ranch	CUSTOMER:	Enercon Services, Inc.
ADDRESS:	Lea County	CONTACT:	Randall Lantz
CITY/STATE/ZIP:	Jal NM 88252	INQUIRY #:	427872.1s
LAT/LONG:	32.2094 / 103.2286	DATE:	November 01, 1999

WELL SEARCH SUMMARY

GEOLOGIC AGE IDENTIFICATION†

Geologic Code:	Tpc
Era:	Cenozoic
System:	Tertiary
Series:	Pliocene

ROCK STRATIGRAPHIC UNIT†

Category:	Continental Deposits

SEARCH DISTANCE RADIUS INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal Database	3.000
State Database	3.000
PWS Database	3.000

FEDERAL DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A1	321215103134301	1/4 - 1/2 Mile South
A2	321215103134302	1/4 - 1/2 Mile South
B3	321217103135701	1/4 - 1/2 Mile SW
B4	321216103135602	1/4 - 1/2 Mile SW
B5	321216103135601	1/4 - 1/2 Mile SW
6	321218103124601	1/2 - 1 Mile ESE
C7	321309103144801	1 - 2 Miles WNW
C8	321308103145101	1 - 2 Miles WNW
9	321219103120401	1 - 2 Miles East
D11	321123103145101	1 - 2 Miles SW
D10	321122103144801	1 - 2 Miles SW
E12	321320103115901	1 - 2 Miles ENE
E14	321319103115701	1 - 2 Miles ENE
13	321152103115601	1 - 2 Miles ESE
15	321046103133801	>2 Miles South
F17	321402103153901	>2 Miles NW
F16	321402103153701	>2 Miles NW
18	321127103112801	>2 Miles ESE
19	321402103154101	>2 Miles NW
20	321350103113301	>2 Miles NE
21	321340103111901	>2 Miles ENE
22	321418103153801	>2 Miles NW
23	321342103111001	>2 Miles ENE
24	321345103111001	>2 Miles ENE
25	321503103132201	>2 Miles North
26	321442103151801	>2 Miles NNW

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
NO WELLS FOUND		

† Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

WELL SEARCH FINDINGS

Map ID
Direction
Distance

A1
South
1/4 - 1/2 Mile

Site ID:	321215103134301	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3346.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	149.12 ft.	Water Level:	146.74 ft.
Date Measured:	03/06/53	Date Measured:	12/02/70

A2
South
1/4 - 1/2 Mile

Site ID:	321215103134302	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3346.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	155.00 ft.	Water Level:	146.11 ft.	Water Level:	146.17 ft.	Water Level:	146.66 ft.
Date Measured:	10/14/65	Date Measured:	03/26/68	Date Measured:	12/02/70	Date Measured:	01/14/76

B3
SW
1/4 - 1/2 Mile

Site ID:	321217103135701	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3346.20 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	142.26 ft.
Date Measured:	01/14/76

WELL SEARCH FINDINGS

Map ID
Direction
Distance

B4
SW
1/4 - 1/2 Mile

Site ID:	321216103135602	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3348.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	143.17 ft.	Water Level:	143.71 ft.
Date Measured:	12/02/70	Date Measured:	01/14/76

B5
SW
1/4 - 1/2 Mile

Site ID:	321216103135601	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3348.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	141.38 ft.	Water Level:	141.62 ft.	Water Level:	142.25 ft.
Date Measured:	04/03/68	Date Measured:	12/02/70	Date Measured:	01/14/76

6
ESE
1/2 - 1 Mile

Site ID:	321218103124601	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3320.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	134.38 ft.	Water Level:	133.90 ft.	Water Level:	133.19 ft.
Date Measured:	03/26/68	Date Measured:	12/02/70	Date Measured:	01/14/76

WELL SEARCH FINDINGS

Map ID
Direction
Distance

C7
WNW
1 - 2 Miles

Site ID:	321309103144801	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3383.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level: 178.27 ft.
Date Measured: 01/14/76

C8
WNW
1 - 2 Miles

Site ID:	321308103145101	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3393.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	176.61 ft.	Water Level:	176.23 ft.	Water Level:	177.15 ft.	Water Level:	178.19 ft.
Date Measured:	10/19/65	Date Measured:	03/26/68	Date Measured:	12/01/70	Date Measured:	01/14/76

9
East
1 - 2 Miles

Site ID:	321219103120401	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3302.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	125.92 ft.	Water Level:	125.92 ft.	Water Level:	125.98 ft.
Date Measured:	02/27/68	Date Measured:	12/02/70	Date Measured:	01/20/76

APPENDIX C

T24S, R36E

T24S, R37E

Whitten/Lea Ltd

Jimmy Joe Doom

Deep Wells Ranch Inc

William J. Grobe & Elena Bell Grobe Trust

George W. Poage III 100ac.

1006.2'

Texas-New Mexico Railroad 200' R/W 100' each side

466.8'

Buri Alexander

376.4'

420'

300'

420'

Transwestern Pipeline Co.

460'

466.8'

373.2'

C. A. & Jal

Fred B. Cooper Ranch

Ludean E. Cantrell

Ludean E. Cantrell

Ronald M Harrison & Henry H. Harrison Jr.

Jal Public Library Fund

Ludean

J.T. Crawford

Jal Library Trust

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 252

Henry H. Harrison, Jr. &
Ronald M. Harrison
1700 N. Big Spring Street
Midland, TX 79701

RE: Landfarm Permitting

Dear Sirs:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

FOR Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 253

Elena Bell Grobe &
William Jarvis Grobe Trust
Drawer G
Jal, NM 88252

RE: Landfarm Permitting

Dear Ms. Grobe:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

FOR Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999

Certified Mail No. Z 165 512 254

George W. Poage III
P.O. Box 106
Rankin, TX 79778

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 176

Whitten/Lea Ltd.
Real Estate Tax Service
P.O. Box 771
Abilene, TX 79604

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

Don R. Parsons, Jr.

FOR Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 177

City of Jal
Jal, NM 88252

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999

Certified Mail No. Z 165 512 178

Texas-New Mexico Railroad
Real Estate Tax Services
P.O. Box 202378
Austin, TX 78720

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 179

Ludean E. Cantrell
c/o C. Pruett
4501 N. Central Road
Bethany, OK 73088

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 186 741 142

Mr. Sam Cooper
Rural Route 1
Box 141
Blossom, Texas 75416

RE: Landfarm Permitting

Dear Mr. Cooper:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

Don R. Parsons, Jr.

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

ENERCON SERVICES, INC.
An Employee Owned Company

2775 Villa Creek, Suite 120
Dallas, TX 75234
(972) 484-3854
Fax: (972) 484-8835

April 3, 2000

Ms. Martyne Kieling
Environmental Geologist
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

RE: Equiva Services, LLC
Landfarm Permit Application
Sam Cooper Ranch
Lea County, New Mexico

Dear Ms, Kieling:

In accordance with your directives as expressed in your March 9, 2000 letter to Kyle Landreneau of Equilon Enterprises, LLC, Enercon Services has placed a public notice statement for publication in both the Lovington Daily Leader and the Santa Fe New Mexican. The original affidavit of publication from the Santa Fe New Mexican has already been forwarded to you, and the affidavit from the Lovington Daily Leader is attached.

Thank you for your assistance with this project. If you have any questions or comments, please call kyle Landreneau at (281) 252-6914.

Sincerely yours,
ENERCON SERVICES, INC.

Don R. Parsons, Jr., C.P.G.
Senior Project Manager

Cc: Kyle Landreneau – Equilon Enterprises, LLC
Donna Williams – New Mexico OCD, Hobbs Office

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 246

Transwestern Pipeline Co.
Property Tax Department
P.O. Box 1188
Houston, Texas 77251

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

Don R. Parsons, Jr.

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 247

Jal Public Library Fund
C.D. Woolworth Trust
P.O. Box 178
Jal, NM 88252

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

Don R. Parsons, Jr.

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 248

Jimmy Joe Doom
Star Route
Jal, NM 88252

RE: Landfarm Permitting

Dear Mr. Doom:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 249

J.T. Crawford
Drawer T
Jal, NM 88252

RE: Landfarm Permitting

Dear Mr. Crawford:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999

Certified Mail No. Z 165 512 250

Burl H. Alexander
Box 913
Jal, NM 88252

RE: Landfarm Permitting

Dear Mr. Alexander:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

FOR Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999

Certified Mail No. Z 165 512 251

Deep Wells Ranch, Inc.
Combest Ranch
Star Route
Jal, NM 88252

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

Affidavit of Publication

STATE OF NEW MEXICO)
) ss.
COUNTY OF LEA)

Joyce Clemens being first duly sworn on oath deposes and says that she is Advertisting Director of **THE LOVINGTON DAILY LEADER**, a daily newspaper of general paid circulation published in the English language at Lovington, Lea County, New Mexico; that said newspaper has been so published in such county continuously and uninterruptedly for a period in excess of Twenty-six (26) consecutive weeks next prior to the first publication of the notice hereto attached as hereinafter shown; and that said newspaper is in all things duly qualified to publish legal notices within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico.

That the notice which is hereto attached, entitled

Notice of Publication Equilon Enterprises

was published in a regular and entire issue of **THE LOVINGTON DAILY LEADER** and not in any supplement thereof, for One(1) Day, beginning with the issue of March 16, 2000 and ending with the issue of March 16, 2000.

And that the cost of publishing said notice is the sum of $ 50.90 which sum has been (Paid) as Court Costs.

Joyce Clemens

Subscribed and sworn to before me this March 16, 2000

Debbie Schilling

Debbie Schilling
Notary Public, Lea County, New Mexico
My Commission Expires June 22, 2002

LEGAL NOTICE
NOTICE OF PUBLICATION

Notice is hereby given that pursuant to the New Mexico Oil Conservation Division Regulations, the following application has been submitted to the Director of the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

Equilon Enterprises L.L.C., Operator, Kyle Landreneau, 28510C Tomball Parkway PMB Suite 406, Tomball, Texas, 77375, has submitted for approval an application to construct and operate four (4) Rule 711 centralized landfarm soils remediation facilities located in the;

1. SE/4 NE/4 Section 23, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico.

2. NW/4 NE/4 Section 24, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico.

3. NE/4 NE/4 of Section 24, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico.

4. SE/4 NW/4 Section 14, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico.

Hydrocarbon contaminated soils associated with oil and gas production operations will be remediated by spreading them on the ground surface in 6 inch lifts or less and periodically disking them to enhance biodegradation of contaminants. Ground water most likely to be affected by any accidental discharges at the surface is at a depth of approximately 133 feet to 177 feet with total dissolved solids concentration of approximately 782 parts per million. The facilities are underlain by Quaternary alluvium and the Ogallala Formation. The permit application addresses the construction, operations, spill/leak prevention and monitoring procedures to be incorporated at the proposed site.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The application may be viewed at the above address or at the Hobbs district office at 1625 N. French Drive, Hobbs, New Mexico between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed application, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

Published in the Lovington Daily Leader March 16, 2000.

ENERCON SERVICES, INC.
An Employee Owned Company

2775 Villa Creek, Suite 120
Dallas, TX 75234
(972) 484-3854
Fax: (972) 484-8835

March 27, 2000

Ms. Martyne J. Kieling
Environmental Geologist
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

RE: Equiva Services, LLC
Landfarm Permit Application
Sam Cooper Ranch
Lea County, New Mexico

Dear Ms. Kieling:

In accordance with your directives as expressed in your March 9, 2000 letter to Kyle Landreneau of Equilon Enterprises, LLC, Enercon Services has placed a public notice statement for publication in both the Lovington Daily Leader and the Santa Fe New Mexican newspapers. Attached you will find the original certified affidavit of publication from the Santa Fe New Mexican. A copy of this affidavit is also being sent to the NMOCD district office in Hobbs, New Mexico. We will forward original and copies of the affidavit from the Lovington Daily Leader as soon as we receive them.

Also attached, per your directive, is a copy of the notice of permit application, which was sent to the Lea County Commission, as well as a copy of the signed return receipt.

Thank you for your assistance with this project. If you have any questions or comments, please call Kyle Landreneau at (281) 252-6914.

Sincerely yours,
Enercon Services, Inc.

Don R. Parsons, Jr., C.P.G.
Senior Project Manager

Cc: Kyle Landreneau – Equilon Enterprises, LLC.
Donna Williams – New Mexico OCD, Hobbs office

The Santa Fe New Mexican

Since 1849. We Read You.

ENERCON SERVICES INC.
ATTN: DON PARSONS, JR.
2775 VILLA CREEK STE. 120
DALLAS, TX 75234

AD NUMBER: 138595 ACCOUNT: 01001
LEGAL NO: 67076 P.O.#:
166 LINES 1 time(s) at $ 108.11
AFFIDAVITS: 10.50
TAX: 7.41
TOTAL: 126.02

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO
COUNTY OF SANTA FE
I, B Peiner being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily newspaper published in the English language, and having a general circulation in the Counties of Santa Fe and Los Alamos, State of New Mexico and being a Newspaper duly qualified to publish legal notices and advertisements under the provisions of Chapter 167 on Session Laws of 1937; that the publication #67076 a copy of which is hereto attached was published in said newspaper 1 day(s) between 03/22/2000 and 03/22/2000 and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 22 day of March, 2000 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

/S/ Betsy Peiner
LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 21 day of March A.D., 2000

Notary Candace R. Dunton

Commission Expires 11/16/2003

NOTICE OF PUBLICATION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following application has been submitted to the Director of the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

Equilon Enterprises L.L.C., Operator, Kyle Landreneau, 28510C Tomball Parkway PMB Suite 406, Tomball, Texas, 77375, has submitted for approval an application to construct and operate four (4) Rule 711 centralized landfarm soils remediation facilities located in the;

1. SE/4 NE/4 Section 23, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico
2. NW/4 NE/4 Section 24, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico
3. NE/4 NE/4 Section 24, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico
4. SE/4 NW/4 Section 14, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico

Hydrocarbon contaminated soils associated with oil and gas production operations will be remediated by spreading them on the ground surface in 6 inch lifts or less and periodically disking them to enhance biodegradation of contaminants. Ground water most likely to be affected by any accidental discharges at the surface is at a depth of approximately 133 feet to 177 feet with total dissolved solids concentration of approximately 782 parts per million. The facilities are underlain by Quaternary alluvium and the Ogallala Formation. The permit application addresses the construction, operations, spill/leak prevention and monitoring procedures to be incorporated at the proposed site.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The application may be viewed at the above address or at the Hobbs district office at 1625 N. French Drive, Hobbs, New Mexico between 8:00 a.m. and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed application, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted and a public hearing may be requested by any interested person. Requests for a public hearing shall set forth the reasons why a hearing should be held. A hearing will be held if the director determines there is significant public interest.
Legal #67076
Pub. March 22, 2000

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

March 16, 2000

Mr. Dennis Holmberg
County Manager
Lea County Courthouse
100 N. Main St., Suite 4
Lovington, New Mexico 88260

CERTIFIED MAIL
Z 186 740 884

RE: Landfarm Permitting

Dear Mr. Holmberg:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) – 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) – 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL, 1273 FEL, Section 24, Township 24S, Range 36 E
Landfarm #4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

In accordance with state regulations, this letter will serve as notification to the Lea County Commission of the proposed construction of the above described landfarms. If you have any questions about the permitting process, please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
EQUIVA SERVICES LLC

For Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of Shell Oil Company, Star Enterprise, and Texaco Inc."

cc: Don R. Parsons, Jr. – Enercon Services, Inc.

28510C Tomball Parkway PMB Suite 406, Tomball TX 77375
Phone 281-252-6914 Facsimile 281-252-6917

SENDER: *COMPLETE THIS SECTION*

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Dennis Holmberg
County Manager
Lea County Courthouse
100 N. Main St. Suite 4
Lovington, NM. 88260

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)*: Andrea Martinez

B. Date of Delivery: 3-20-2000

C. Signature: x Andrea Martinez ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☑ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)*
7 1486 740 884

PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

Kieling, Martyne

From: Williams, Donna
Sent: Friday, March 10, 2000 2:16 PM
To: Anderson, Roger
Cc: Olson, William; Price, Wayne; Kieling, Martyne; Williams, Chris
Subject: Equiva

Roger and others,

I need all of your input on this one. Remember Equiva (former Shell) the Sam Coopers clean up project they are doing? Well all of the sight appear to be ok except for sites 10 & 11 the levels are higher than the 1000 ppm they were suppose to reach. The levels are from 325 to 4100 ppm that is at 17 feet bgs. They are wanting to risk this out. The levels have decreased, but the company wants to just risk out the rest.

Now – the facts: the depth to groundwater is over 140 feet.
Also there is a windmill that is approximately 800 feet west of these sites.
The windmill is used for the cemetary. It doesn't appear to be used for any kind of domestic use.

My gut feeling is: I don't see a problem with allowing this. Knowing the area. and the depth to ground water. I don't feel it is a threat to anyone-the environment-that I can see. So I don't have a problem letting them close this at these levels.

Now I need your feedback.
Thank you
Donna

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

March 9, 2000

CERTIFIED MAIL
RETURN RECEIPT NO. Z-559-573-280

Mr. Kyle Landreneau
Equilon Enterprises L.L.C.
28510C Tomball Parkway PMB Suite 406
Tomball, Texas, 77375

RE: Public Notice for Equilon Enterprises L.L.C., 711 Surface Waste Management Facilities
SE/4 NE/4 Section 23, Township 24 South, Range 36 East;
NW/4 NE/4 Section 24, Township 24 South, Range 36 East;
NE/4 NE/4 Section 24, Township 24 South, Range 36 East; and
SE/4 NW/4 Section 14, Township 24 South, Range 36 East,
N.M.P.M., Lea County, New Mexico

Dear Mr. Landreneau:

The New Mexico Oil Conservation Division (OCD), has received the Equilon Enterprises L.L.C. (Equilon) application for the 711 surface waste management facilities dated November 17, 1999. The application proposes the construction of four (4) 711 landfarm facilities. The facilities are to be located at the above referenced locations.

Based on the information provided with the application Form C-137 and additional information dated December 22, 1999, and March 3, 2000, the OCD has prepared a public notice statement that Equilon must published in the Lovington Daily Leader and in the Santa Fe New Mexican newspapers. Equilon must send the original certified affidavit of publication from both the Lovington Daily Leader and the Santa Fe New Mexican to the OCD Santa Fe office and a copy to the appropriate District office.

In addition, Equilon must give written notice to all surface owners of record within one mile of the proposed facility and to the county commission that the proposed facility is to be located. The OCD has received proof of such notice to the surface owners of record. However, the OCD still requires proof of notice to the county commission.

If you have any questions please do not hesitate to contact me at (505) 827-7153.

Sincerely,

Martyne J. Kieling
Environmental Geologist

Attachments
xc: Hobbs OCD Office
Don R. Parsons, Enercon Services, Inc.

NOTICE OF PUBLICATION

Notice is hereby given that pursuant to the New Mexico Oil Conservation Division Regulations, the following application has been submitted to the Director of the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

Equilon Enterprises L.L.C., Operator, Kyle Landreneau, 28510C Tomball Parkway PMB Suite 406, Tomball, Texas, 77375, has submitted for approval an application to construct and operate four (4) Rule 711 centralized landfarm soils remediation facilities located in the;

1. **SE/4 NE/4 Section 23, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico**
2. **NW/4 NE/4 Section 24, Township 24 South, Range 36 East,N.M.P.M., Lea County, New Mexico**
3. **NE/4 NE/4 Section 24, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico**
4. **SE/4 NW/4 Section 14, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico**

Hydrocarbon contaminated soils associated with oil and gas production operations will be remediated by spreading them on the ground surface in 6 inch lifts or less and periodically disking them to enhance biodegradation of contaminants. Ground water most likely to be affected by any accidental discharges at the surface is at a depth of approximately 133 feet to 177 feet with total dissolved solids concentration of approximately 782 parts per million. The facilities are underlain by Quaternary alluvium and the Ogallala Formation. The permit application addresses the construction, operations, spill/leak prevention and monitoring procedures to be incorporated at the proposed site.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The application may be viewed at the above address or at or at the Hobbs district office at 1625 N. French Drive, Hobbs, New Mexico between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed application, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

ENERCON SERVICES, INC.
An Employee Owned Company

2775 Villa Creek, Suite 120
Dallas, TX 75234
(972) 484-3854
Fax: (972) 484-8835

March 3, 2000

Ms. Martyne Kieling
Environmental Geologist
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

RE: Proof of Notification
Equiva Services, LLC
Landfarm Oermit Application
Sam Cooper Ranch
Lea County, New Mexico

Dear Ms. Kieling:

Attached you will find a copy of the Return Receipt from the notification letter mailed to the Elena Bell Grobe & William Jarvis Grobe Trust on November 15, 1999. The notification letter was sent to the Trust in accordance with NMOCD regulations pertaining to landfarm permit applications.

On December 22, 1999, Enercon mailed to your office copies of Return Receipts from letters sent to the remaining adjacent landowners. The receipt from the Elena Bell Grobe & William Jarvis Grobe Trust completes to notification process.

Enercon Services, Inc., on behalf of Equiva Services, LLC, thanks you for your assistance and cooperation during this permitting process. If you have any questions, please do not hesitate to call Mr. Kyle Landreneau at (281) 252-6914.

Sincerely yours,
ENERCON SERVICES, INC.

Don R. Parsons, Jr., C.P.G.
Senior Project Manager

Cc: Kyle Landreneau – Equiva Services LLC

MAILING OFFICE: Postmark if Return Receipt was paid for at time of mailing.

LEWISVILLE, TX FEB 17 2000 USPS

Attach fee as shown in DMM if return receipt was not paid for at time of mailing.

CUSTOMER: Complete unshaded area (items 1-6) and enter your name and address on the reverse.

- ☐ 1. Return receipt **WAS NOT** paid for at time of mailing.
- ☒ 2a. Return receipt **WAS** paid for at time of mailing.
- ☐ 2b. Return receipt showing addressee's address **WAS** paid for at time of mailing.

3. Article Addressed To:

Elena Bell Grobe +
William Jarvis Grobe Trust
Drawer G
JAL, NM 88252

4. Article Number
Z 165 512 253

5. Mailing Date
11-16-99

6. Type of Service
☐ COD ☒ Certified ☐ Numbered Insured ☐ Return Receipt for Merchandise ☐ Express Mail ☐ Registered

7. Delivery Office Postmark

8. Delivered to the following individual, company, or organization:
E Grobe

9. Delivery Date
11-22-99

11. Postal Records Show:
☒ Delivery was made
☐ Delivery was not made

12. Clerk's Initials
BH

(After Mailing)

CAMPBELL, CARR, BERGE
& SHERIDAN, P.A.
LAWYERS

MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN
MICHAEL H. FELDEWERT
PAUL R. OWEN
ANTHONY F. MEDEIROS

JACK M. CAMPBELL
1916-1999

110 JEFFERSON PLACE, SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
FACSIMILE: (505) 983-6043
E-MAIL: law@westofpecos.com

March 3, 2000

Ms. Martyne Kieling
New Mexico Oil Conservation Division
2040 South Pacheco
Santa Fe, New Mexico 87504

Re: Rule 711 applications

Dear Ms. Kieling,

I understand from our recent telephone conversation that the notice of Lea Land's application for a Rule 711 permit and the notice of Equilon Enterprises to operate four Rule 711 landfarms posted with the March 2, 2000, docket sheet did not trigger the 30-day comment period. I also understand that you will contact this office when notices are issued for these applications which trigger the 30-day comment period.

If I have misunderstood our recent conversation, please let me know immediately. Thank you for your time and effort.

Sincerely,

Michael H. Feldewert

MHF/ras

cc. Ken Marsh, Controlled Recovery, Inc.

Returned 3-9-00

Kieling, Martyne

From: Kieling, Martyne
Sent: Monday, February 07, 2000 11:12 AM
To: Martinez, Sally
Cc: Davidson, Florene
Subject: Notices

Sally:

This is for your next Docket Mail-out. I gave Florene two hard copy 711 Notices. One is for Lea Land Inc. the other is for Equilon Enterprises L.L.C. I am attaching the notices here for your other mail outs (E-Mail).


Lealand.wpd


Equilon.wpd

Thanks
Martyne

NOTICE

Notice is hereby given that pursuant to the New Mexico Oil Conservation Division Regulations, the following application has been submitted to the Director of the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

Equilon Enterprises L.L.C., Operator, Kyle Landreneau, 28510C Tomball Parkway PMB Suite 406, Tomball, Texas, 77375, has submitted for approval an application to construct and operate four (4) Rule 711 centralized landfarm soils remediation facilities located in the;

1. **SE/4 NE/4 Section 23, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico**
2. **NW/4 NE/4 Section 24, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico**
3. **NE/4 NE/4 Section 24, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico**
4. **SE/4 NW/4 Section 14, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico**

Hydrocarbon contaminated soils associated with oil and gas production operations will be remediated by spreading them on the ground surface in 6 inch lifts or less and periodically disking them to enhance biodegradation of contaminants. The permit application addresses the construction, operations, spill/leak prevention and monitoring procedures to be incorporated at the proposed site.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The application may be viewed at the above address or at or at the Hobbs district office at 1625 N. French Drive, Hobbs, New Mexico between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed application, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

NOTICE

Notice is hereby given that pursuant to the New Mexico Oil Conservation Division Regulations, the following application has been submitted to the Director of the Oil Conservation Division, 2040 S. Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

Equilon Enterprises L.L.C., Operator, Kyle Landreneau, 28510C Tomball Parkway PMB Suite 406, Tomball, Texas, 77375, has submitted for approval an application to construct and operate four (4) Rule 711 centralized landfarm soils remediation facilities located in the;

1. **SE/4 NE/4 Section 23, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico**
2. **NW/4 NE/4 Section 24, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico**
3. **NE/4 NE/4 Section 24, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico**
4. **SE/4 NW/4 Section 14, Township 24 South, Range 36 East, N.M.P.M., Lea County, New Mexico**

Hydrocarbon contaminated soils associated with oil and gas production operations will be remediated by spreading them on the ground surface in 6 inch lifts or less and periodically disking them to enhance biodegradation of contaminants. The permit application addresses the construction, operations, spill/leak prevention and monitoring procedures to be incorporated at the proposed site.

Any interested person may obtain further information from the Oil Conservation Division and may submit written comments to the Director of the Oil Conservation Division at the address given above. The application may be viewed at the above address or at or at the Hobbs district office at 1625 N. French Drive, Hobbs, New Mexico between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed application, the Director of the Oil Conservation Division shall allow at least thirty (30) days after the date of publication of this notice during which comments may be submitted and public hearing may be requested by any interested person. Request for public hearing shall set forth the reasons why a hearing shall be held. A hearing will be held if the director determines that there is significant public interest.

ENERCON SERVICES, INC.
An Employee Owned Company

2775 Villa Creek, Suite 120
Dallas, TX 75234
(972) 484-3854
Fax: (972) 484-8835

December 22, 1999

Ms. Martyne J. Kieling
Environmental Geologist
New Mexico Oil Conservation Division
2040 S. Pacheco
Santa Fe, New Mexico 87505

RE: Proof of Notification
Equiva Services LLC
Landfarm Permit Application
Sam Cooper Ranch
Lea County, New Mexico

Dear Ms. Kieling:

Attached you will find copies of Return Receipts from notification letters mailed to adjacent property owners on November 15, 1999. The notification letters were sent to these individuals in accordance with NMOCD regulations pertaining to landfarm permit applications.

As of this date, we have received Return Receipts for all notification letters with the exception of the letter mailed to the Elena Bell Grobe & William Jarvis Grobe Trust. We are in the process of tracking this letter through the U.S. Postal Service to determine its status. When the status of this letter is determined we will, of course, notify you.

Enercon Services, Inc., on behalf of Equiva Services LLC, thanks you for your assistance and cooperation during this permitting process. If you have any questions, please do not hesitate to contact Mr. Kyle Landreneau at (281)252-6914.

Sincerely yours,
ENERCON SERVICES, INC.

Don R. Parsons, Jr., C.P.G.
Senior Project Manager

Cc: Kyle Landreneau – Equiva Services LLC

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Sam Cooper
Rural Route 1
Box 141
Big Spring, TX
79416

2. Article Number (Copy from service label) Z 165 512 249

3. Service Type: ☒ Certified Mail ☐ Express Mail ☐ Registered ☐ Return Receipt for Merchandise ☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? (Extra Fee) ☐ Yes

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly): Sam Cooper

B. Date of Delivery: 11-23-99

C. Signature: X [signature] ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

SENDER:

- ☐ Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b.
- ☐ Print your name and address on the reverse of this form so that we can return this card to you.
- ☐ Attach this form to the front of the mailpiece, or on the back if space does not permit.
- ☐ Write *"Return Receipt Requested"* on the mailpiece below the article number.
- ☐ The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

3. Article Addressed to:

Burl H. Alexander
Box 913
Jal, NM 88252

4a. Article Number: Z 165 512 250

4b. Service Type: ☐ Registered ☒ Certified ☐ Express Mail ☐ Insured ☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 11-19-99

8. Addressee's Address (Only if requested and fee is paid)

5. Received By: (Print Name)

6. Signature: (Addressee or Agent)

Is your RETURN ADDRESS completed on the reverse side?

PS Form 3811, December 1994 102595-99-B-0223 Domestic Return Receipt

---

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery
Consult postmaster for fee.

3. Article Addressed to:

J. T. Crawford
Drawer T
Jal, NM 88252

4a. Article Number: Z 165 512 249

4b. Service Type: ☐ Registered ☒ Certified ☐ Express Mail ☐ Insured ☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 11-24-99

8. Addressee's Address (Only if requested and fee is paid)

5. Received By: (Print Name) J. T. Crawford

6. Signature (Addressee or Agent)

Is your RETURN ADDRESS completed on the reverse side?

PS Form 3811, December 1994 102595-99-B-0223 Domestic Return Receipt

---

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery
Consult postmaster for fee.

3. Article Addressed to:

Henry H. Harrison, Jr. &
Ronald M. Harrison
1700 N. Big Spring Street
Midland, TX 79701

4a. Article Number: Z 165 512 252

4b. Service Type: ☐ Registered ☒ Certified ☐ Express Mail ☐ Insured ☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 11-26-99

8. Addressee's Address (Only if requested and fee is paid)

5. Received By: (Print Name)

6. Signature: (Addressee or Agent) X [signature]

Is your RETURN ADDRESS completed on the reverse side?

PS Form 3811, December 1994 Domestic Return Receipt

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery
Consult postmaster for fee.

3. Article Addressed to:

Transwestern Pipeline Co.
Property Tax Department
P.O. Box 1188
Houston, TX 77251

4a. Article Number: Z 165 512 246

4b. Service Type: ☐ Registered ☒ Certified ☐ Express Mail ☐ Insured ☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: NOV 22 1999

8. Addressee's Address (Only if requested and fee is paid)

5. Received By: (Print Name)

6. Signature: (Addressee or Agent) X [signature]

Is your RETURN ADDRESS completed on the reverse side?

PS Form 3811, December 1994 Domestic Return Receipt

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse sid

PS Form 3811, December 1994

5. Received By: (Print Name)

6. Signature (Addressee or Agent)

City of Jal
Jal, NM 88252

3. Article Addressed to:

- ☐ Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b.
- ☐ Print your name and address on the reverse of this form so that we can return this card to you.
- ☐ Attach this form to the front of the mailpiece, or on the back if space does not permit.
- ☐ Write "Return Receipt Requested" on the mailpiece below the article number.
- ☐ The Return Receipt will show to whom the article was delivered and the date delivered.

4a. Article Number: Z 165 512 177

4b. Service Type
- ☐ Registered
- ☐ Certified
- ☐ Express Mail
- ☐ Insured
- ☒ Return Receipt for Merchandise
- ☐ COD

7. Date of Delivery: 11-19-99

8. Addressee's Address (Only if requested and fee is paid)

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

102595-99-B-0223 Domestic Return Receipt

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- ☐ Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b.
- ☐ Print your name and address on the reverse of this form so that we can return this card to you.
- ☐ Attach this form to the front of the mailpiece, or on the back if space does not permit.
- ☐ Write "Return Receipt Requested" on the mailpiece below the article number.
- ☐ The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

3. Article Addressed to:

Texas New Mexico Railroad
~~Real Estate Tax Services~~
P.O.Box 202378
Austin, TX 78720

4a. Article Number: Z 165 512 178

4b. Service Type
- ☐ Registered
- ☒ Certified
- ☐ Express Mail
- ☐ Insured
- ☒ Return Receipt for Merchandise
- ☐ COD

7. Date of Delivery: 11-23-99

5. Received By: (Print Name) S. ROSALES

6. Signature (Addressee or Agent) Susan Rosales

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1994 102595-99-B-0223 Domestic Return Receipt

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- ☐ Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b.
- ☐ Print your name and address on the reverse of this form so that we can return this card to you.
- ☐ Attach this form to the front of the mailpiece, or on the back if space does not permit.
- ☐ Write "Return Receipt Requested" on the mailpiece below the article number.
- ☐ The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

3. Article Addressed to:

Whitten/Lea Ltd.
Real Estate Tax Service
P.O.Box 771
Abilene, TX 79604

4a. Article Number: Z 165 512 176

4b. Service Type
- ☐ Registered
- ☒ Certified
- ☐ Express Mail
- ☐ Insured
- ☒ Return Receipt for Merchandise
- ☐ COD

7. Date of Delivery: 11/22/99

5. Received By: (Print Name)

6. Signature (Addressee or Agent) Claudia Rogers

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1994 102595-99-B-0223 Domestic Return Receipt

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- ☐ Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b.
- ☐ Print your name and address on the reverse of this form so that we can return this card to you.
- ☐ Attach this form to the front of the mailpiece, or on the back if space does not permit.
- ☐ Write "Return Receipt Requested" on the mailpiece below the article number.
- ☐ The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

3. Article Addressed to:

Deep Wells Ranch, Inc.
Combest Ranch
Star Route
Jal, NM 88252

4a. Article Number: Z 165 512 251

4b. Service Type
- ☐ Registered
- ☒ Certified
- ☐ Express Mail
- ☐ Insured
- ☒ Return Receipt for Merchandise
- ☐ COD

7. Date of Delivery: 11-19-99

5. Received By: (Print Name)

6. Signature (Addressee or Agent) JoAnn Myers

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1994 102595-99-B-0223 Domestic Return Receipt

Thank you for using Return Receipt Service.

PS Form 3811, December 1994

5. Received By: (Print Name)

6. Signature (Addressee or Agent)

George W. Poage III
P.O.Box 106
Rankin, TX 79778

3. Article Addressed to:

- ☐ Complete items 1 and/or 2 for additional services. Complete items 3, 4a, and 4b.
- ☐ Print your name and address on the reverse of this form so that we can return this card to you.
- ☐ Attach this form to the front of the mailpiece, or on the back if space does not permit.
- ☐ Write "Return Receipt Requested" on the mailpiece below the article number.
- ☐ The Return Receipt will show to whom the article was delivered and the date delivered.

4a. Article Number: Z 165 512 254

4b. Service Type
- ☐ Registered
- ☐ Certified
- ☐ Express Mail
- ☐ Insured
- ☒ Return Receipt for Merchandise
- ☐ COD

7. Date of Delivery: 11-19-99

8. Addressee's Address (Only if requested and fee is paid)

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

102595-99-B-0223 Domestic Return Receipt

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Jal Public Library Fund
C.D. Woolworth Trust
P.O.Box 178
Jal, NM 88252

4a. Article Number: Z 165 512 247

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 11-19-99

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X Donna McCorkle

PS Form **3811,** December 1994 Domestic Return Receipt

[redacted]

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Jimmy Joe Doom
Star Route
Jal, NM 88252

4a. Article Number: Z 165 512 248

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 11/19/99

5. Received By: *(Print Name)* Jimmy Joe Doom

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X J Doom

PS Form **3811,** December 1994 Domestic Return Receipt

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- ☐ Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- ☐ Print your name and address on the reverse of this form so that we can return this card to you.
- ☐ Attach this form to the front of the mailpiece, or on the back if space does not permit.
- ☐ Write *"Return Receipt Requested"* on the mailpiece below the article number.
- ☐ The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

3. Article Addressed to:

Ludean E. Cantrell
c/o C. Pruett
4501 N. Central Rd.
Bethany, OK 73088

4a. Article Number: Z 165 512 179

4b. Service Type
☐ Registered ☒ Certified
☐ Express Mail ☐ Insured
☒ Return Receipt for Merchandise ☐ COD

7. Date of Delivery: 11-19-99

5. Received By: *(Print Name)* Christen Pruett

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature *(Addressee or Agent)*

PS Form **3811,** December 1994 102595-99-B-0223 Domestic Return Receipt

Thank you for using Return Receipt Service.

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-137
Revised March 17, 1999

Submit Original Plus 1
Copy to Santa Fe
1 Copy Appropriate
District Office

APPLICATION FOR WASTE MANAGEMENT FACILITY

(Refer to the OCD Guidelines for assistance in completing the application)

Landfarm #1

☐ Commercial ☒ Centralized

1. Type: ☐ Evaporation ☐ Injection ☐ Other
☒ Solids/Landfarm ☐ Treating Plant

2. Operator: Equilon Enterprises LLC

Address: 28510C Tomball Parkway PMB Suite 406, Tomball, TX 77375

Contact Person: Kyle Landreneau (Equiva Services LLC) Phone: (281) 252-6914

3. Location: SE /4 NE /4 Section 23 Township 24S Range 36E
Submit large scale topographic map showing exact location

4. Is this a modification of an existing facility? ☐ Yes ☒ No

5. Attach the name and address of the landowner of the facility site and landowners of record within one mile of the site.

6. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.

7. Attach designs prepared in accordance with Division guidelines for the construction/installation of the following: pits or ponds, leak-detection systems, aerations systems, enhanced evaporation (spray) systems, waste treating systems, security systems, and landfarm facilities.

8. Attach a contingency plan for reporting and clean-up for spills or releases.

9. Attach a routine inspection and maintenance plan to ensure permit compliance.

10. Attach a closure plan.

11. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact groundwater. Depth to and quality of ground water must be included.

12. Attach proof that the notice requirements of OCD Rule 711 have been met.

13. Attach a contingency plan in the event of a release of H_2S.

14. Attach such other information as necessary to demonstrate compliance with any other OCD rules, regulations and orders.

15. CERTIFICATION
I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Kyle Landreneau Title: Environmental Geologist

Signature: K L Landreneau Date: 11/17/99

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-137
Revised March 17, 1999

Submit Original Plus 1
Copy to Santa Fe
1 Copy Appropriate
District Office

APPLICATION FOR WASTE MANAGEMENT FACILITY

(Refer to the OCD Guidelines for assistance in completing the application)

Landfarm #2

☐ Commercial ☒ Centralized

1. Type: ☐ Evaporation ☐ Injection ☐ Other
   ☒ Solids/Landfarm ☐ Treating Plant

2. Operator: Equilon Enterprises LLC

   Address: 28510C Tomball Parkway PMB Suite 406, Tomball, TX 77375

   Contact Person: Kyle Landreneau (Equiva Services LLC) Phone: (281) 252-6914

3. Location: NW /4 NE /4 Section 24 Township 24S Range 36E
   Submit large scale topographic map showing exact location

4. Is this a modification of an existing facility? ☐ Yes ☒ No

5. Attach the name and address of the landowner of the facility site and landowners of record within one mile of the site.

6. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.

7. Attach designs prepared in accordance with Division guidelines for the construction/installation of the following: pits or ponds, leak detection systems, aerations systems, enhanced evaporation (spray) systems, waste treating systems, security systems, and landfarm facilities.

8. Attach a contingency plan for reporting and clean-up for spills or releases.

9. Attach a routine inspection and maintenance plan to ensure permit compliance.

10. Attach a closure plan.

11. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact groundwater. Depth to and quality of ground water must be included.

12. Attach proof that the notice requirements of OCD Rule 711 have been met.

13. Attach a contingency plan in the event of a release of H_2S.

14. Attach such other information as necessary to demonstrate compliance with any other OCD rules, regulations and orders.

15. CERTIFICATION
    I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Kyle Landreneau Title: Environmental Geologist

Signature: Kyle Landreneau Date: 11/17/99

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
Districts III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-137
Revised March 17, 1999

Submit Original Plus 1
Copy to Santa Fe
1 Copy Appropriate
District Office

APPLICATION FOR WASTE MANAGEMENT FACILITY

(Refer to the OCD Guidelines for assistance in completing the application)

Landfarm #3

☐ Commercial ☒ Centralized

1. Type: ☐ Evaporation ☐ Injection ☐ Other
☒ Solids/Landfarm ☐ Treating Plant

2. Operator: Equilon Enterprises LLC

Address: 28510C Tomball Parkway PMB Suite 406, Tomball, TX 77375

Contact Person: Kyle Landreneau (Equiva Services LLC) Phone: (281) 252-6914

3. Location: NE /4 NE /4 Section 24 Township 24S Range 36E
Submit large scale topographic map showing exact location

4. Is this a modification of an existing facility? ☐ Yes ☒ No

5. Attach the name and address of the landowner of the facility site and landowners of record within one mile of the site.

6. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.

7. Attach designs prepared in accordance with Division guidelines for the construction/installation of the following: pits or ponds, leak detection systems, aerations systems, enhanced evaporation (spray) systems, waste treating systems, security systems, and landfarm facilities.

8. Attach a contingency plan for reporting and clean-up for spills or releases.

9. Attach a routine inspection and maintenance plan to ensure permit compliance.

10. Attach a closure plan.

11. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact groundwater. Depth to and quality of ground water must be included.

12. Attach proof that the notice requirements of OCD Rule 711 have been met.

~~13. Attach a contingency plan in the event of a release of H_2S.~~

14. Attach such other information as necessary to demonstrate compliance with any other OCD rules, regulations and orders.

15. CERTIFICATION
I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Kyle Landreneau Title: Environmental Geologist

Signature: Kyle Landreneau Date: 11/17/99

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Form C-137
Revised March 17, 1999

Submit Original Plus 1
Copy to Santa Fe
1 Copy Appropriate
District Office

APPLICATION FOR WASTE MANAGEMENT FACILITY

(Refer to the OCD Guidelines for assistance in completing the application)

Landfarm #4

☐ Commercial ☒ Centralized

1. Type: ☐ Evaporation ☐ Injection ☐ Other
   ☒ Solids/Landfarm ☐ Treating Plant

2. Operator: Equilon Enterprises LLC

   Address: 28510C Tomball Parkway PMB Suite 406, Tomball, TX 77375

   Contact Person: Kyle Landreneau (Equiva Services LLC) Phone: (281) 252-6914

3. Location: SE /4 NW /4 Section 14 Township 24S Range 36E
   Submit large scale topographic map showing exact location

4. Is this a modification of an existing facility? ☐ Yes ☒ No

5. Attach the name and address of the landowner of the facility site and landowners of record within one mile of the site.

6. Attach description of the facility with a diagram indicating location of fences, pits, dikes, and tanks on the facility.

7. Attach designs prepared in accordance with Division guidelines for the construction/installation of the following: pits or ponds, leak-detection systems, aerations systems, enhanced evaporation (spray) systems, waste treating systems, security systems, and landfarm facilities.

8. Attach a contingency plan for reporting and clean-up for spills or releases.

9. Attach a routine inspection and maintenance plan to ensure permit compliance.

10. Attach a closure plan.

11. Attach geological/hydrological evidence demonstrating that disposal of oil field wastes will not adversely impact groundwater. Depth to and quality of ground water must be included.

12. Attach proof that the notice requirements of OCD Rule 711 have been met.

13. Attach a contingency plan in the event of a release of H_2S.

14. Attach such other information as necessary to demonstrate compliance with any other OCD rules, regulations and orders.

15. CERTIFICATION

I hereby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.

Name: Kyle Landreneau Title: Environmental Geologist

Signature: Kyle Landreneau Date: 11/17/99

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

5.0 Names and Addresses of Site Landowner and Landowners of Record Within One Mile

Landowner:
Sam Cooper
Rural Route 1
Box 141
Blossom, Texas 75416

Landowners of Record Within One Mile:

Jal Public Library Fund
C.D. Woolworth Trust
P.O. Box 178
Jal, NM 88252

Whitten/Lea Ltd.
Real Estate Tax Service
P.O. Box 771
Abilene, TX 79604

George W. Poage III
P.O. Box 106
Rankin, TX 79778

Elena Bell Grobe &
William Jarvis Grobe Trust
Drawer G
Jal, NM 88252

Henry H. Harrison, Jr. &
Ronald M. Harrison
1700 N. Big Spring Street
Midland, TX 79701

Deep Wells Ranch, Inc.
Combest Ranch
Star Route
Jal, NM 88252

Burl H. Alexander
Box 913
Jal, NM 88252

J.T. Crawford
Drawer T
Jal, NM 88252

Jimmy Joe Doom
Star Route
Jal, NM 88252

Ludean E. Cantrell
c/o C. Pruett
4501 N. Central Road
Bethany, OK 73088

Texas-New Mexico Railroad
Real Estate Tax Services
P.O. Box 202378
Austin, TX 78720

City of Jal
Jal, NM 88252

Transwestern Pipeline Co.
Property Tax Department
P.O. Box 1188
Houston, TX 77251

Sam Cooper
Rural Route 1
Box 141
Blossom, TX 75416

6.0 Facility Description

6.1 Materials to be Treated

Intrinsic bioremediation of hydrocarbon (crude oil) impacted soils will be conducted at the permitted facilities. The facilities will be centralized and used to treat RCRA Subtitle C Exempt soil from the applicant's own leases. The crude oil impacted soils to be treated were generated by minor leaks and spills from historical operations of a crude oil gathering system. No impacted soils originating elsewhere and no impacted liquids will be permitted within the landfarm cells.

6.2 Description of On-Site Facilities

A total of four landfarm sites will be constructed; each will be located in the immediate vicinity of an historic crude oil spill. Four separate sites are being constructed instead of one central site in order to mitigate transportation costs. The sites will be constructed in the locations shown on the attached topographic map, Figure 1. Each site will contain one cell, with the exception of Landfarm Site #1, which, because of its size, will contain 3 cells. Landfarm cells will not exceed five acres in size and will be unlined. The bottom of each cell will rest on undisturbed native soil. Berms constructed of native soil and at least two feet in height will completely surround each cell in order to prevent runon/runoff. The berms surrounding each cell will be capable of containing precipitation from a 100-year rainfall event. No effluent from landfarming will be discharged on site during the operation of the landfarm. It is intended that each cell will be loaded only once and that when the initial load is successfully remediated to OCD standards, the cells will be properly abandoned. When bioremediation of the impacted material is complete and laboratory analytical results indicate that concentrations of the contaminants of concern are at or below OCD requirements, the landfarm cells will be broken out and the treated material will be tilled into the native soil, approximately to grade. Following tilling of the remediated material, a layer of soil will be placed over the remediated material, and the area will be reseeded with native grasses.

6.3 Diagrams of the Facilities

See Appendix A.

7.0 Landfarm Design

Four separate sites, as shown in Figures 2 through 5 (Appendix A), will be constructed to handle the bioremediation of the impacted soil. Each site will contain one landfarm cell, with the exception of Landfarm Site #1, which, due to its size, will contain three cells. The cells will be unlined, and native soil berms, at least two feet in height, will surround each cell to prevent runon/runoff. Hydrocarbon (crude oil) impacted soil will be excavated and placed into the cells in 6-inch lifts for treatment. Each cell will be tilled on a bi-weekly schedule in order to aerate the impacted material efficiently. Walton Construction Company, Inc., of Hobbs, New Mexico, will be used to maintain and till the landfarm cells. Walton Construction has constructed two commercial landfarms in the area and is aware of the requirements for water dispersal and diversion. Walton has farm tractors and cultivation equipment to disk, till, or roto-till up to 18 inches in depth. Equipment available for tilling operations include an International Farm-All 1468, John Deere 730, and an International TD18. Walton also has a vacuum truck as well as pumps and portable pipe to remove water from the landfill cells. Any water which may be removed from the landfarm cells will be disposed at a permitted disposal well for oilfield products, such as Key Disposal in Eunice, NM.

At present, it is anticipated that indigenous microbes will metabolize the contaminants without the introduction of additional microbes or nutrients. The impacted material in each cell will be sampled and analyzed after the material is initially emplaced in the cell, and quarterly thereafter. Samples will be analyzed for total petroleum hydrocarbons (TPH); benzene, toluene, ethylbenzene, total xylenes (BTEX); and RCRA Metals during the first sampling event. If, after the initial sampling event, RCRA metals and BTEX concentrations are below NMOCD guidelines for soil to remain in place, no further BTEX and RCRA metals analysis will be performed. If quarterly analytical results indicate that bioremediation is not progressing as rapidly as envisioned, additional nutrients, in the form of commercial fertilizer or manure, may be added to the cells. Water may be added to the landfarm cells, as necessary, to enhance bioremediation; however, no ponding of water will be allowed.

Each landfarm site will be fenced to protect livestock. In accordance with regulations, a sign, not less than 12" x 24" shall be posted in a conspicuous place on the fence surrounding each facility. The sign shall identify the operator of the landfarm; the location of the facility by quarter-quarter section, township and range; and shall provide emergency telephone numbers. Sign lettering will be at least two inches high.

8.0 Contingency Plan for Reporting and Clean-up of Spills and Releases

The sites will be inspected at least once per week and immediately after any significant rainfall or windstorm event. Since no liquids are to be treated or allowed within the landfarm cells, the only potential spills which could be envisioned would be a spill of impacted soil outside of the bermed area following a significant rainfall event and resulting breaching of the berm. Although such a situation is highly unlikely, the first step in cleaning up such an occurrence would be to notify the OCD pursuant to OCD Rule 116 or New Mexico Water Quality Control Commission regulation 1-203. Notification is to be made immediately upon discovery of the release. Earthmoving equipment will be mobilized to the site to repair the breach and to pick up the released material and return it to the landfarm cell. Confirmatory sampling and analysis (TPH) will be performed on the surface soil within the release area and compared to previously obtained background analytical results to verify that the released materials have been successfully cleaned up.

Ponding, pooling, or runon of precipitation will be removed with either a vacuum truck or by pumps, depending upon the extent. All liquids will be containerized and transported to a permitted disposal facility for proper disposal.

Quarterly treatment zone monitoring is designed to determine if contaminants have migrated into the native soils in unacceptable concentrations. In the highly unlikely event that such a situation occurs, numerous alternatives could be evaluated to mitigate such an occurrence. The most expedient and cost-effective solution would be to add additional nutrients, moisture, and oxygenating compounds, such as ORC®, in order to accelerate the bioremediation process.

9.0 Operation and Maintenance Plan

9.1 Purpose and Operation

The purpose of the landfarming operations proposed within this permit application is to naturally attenuate hydrocarbon (crude oil) impacted soils. Landfarming operations are to be centralized facilities for the remediation of RCRA Subtitle C Exempt soil from the applicant's operations only. No commercial materials or materials from outside sources will be accepted at the landfarms for which this permit application applies. No impacted liquids will be treated at these facilities. Natural attenuation will be accomplished by indigenous aerobic microbes, oxygenated by a bi-weekly disking program.

9.2 Sampling and Analysis

9.2.1 Baseline sampling and analysis

Soil samples will be obtained from native soil two feet below surface grade within the proposed landfarm cells prior to placing impacted soil in the cell for treatment. The samples will be analyzed for TPH, BTEX, and RCRA Metals using EPA Methods 8015M, 8021B, and 6010B, respectively. For those cells where landfarming activities have already begun, baseline samples will be obtained from native soil two feet below surface grade outside of and within a 20-foot radius of the cell.

9.2.2 Treatment zone sampling and analysis

The treatment zone 2-3 feet below surface grade within the landfarm cells will be monitored on a regular schedule. The first monitoring event will occur 6 months after the first contaminated soils are received, and quarterly, thereafter. One hand auger boring will be installed at random to a depth no greater than 2 feet below ground surface. The soil sample obtained from that boring will be collected using EPA-approved techniques and sent to an approved analytical laboratory. On the first sampling event, and annually thereafter, the soil sample will be analyzed for TPH, BTEX, major anions/cations, and RCRA metals. Soil samples from the quarterly sampling events will be analyzed for TPH and BTEX. After samples are obtained, the hand auger boring will be plugged with cement, hydrated bentonite chips, or similar impermeable material.

9.2.3 Bioremediation monitoring

Soils undergoing treatment within the landfarm cells will be sampled quarterly to monitor the progress of the natural attenuation. Samples will be analyzed for TPH; BTEX; and RCRA Metals during the first sampling event. If, after the initial sampling event, RCRA metals and BTEX concentrations are below NMOCD guidelines for soil to remain in place, no further BTEX and RCRA metals analysis will be performed. If quarterly analytical results indicate that bioremediation is not progressing as rapidly as envisioned, additional nutrients, in the form of commercial fertilizer or manure, may be added to the cells. Water may also be added, as necessary, to enhance bioremediation. No liquids will be allowed to pool within the landfarm cells.

9.3 Inspection and Nuisance Mitigation

The landfarming operations will be inspected, at minimum, on a weekly basis to assure that operations are proceeding according to plan and that the integrity of the landfarm cells is maintained. In the event of any significant rainfall or windstorm, the landfarm cells will be inspected immediately following such event. Any damage to or erosion of the surrounding berms is to be repaired immediately. Berms are to be maintained such that they are no less than two feet high, in order to contain the precipitation of a 100-year flood. The landfarming of impacted soil from these historic crude oil spills is not anticipated to generate noxious odors; therefore, no measures to mitigate odors will be required. Soil being treated in the landfarm cells will be wetted, as necessary, to prevent wind erosion and to stimulate the bioremediation process. Water will not be allowed to pond within the cells during wetting operations or at any other time.

10.0 Closure Plan

It is anticipated that bioremediation of crude oil impacted soils will require approximately one year. Landfarm cells will be loaded initially, and no additional material will be placed into the cells thereafter. Remediation progress, as previously stated, will be monitored on a quarterly basis. Remediation will continue until quarterly sampling and analysis indicates that landfarm soils have been remediated to the OCD standards in effect at the time of closure. When laboratory analytical results indicate that remediation is complete according to OCD standards, Equilon Pipeline Company shall notify the OCD of cessation of operations. Equilon will then close the landfarm operations in accordance with all applicable local, state, and/or federal regulations which may be in effect at the time of closure. Closure operations will be complete within six months of notification of cessation of operations.

Closure of landfarming operations shall consist of breaking out the surrounding berms, and spreading and tilling the remediated and berm material into on-site native soils, approximately to grade. The leveled, remediated material will then be covered with a layer of clean soil, and reseeded with native grasses. One application of water for irrigation purposes will then be made.

11.0 Groundwater Protection

The Sam Cooper Ranch lies in extreme southern Lea County, approximately 5.6 miles north-northwest of Jal, New Mexico. The area lies within both the Llano Estacado and the Permian Basin and is characterized by an arid climate. Topography is relatively flat and the surface is covered with scrub vegetation. Rainfall averages 12.5 inches per year. Regional drainage within the subject area is generally to the east at approximately 35 feet per mile. There are no perennial or intermittent streams or other surface bodies of water within a one-mile radius of the subject site, nor are there any groundwater discharge sites. A water well search was performed by Environmental Data Resources, Inc. (EDR). Results of the search indicated that a total of 6 water wells were located within a one-mile radius of the subject site. The clusters of wells (A1, A2, B3, B4, and B5 on the EDR map) are mis-located approximately 700 feet south of their actual location. Wells A1 and A2 are domestic supply wells for the Cooper Ranch house, while wells B3, B4, and B5 are situated within and slightly outside of the Jal-Cooper Cemetery, which is adjacent to and south of County Road 7. The wells are reportedly completed in the Ogallala formation and water level, as measured by Enercon, ranges between 133 and 177 feet below ground surface (bgs). Total dissolved solids in a water sample obtained from one of the Jal-Cooper Cemetery wells was 782 mg/l. Groundwater flow direction at the subject site, as determined by observing the surface gradient and by observing water levels in the wells plotted on the EDR report, appears to be to the east.

On-site soils consist of alluvial red beds from the surface to a depth of approximately 5 feet bgs. The red beds are underlain by caliche and discontinuous sand stringers from 5 feet bgs to approximately 130 feet bgs. The Ogallala, consisting of consolidated beach sand, is encountered at a depth of approximately 130 feet bgs and extends to 220-250 feet bgs.

The flooding potential for this site is low. Soil berms, at least two feet high and designed to contain a 100-year flood, will be constructed around the landfarm cells. In addition, diversion dams, approximately two feet high, will be constructed to divert surface runoff away from the containment berms. The sites will be inspected at least once per week and immediately after any significant rainfall or windstorm event. In the event of flooding or washout, the first step in cleaning up such an occurrence would be to notify the OCD pursuant to OCD Rule 116 or New Mexico Water Quality Control Commission regulation 1-203. Notification is to be made immediately upon discovery of the release.

12.0 Proof of Notification

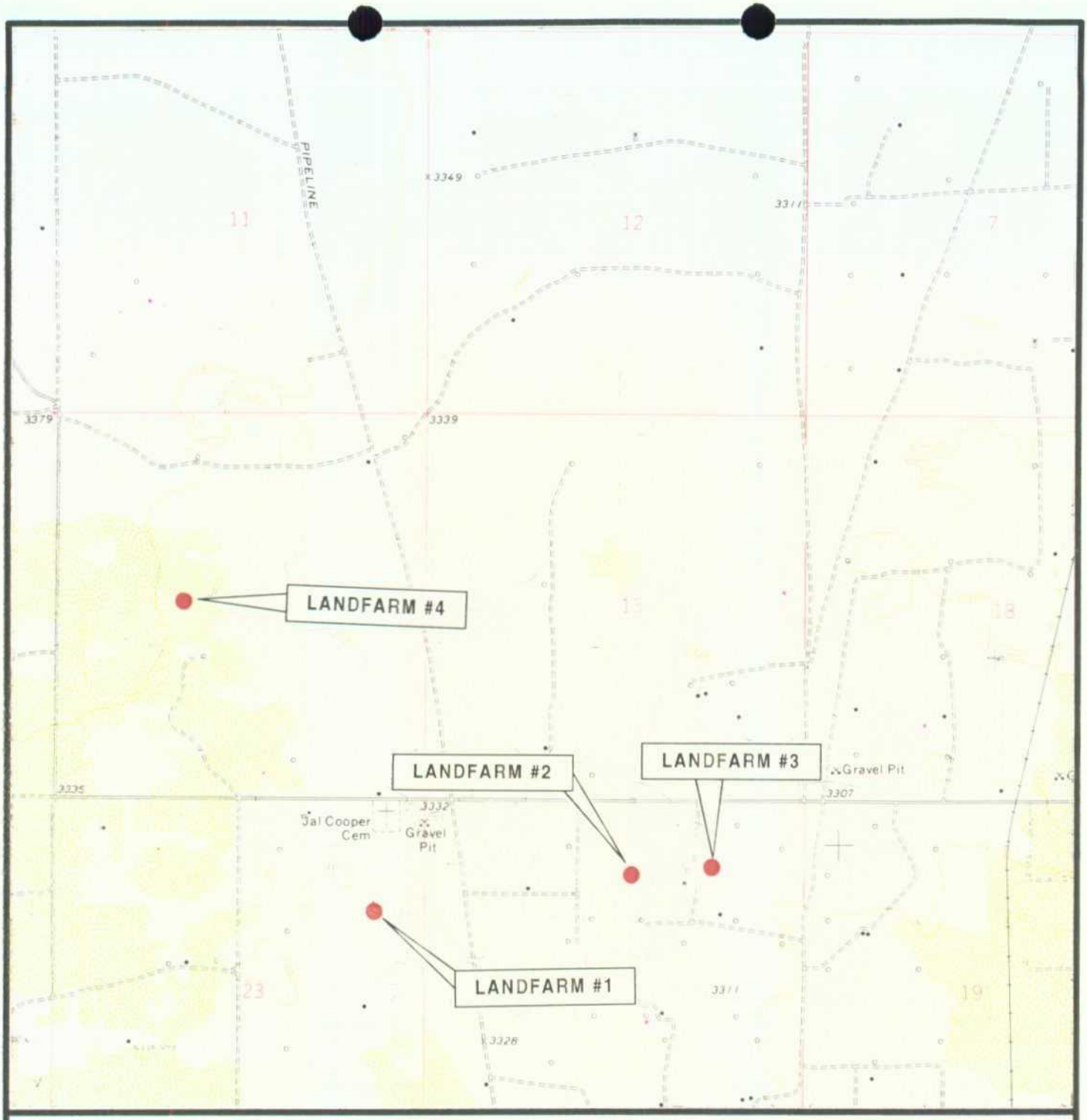
Copies of notification letters are presented in Appendix C. These letters were mailed by Certified Mail on November 16, 1999. Copies of the signed receipts will be forwarded to OCD upon receipt by Equiva.

13.0 H_2S Contingency Plan

Since the proposed Surface Waste Management Facility is a landfarm, which is not expected to generate H_2S, the requirement for an H_2S Contingency Plan is not applicable.

14.0 Other Information to Demonstrate Compliance with OCD Rules, Regulations, and Orders

Not Applicable



U.S.G.S. Topographic Map
Jal, NM Quandrangle
Photorevised 1979

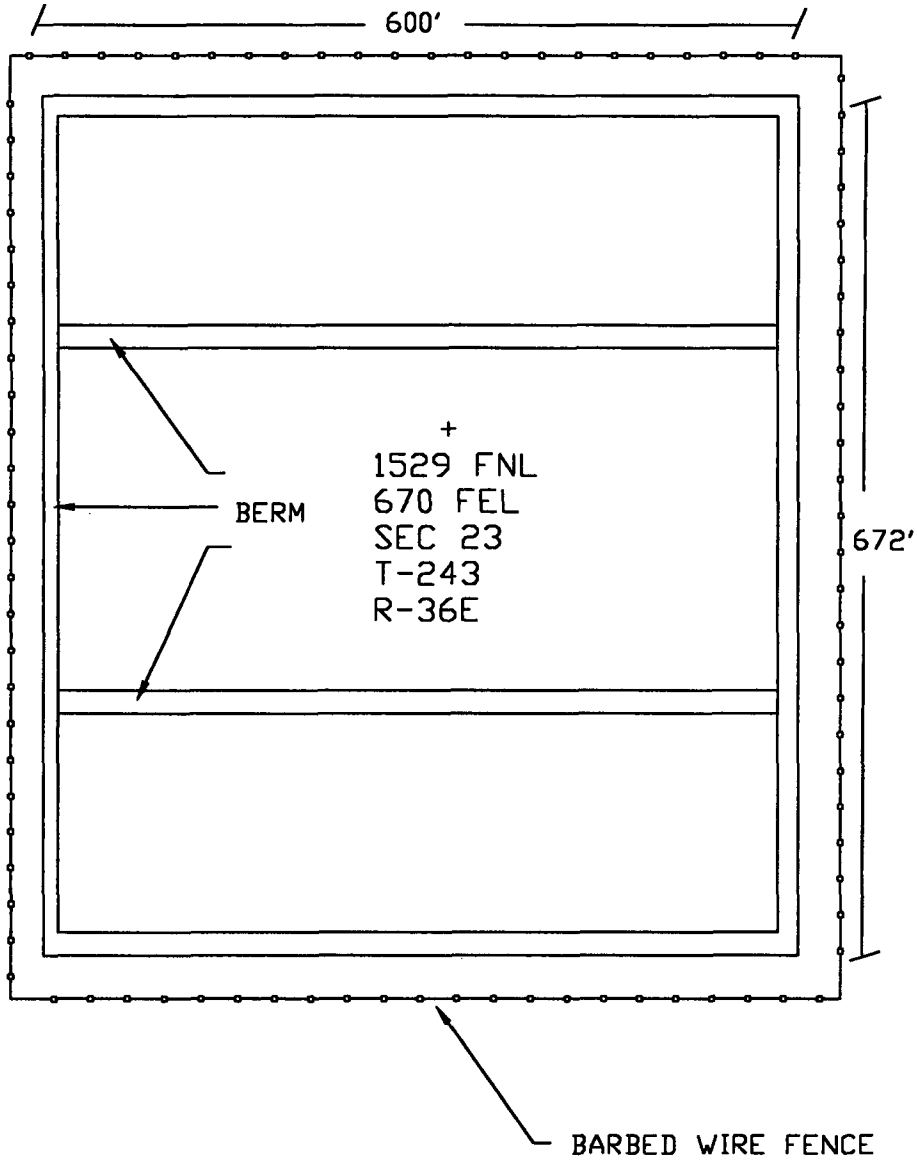
N

LANDFARM LOCATION MAP
Scale: 1" = 24,000'
Figure 1

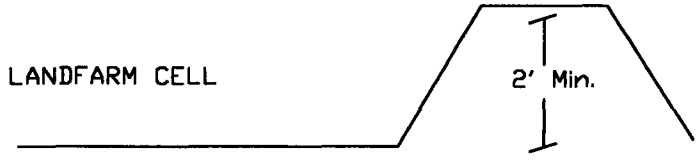
EQUIVA SERVICES, INC.

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 120
DALLAS, TX 75234-7420
(972) 484-3854

APPENDIX A



BERM DIAGRAM



NOT TO SCALE

LANDFARM #1 DIAGRAM

NOVEMBER 16, 1999

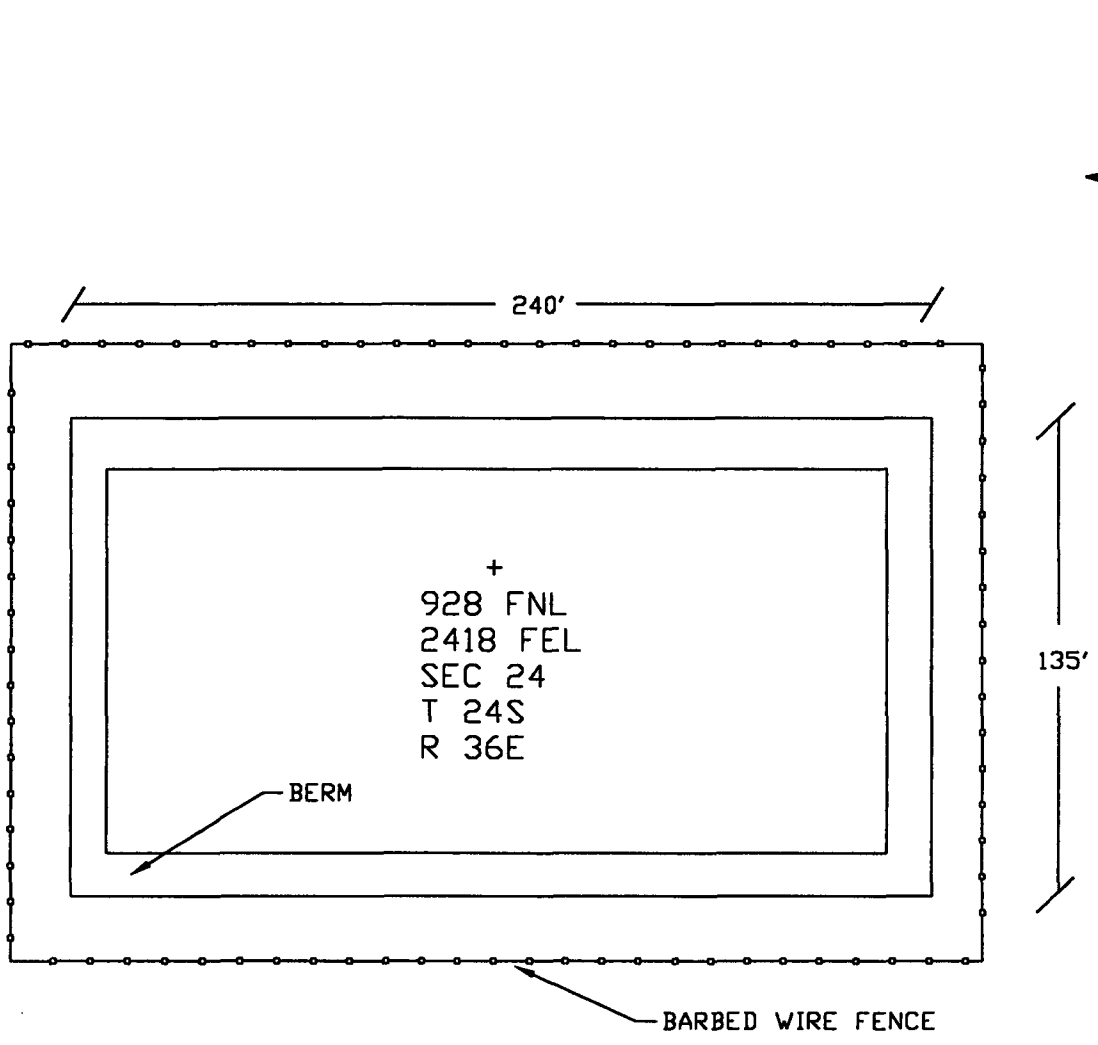
PREPARED FOR:
EQUIVA SERVICES, INC.

PREPARED BY:
ENERCON SERVICES, INC.
2775 VILLA CREEK, SUITE 120
DALLAS, TX 75234
972/484-3854

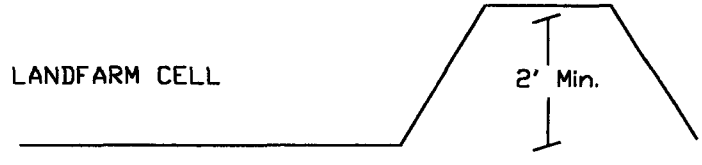
DRAWN BY: B. Mc

PROJECT NUMBER: ES-347

FIGURE 2

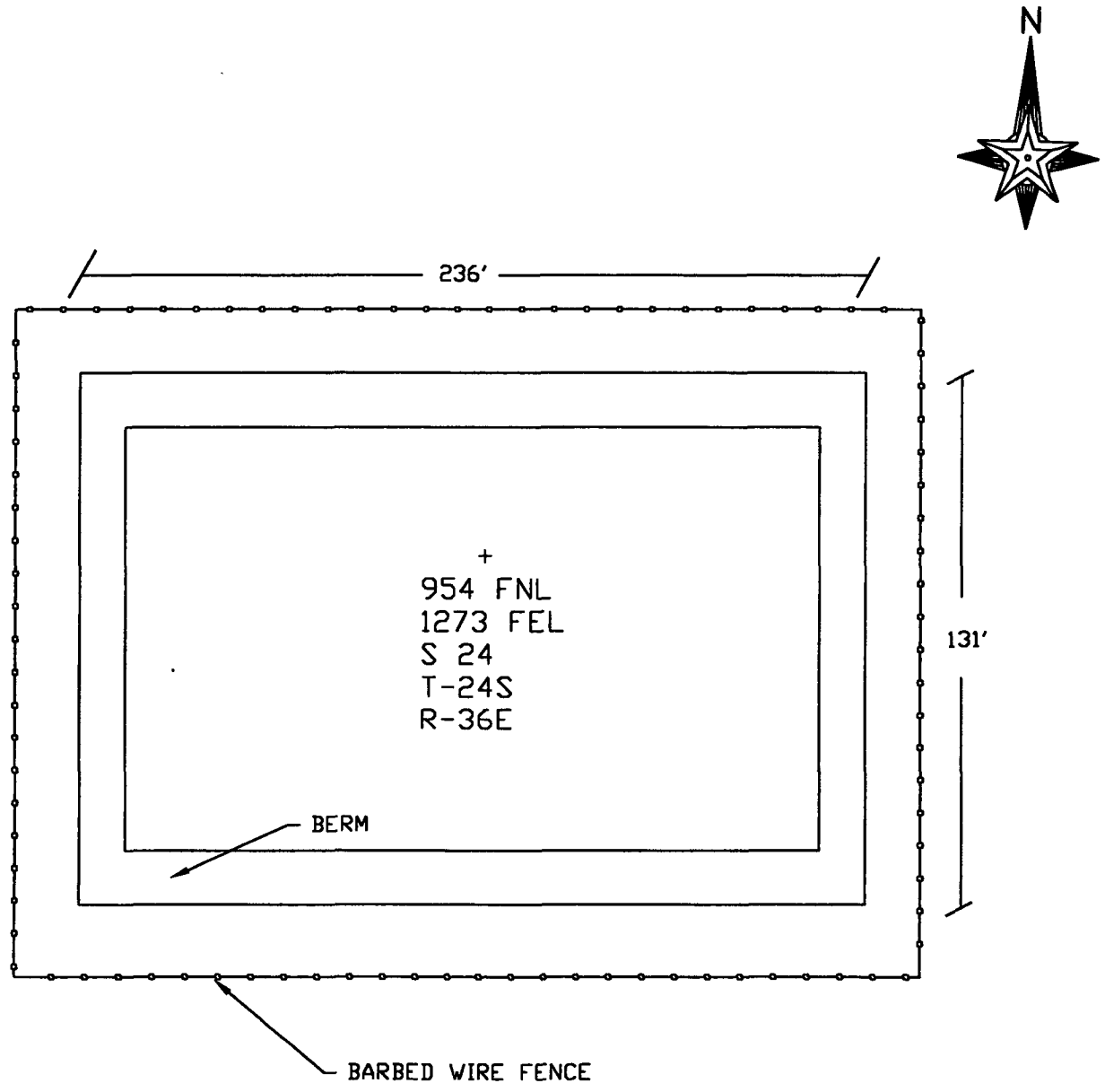


BERM DIAGRAM

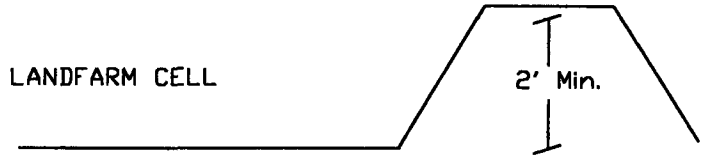


NOT TO SCALE

LANDFARM #2 DIAGRAM		NOVEMBER 16, 1999	
PREPARED FOR: EQUIVA SERVICES, INC.	PREPARED BY: ENERCON SERVICES, INC. 2775 VILLA CREEK, SUITE 120 DALLAS, TX 75234 972/484-3854	DRAWN BY: B. Mc PROJECT NUMBER: ES-347	FIGURE 3

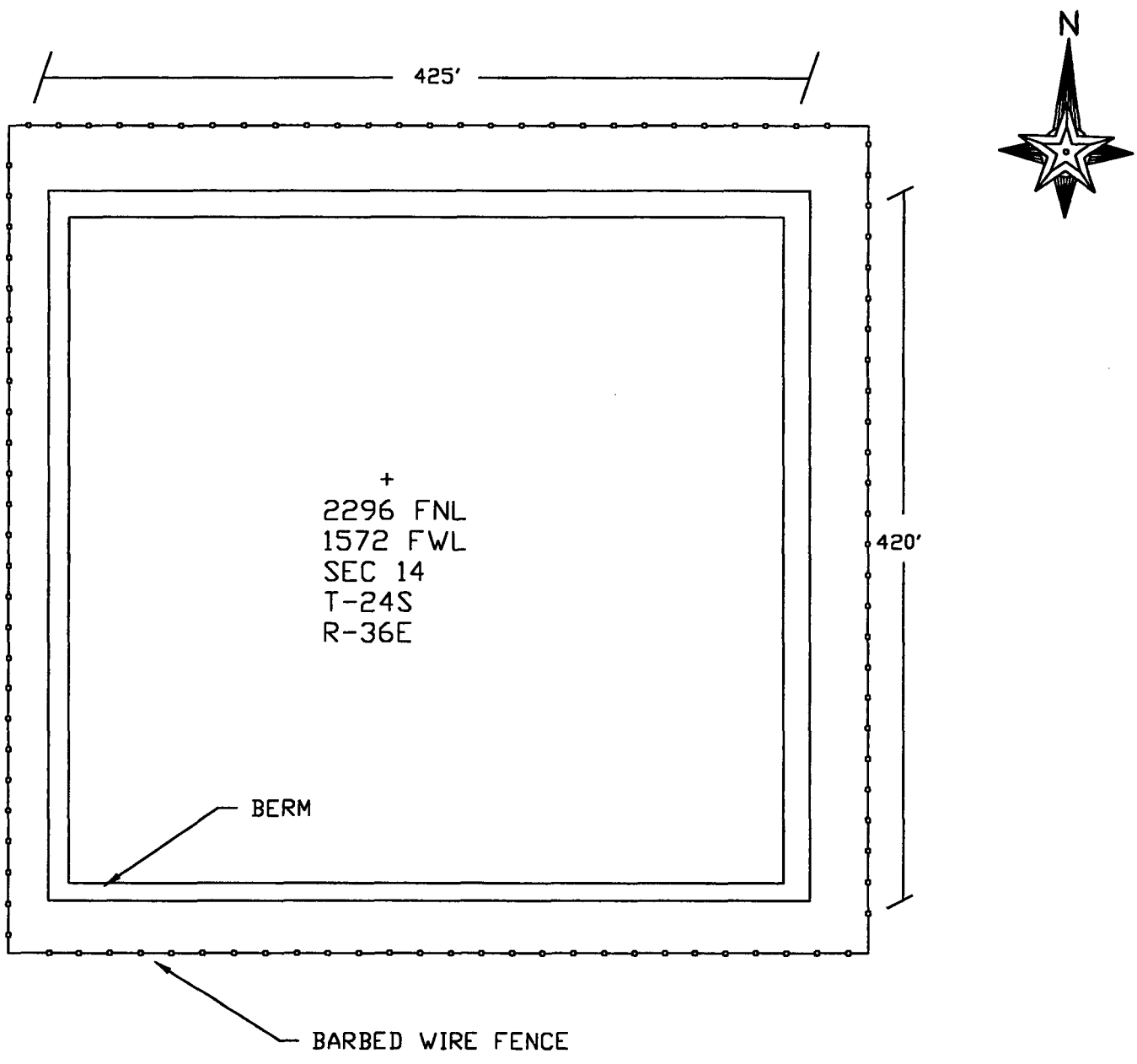


BERM DIAGRAM

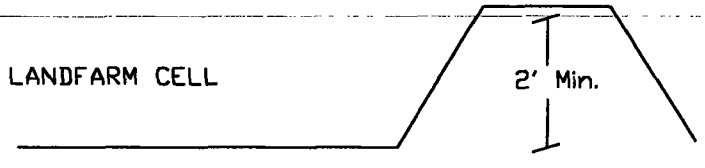


NOT TO SCALE

LANDFARM #3 DIAGRAM		NOVEMBER 16, 1999	
PREPARED FOR: EQUIVA SERVICES, INC.	PREPARED BY: ENERCON SERVICES, INC. 2775 VILLA CREEK, SUITE 120 DALLAS, TX 75234 972/484-3854	DRAWN BY: B. Mc	FIGURE 4
		PROJECT NUMBER: ES-347	



BERM DIAGRAM



NOT TO SCALE

LANDFARM #4 DIAGRAM		NOVEMBER 16, 1999	
PREPARED FOR: EQUIVA SERVICES, INC.	PREPARED BY: ENERCON SERVICES, INC. 2775 VILLA CREEK, SUITE 120 DALLAS, TX 75234 972/484-3854	DRAWN BY: B. Mc PROJECT NUMBER: ES-347	FIGURE 5

APPENDIX B

The EDR-GeoCheck® Report

Jal Cooper Ranch
Lea County
Jal, NM 88252

Inquiry Number: 427872.1s

November 01, 1999

Environmental Data Resources, Inc.
an edr company

The Source For Environmental Risk Management Data

3530 Post Road
Southport, Connecticut 06490

Nationwide Customer Service

Telephone: 1-800-352-0050
Fax: 1-800-231-6802
Internet: www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

THE EDR GEOCHECK™ REPORT

The EDR GeoCheck™ Report is a screening tool designed to assist in the hydrogeological assessment of a particular geographic area based upon publicly available information.

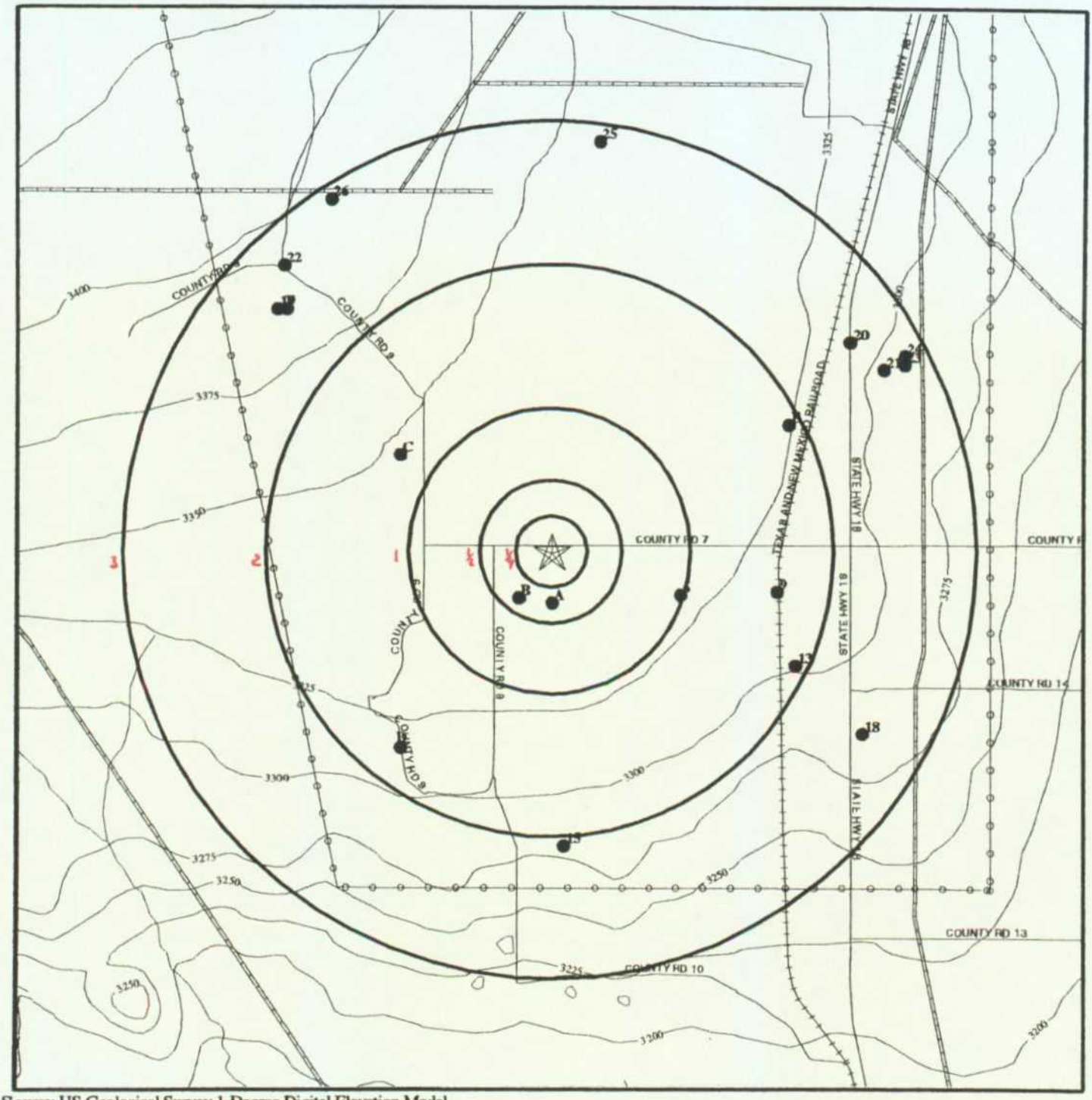
The EDR GeoCheck™ Report consists of the following information within a customer specified radius of the target property.

- topography (25 foot intervals unless otherwise shown)
- major roads
- surface water bodies
- railroad tracks
- flood plains (available in selected counties)
- wetlands (available in selected counties)
- wells including depth to water table and water level variability (in federal and selected state databases)
- public water supply wells (including violations information)
- geologic data
- radon data.

The EDR GeoCheck™ Report is a general area study. It may or may not be accurate at any specific location.

APPENDIX C

TOPOGRAPHIC MAP –427872.1s –'Enercon Services, Inc.'



Source: US Geological Survey 1-Degree Digital Elevation Model
Compiled 09/15/92

0 1/2 1 2

scale in miles

–Major Roads

–Contour lines (25 foot interval unless otherwise shown)

–Waterways

–Wells within search distance to Target Property

–Earthquake Epicenters (Richter 5 or greater)

–Power lines

–Pipe lines

–Fault lines

–Water

N

TARGET PROPERTY:	Jal Cooper Ranch	CUSTOMER:	Enercon Services, Inc.
ADDRESS:	Lea County	CONTACT:	Randall Lantz
CITY/STATE/ZIP:	Jal NM 88252	INQUIRY #:	427872.1s
LAT/LONG:	32.2094 / 103.2286	DATE:	November 01, 1999

WELL SEARCH SUMMARY

GEOLOGIC AGE IDENTIFICATION†

Geologic Code:	Tpc
Era:	Cenozoic
System:	Tertiary
Series:	Pliocene

ROCK STRATIGRAPHIC UNIT†

Category:	Continental Deposits

SEARCH DISTANCE RADIUS INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal Database	3.000
State Database	3.000
PWS Database	3.000

FEDERAL DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
• A1	321215103134301	1/4 - 1/2 Mile South
• A2	321215103134302	1/4 - 1/2 Mile South
• B3	321217103135701	1/4 - 1/2 Mile SW
• B4	321216103135602	1/4 - 1/2 Mile SW
• B5	321216103135601	1/4 - 1/2 Mile SW
6	321218103124601	1/2 - 1 Mile ESE
C7	321309103144801	1 - 2 Miles WNW
C8	321308103145101	1 - 2 Miles WNW
9	321219103120401	1 - 2 Miles East
D11	321123103145101	1 - 2 Miles SW
D10	321122103144801	1 - 2 Miles SW
E12	321320103115901	1 - 2 Miles ENE
E14	321319103115701	1 - 2 Miles ENE
13	321152103115601	1 - 2 Miles ESE
15	321046103133801	>2 Miles South
F17	321402103153901	>2 Miles NW
F16	321402103153701	>2 Miles NW
18	321127103112801	>2 Miles ESE
19	321402103154101	>2 Miles NW
20	321350103113301	>2 Miles NE
21	321340103111901	>2 Miles ENE
22	321418103153801	>2 Miles NW
23	321342103111001	>2 Miles ENE
24	321345103111001	>2 Miles ENE
25	321503103132201	>2 Miles North
26	321442103151801	>2 Miles NNW

Cooper Ranch House Domestic are mis located 700' South of their actual Location

Near & Inside Jal - Cooper Cemetery.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
NO WELLS FOUND		

† Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

WELL SEARCH FINDINGS

Map ID
Direction
Distance

A1
South
1/4 - 1/2 Mile

Site ID:	321215103134301	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3346.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	149.12 ft.	Water Level:	146.74 ft.
Date Measured:	03/06/53	Date Measured:	12/02/70

A2
South
1/4 - 1/2 Mile

Site ID:	321215103134302	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3346.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	155.00 ft.	Water Level:	146.11 ft.	Water Level:	146.17 ft.	Water Level:	146.66 ft.
Date Measured:	10/14/65	Date Measured:	03/26/68	Date Measured:	12/02/70	Date Measured:	01/14/76

B3
SW
1/4 - 1/2 Mile

Site ID:	321217103135701	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3346.20 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	142.26 ft.
Date Measured:	01/14/76

WELL SEARCH FINDINGS

Map ID
Direction
Distance

B4
SW
1/4 - 1/2 Mile

Site ID:	321216103135602	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3348.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	143.17 ft.	Water Level:	143.71 ft.
Date Measured:	12/02/70	Date Measured:	01/14/76

B5
SW
1/4 - 1/2 Mile

Site ID:	321216103135601	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3348.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	141.38 ft.	Water Level:	141.62 ft.	Water Level:	142.25 ft.
Date Measured:	04/03/68	Date Measured:	12/02/70	Date Measured:	01/14/76

6
ESE
1/2 - 1 Mile

Site ID:	321218103124601	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3320.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	134.38 ft.	Water Level:	133.90 ft.	Water Level:	133.19 ft.
Date Measured:	03/26/68	Date Measured:	12/02/70	Date Measured:	01/14/76

WELL SEARCH FINDINGS

Map ID
Direction
Distance

C7
WNW
1 - 2 Miles

Site ID:	321309103144801	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3383.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level: 178.27 ft.
Date Measured: 01/14/76

C8
WNW
1 - 2 Miles

Site ID:	321308103145101	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3393.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	176.61 ft.	Water Level:	176.23 ft.	Water Level:	177.15 ft.	Water Level:	178.19 ft.
Date Measured:	10/19/65	Date Measured:	03/26/68	Date Measured:	12/01/70	Date Measured:	01/14/76

9
East
1 - 2 Miles

Site ID:	321219103120401	Info. Source:	USGS
Site Type:	Single well, other than collector or Ranney type		
Year Constructed:	Not Reported	County:	Lea
Altitude:	3302.00 ft.	State:	New Mexico
Well Depth:	Not Reported	Topographic Setting:	Not Reported
Depth to Water Table:	Not Reported	Prim. Use of Site:	Not Reported
Date Measured:	Not Reported	Prim. Use of Water:	Not Reported

LITHOLOGIC DATA

Not Reported

WATER LEVEL VARIABILITY

Water Level:	125.92 ft.	Water Level:	125.92 ft.	Water Level:	125.98 ft.
Date Measured:	02/27/68	Date Measured:	12/02/70	Date Measured:	01/20/76

T24S, R36E

T24S, R37E

Whitten/Lea Ltd

Deep Wells Ranch Inc

Jimmy Joe Doom

William J. Grobe & Elena Bell Grobe Trust

George W. Poage III 100ac.

1006.2'

Texas-New Mexico Pipeline Co. 200' each side

466.8'

466.8'

Burl Alexander

376.4'

460'

466.8'

373.2'

City of Jal

420'

300'

420'

Transwestern Pipeline Co.

Fred B. Cooper Ranch

Ludean E. Cantrell

E Cantrell

Ludean

Ronald M Harrison & Henry H. Harrison Jr.

Jal Public Library Fund

J.T. Crawford

Library Jal Trust

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999

Certified Mail No. Z 165 512 246

Transwestern Pipeline Co.
Property Tax Department
P.O. Box 1188
Houston, Texas 77251

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

Don R. Parsons, Jr.

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 247

Jal Public Library Fund
C.D. Woolworth Trust
P.O. Box 178
Jal, NM 88252

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

Don R. Parsons, Jr.

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 248

Jimmy Joe Doom
Star Route
Jal, NM 88252

RE: Landfarm Permitting

Dear Mr. Doom:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999

Certified Mail No. Z 165 512 249

J.T. Crawford
Drawer T
Jal, NM 88252

RE: Landfarm Permitting

Dear Mr. Crawford:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999

Certified Mail No. Z 165 512 250

Burl H. Alexander
Box 913
Jal, NM 88252

RE: Landfarm Permitting

Dear Mr. Alexander:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

FOR Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 251

Deep Wells Ranch, Inc.
Combest Ranch
Star Route
Jal, NM 88252

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 252

Henry H. Harrison, Jr. &
Ronald M. Harrison
1700 N. Big Spring Street
Midland, TX 79701

RE: Landfarm Permitting

Dear Sirs:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

FOR Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999

Certified Mail No. Z 165 512 253

Elena Bell Grobe &
William Jarvis Grobe Trust
Drawer G
Jal, NM 88252

RE: Landfarm Permitting

Dear Ms. Grobe:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

FOR Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999

Certified Mail No. Z 165 512 254

George W. Poage III
P.O. Box 106
Rankin, TX 79778

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 176

Whitten/Lea Ltd.
Real Estate Tax Service
P.O. Box 771
Abilene, TX 79604

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 177

City of Jal
Jal, NM 88252

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999 **Certified Mail No.** Z 165 512 178

Texas-New Mexico Railroad
Real Estate Tax Services
P.O. Box 202378
Austin, TX 78720

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999

Certified Mail No. Z 165 512 179

Ludean E. Cantrell
c/o C. Pruett
4501 N. Central Road
Bethany, OK 73088

RE: Landfarm Permitting

Dear Sir/Madam:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

November 15, 1999

Certified Mail No. Z 186 741 142

Mr. Sam Cooper
Rural Route 1
Box 141
Blossom, Texas 75416

RE: Landfarm Permitting

Dear Mr. Cooper:

Pursuant to the requirements of New Mexico Oil Conservation Division Rule 711, notice is hereby given that Equiva Services LLC, on behalf of Equilon Pipeline Company, is applying for a permit to construct four landfarms on the Sam Cooper Ranch in Lea County, New Mexico for the purpose of bioremediating crude oil impacted soil from historical spills. It is anticipated that it will require approximately two years to complete the remediation of the soil to NMOCD standards. The proposed landfarms will not be commercial facilities, but will treat soil from Equilon's previous operations on the Sam Cooper Ranch only. Locations of the proposed landfarms are as follows:

Landfarm #1 (9.25 acres) - 1529 FNL, 670 FEL, Section 23, Township 24 S, Range 36 E
Landfarm #2 (0.74 acres) - 928 FNL, 2418 FEL, Section 24, Township 24 S, Range 36 E
Landfarm #3 (0.71 acres) – 954 FNL , 1273 FEL, Section 24, Township 24 S, Range 36 E
Landfarm # 4 (4.10 acres) – 2296 FNL, 1572 FWL, Section 14, Township 24 S, Range 36 E

You are being notified of the permit applications in accordance with state regulations because you may own land, which lies within a one-mile radius of the proposed landfarm cells. If you have any questions about the permitting process please contact Ms. Martyne Kieling at the NMOCD in Hobbs, New Mexico, telephone no. (505) 827-7153.

Sincerely yours,
Equiva Services LLC

Don R. Parsons, Jr.

For Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

CC: Don R. Parsons, Jr., Enercon Services INC.

NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

CONSERVATION DIVISION
DISTRICT I HOBBS
PO BOX 1980, Hobbs, NM 88241
(505) 393-6161
FAX (505) 393-0720

Jennifer A. Salisbury
CABINET SECRETARY

November 1, 1999

CERTIFIED MAIL Z 402 901 815
RETURN RECEIPT REQUESTED

Greg Vratil
Equilon Pipeline Company
P.O. Box 1910
Midland, Tx 79702

Re: Work Plan for Sam Cooper Ranch Remediation Project

Dear Mr. Vratil:

The New Mexico Oil Conservation Division (NMOCD) is in receipt of the work plan dated September 9, 1999, and received on October 14, 1999, for the above captioned project. NMOCD Environmental Bureau Representatives, Donna Williams and Wayne Price, visited the site on October 25, 1999, and observed remediation activities and oilfield waste being deposited into un-permitted landfarms.

In order for NMOCD to properly evaluate the submitted work plan, Equilon Pipeline is required to submit the following additional information by November 15, 1999.

1. Equilon Pipeline must demonstrate that all waste would be Exempt or is classified as RCRA Non-Hazardous per EPA CFR 40 part 261.

2. Provide a legal survey and plot plan for each proposed remediation and landfarm site. Include on each plot plan the location and/or distance to any buried pipeline or significant surface equipment or feature.

3. Submit to NMOCD site assessment information per NMOCD guidelines for each proposed remediation and landfarm site. Please demonstrate for each site how Equilon Pipeline determined the estimated closure values for TPH and BTEX .

4. Submit a copy of the site safety and health plan.

In addition, the NMOCD has the following requirements:

1. Equilon Pipeline must submit to the NMOCD Environmental Bureau an application for all landfarms pursuant to 19 NMAC 15.I .711 (Rule 711) by November 10, 1999. Please contact Martyne Kieling at 505-827-7153 concerning landfarm permits.

2. Equilon Pipeline is hereby ordered not to cover or close any site without first notifying the NMOCD District office. Please notify the NMOCD at least 48 hours in advance of the scheduled activities such that the NMOCD has the opportunity to witness the events and/or split samples during OCD's normal working hours.

3. Equilon Pipeline is hereby ordered to secure all work sites pursuant to the work plan. During NMOCD's site inspection there were no fences around pits and the landfarm areas were not bermed.

4. Equilon Pipeline must submit EPA approved third party laboratory analytical results for each sample collected for final site closure. Equilon shall maintain records for all field screening sampling events. NMOCD will require bottom hole and sidewall samples for each site. Bottom hole samples may be a five point composite, if there are no obvious "hot spots". All hot spots shall be delineated. These final results may be submitted in the final closure report.

Equilon Pipeline is hereby notified and is required to submit for NMOCD approval a site investigation and/or a remediation plan(s) for any future sites and/or cleanup projects.

Please note failure to abide by all of the above requirements in a timely fashion may result in a "Notice of Violation" being issued to Equilon Pipeline Company.

Sincerely,

Chris Williams

Chris Williams - District I Supervisor

cc: Roger Anderson-Environmental Bureau Chief
Martyne Kieling-Environmental Bureau
File

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MEMORANDUM OF MEETING OR CONVERSATION

☒ Telephone ☐ Personal	Time 3:10	Date 11-8-99

Originating Party	Other Parties
Don Parsons Equilon	Marlyn Kieling

Subject Extension of time From November 10th For an Extra week to Have a "11" Permit Application In to Santa Fe by the 19th 11-19-99

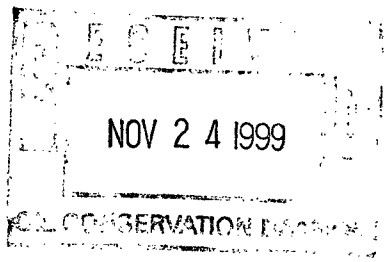
Discussion

Conclusions or Agreements Equilon will write a Note Letter As to this agreement & cc Chris Williams

Distribution

Signed Marlyn J Kieling

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together



COPY

November 16, 1999

Mr. Chris Williams
District I Supervisor
Oil Conservation Division
New Mexico Energy, Minerals & Natural Resources Department
1625 North French Drive
Hobbs, New Mexico 88240

RE: Response to November 1, 1999 letter

Dear Mr. Williams:

The purpose of this letter is to address those directives issued to Equilon Pipeline in your letter to Greg Vratil, dated November 1, 1999.

1) *Equilon Pipeline must demonstrate that all waste would be Exempt or is classified as RCRA Non-Hazardous per EPA CFR 40 part 261.*

Response: In 1980 Congress specifically exempted "drilling fluids, produced waters, and other wastes associated with the exploration, development, or production of crude oil or natural gas or geothermal energy" from regulation under RCRA Subtitle C as hazardous wastes, at least until the EPA could study these wastes.

On July 6, 1988, after performing the study of oil and gas wastes mandated by Congress, EPA published its Regulatory Determination. In its Regulatory Determination, EPA concluded that the exemption for produced water, drilling fluids, and associated wastes should continue. EPA also made its first efforts to define the scope of this exemption. EPA reviewed both the statutory language and the legislative history and determined that the exemption for wastes associated with the exploration, development, and production of oil and gas covers only those wastes **uniquely associated with primary field operations.** Primary field operations include primary, secondary, and tertiary production of oil or gas.

With respect to oil production, primary field operations include activities occurring at or near the wellhead or production facility, but **before the point where the custody of the oil is transferred from an individual field facility or a centrally located facility to a carrier for transport to a refiner.**

The crude oil impacted soil which Equilon proposes to landfarm originated from leaks in a crude oil **gathering** system, prior to the point of custody transfer and prior to entering the pipeline for transportation to the refinery. Therefore, the leaks occurred during primary field operations and the resultant crude oil impacted soil is Exempt from RCRA Subtitle C.

2) *Provide a legal survey and plot plan for each proposed remediation and landfarm site. Include on each plot plan the location and/or distance to any buried pipeline or significant surface equipment or feature.*

Response: Attachment A contains surveyed locations for each of the impacted sites as well as locations for each of the proposed landfarm sites. Please note that the aerial extent of each landfarm, as shown in the column entitled "Acreage" on the November 9 John West Surveying Company letter is incorrect. The surveyor surveyed the entire fenced area around each landfarm, instead of the area to be contained within berms. The area surveyed includes strips of land approximately 30-40 feet wide between the fence and berms that will be used for access to the landfarm cells. Figure 1 is a Site Vicinity Map

28510C Tomball Parkway PMB Suite 406, Tomball TX 77375
Phone 281-252-6914 Facsimile 281-252-6917

which shows the impacted sites plotted on the USGS Jal, NM 7.5 minute quadrangle. Figure 2 shows the locations of the proposed landfarm cells and their spatial relationship to roads, pipelines, and other cultural features as noted on the Jal quadrangle. Figures 3,4,5, and 6 show the layouts and dimensions of each of the proposed landfarms.

3) *Submit to NMOCD site assessment information per NMOCD guidelines for each proposed remediation and landfarm site. Please demonstrate for each site how Equilon Pipeline determined the estimated closure values for TPH and BTEX.*

Response: Based upon groundwater elevations as measured in the Jal-Cooper Cemetery water wells (152 feet bgs), depth to groundwater within the area of interest ranges from approximately 133 feet below ground surface (bgs) to 177 feet bgs. Areas of impacted soil which are to be excavated and bioremediated in the proposed landfarm cells are shown on the attached Figure 1 (Attachment A).

According to NMOCD guidelines, the impacted soils are classified as "Unsaturated Contaminated Soils." Table 1 (Attachment A) illustrates laboratory analytical results from the first round of confirmatory sampling and also presents the NMOCD ranking for each site.

A tabulation of surveyed locations of the landfarm cells and impacted sites are presented in the John West Surveying Company letter included in Attachment A.

On-site soils consist of alluvial red beds from the surface to a depth of approximately 5 feet bgs. The red beds are underlain by caliche and discontinuous sand stringers from 5 feet bgs to approximately 130 feet bgs. The Ogallala, consisting of consolidated beach sand, is encountered at a depth of approximately 130 feet bgs and extends to 220-250 feet bgs.

Closure values for Benzene, BTEX, and TPH were determined for each site by using the NMOCD ranking criteria. Depth to groundwater for each site is greater than 100 feet bgs. There are no surface bodies of water within 1,000 horizontal feet of the areas of interest. All impacted sites, with the exception of leak nos. 10 and 11 are greater than 1,000 feet from a water source. Leak nos. 10 and 11 are approximately 800 feet from the Jal-Cooper Cemetery well. NMOCD Ranking for these two spill sites is, because of their distance from the Cemetery well, 20. Cleanup levels for leaks 10 and 11 will, therefore, be 100 ppm above background for TPH, 50 ppm BTEX, and 10 ppm Benzene. Cleanup levels for all other areas will be 5,000 ppm above background for TPH, 50 ppm BTEX, and 10 ppm Benzene.

4) *Submit a copy of the site safety and health plan.*

Response: See Attachment B

Enercon Services, on behalf of Equilon Pipeline Company, has been coordinating with Martyne Kieling the preparation of applications for landfarm permits, as directed in your November 1, 1999 letter. Ms. Kieling has granted an extension of time in order for us to properly prepare the necessary submittals, which we anticipate will be presented the week of November 15, 1999.

EQUIVA
SERVICES LLC
Shell, Texaco & Saudi Aramco Working Together

Thank you for your assistance in the permitting process. If you have any questions or comments, please feel free to contact me.

Sincerely yours,
Equiva Services LLC

for Kyle Landreneau
Environmental Geologist
SE/Science & Engineering

"Equiva Services LLC provides miscellaneous services, including environmental services, on behalf of its owners Motiva Enterprises LLC and Equilon Enterprises LLC, and on behalf of, Shell Oil Company, Star Enterprise and Texaco Inc."

Cc: Don R. Parsons – Enercon Services, Inc
Donna Williams – New Mexico OCD, Hobbs District Office
Martyne Kieling – New Mexico OCD, Sante Fe New Mexico

28510C Tomball Parkway PMB Suite 406, Tomball TX 77375
Phone 281-252-6914 Facsimile 281-252-6917

ATTACHMENT A

28510C Tomball Parkway PMB Suite 406, Tomball TX 77375
Phone 281-252-6914 Facsimile 281-252-6917

(505) 393-3942

(505) 393-3117

JOHN WEST
SURVEYING
COMPANY
EMPLOYEE OWNED

412 North Dal Paso
Hobbs, New Mexico 88240

November 9, 1999

Jeff Kindley
Enercon Services, Inc.
P.O. Box 51138
Midland, Texas 79710-1138

Mr. Kindley,

On November 8, 1999, we performed a land survey to determine the relative location of 18 leak sites and four land farm sites in Lea County, New Mexico. The results of that survey are as attached.

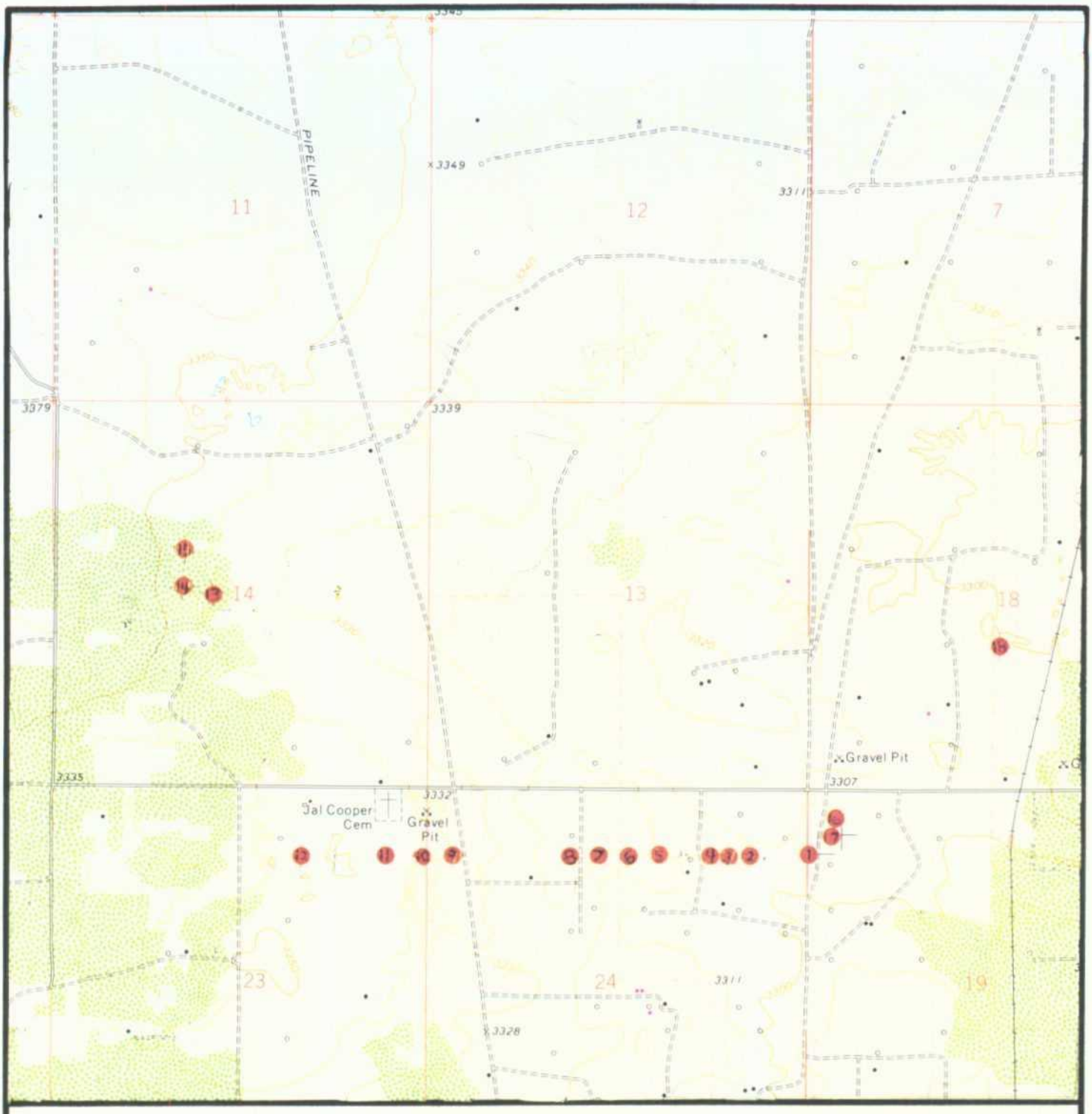
Please contact me if you have any questions.

Thank you.

Gary Eidson, P.S.
John West Surveying Company

W.O. #99110945

Site Description	Tie To Section Line		Section	Township	Range	Acreage
Land Farm #4	2296 FNL	1572 FWL	14	24S	36E	5.44 Acres
Leak #13	2611 FNL	2200 FWL	14	24S	36E	
Leak #14	2487 FNL	1854 FWL	14	24S	36E	
Leak #15	2233 FNL	1808 FWL	14	24S	36E	
Land Farm #1	1529 FNL	670 FEL	23	24S	36E	15.92 Acres
Leak #10	1078 FNL	92 FEL	23	24S	36E	
Leak #11	1116 FNL	502 FEL	23	24S	36E	
Leak #12	1076 FNL	1498 FEL	23	24S	36E	
Leak #9	1044 FNL	185 FWL	24	24S	36E	
Leak #8	1046 FNL	2041 FWL	24	24S	36E	
Land Farm #2	928 FNL	2418 FEL	24	24S	36E	1.47 Acres
Land Farm #3	954 FNL	1273 FEL	24	24S	36E	1.60 Acres
Leak #7	1053 FNL	2658 FEL	24	24S	36E	
Leak #6	1047 FNL	2583 FEL	24	24S	36E	
Leak #5	950 FNL	1952 FEL	24	24S	36E	
Leak #4	1045 FNL	1482 FEL	24	24S	36E	
Leak #3	1100 FNL	1087 FEL	24	24S	36E	
Leak #2	1059 FNL	598 FEL	24	24S	36E	
Leak #1	1075 FNL	64 FWL	19	24S	37E	
Leak #16	659 FNL	477 FWL	19	24S	37E	
Leak #17	507 FNL	611 FWL	19	24S	37E	
Leak #18	1651 FSL	2580 FEL	18	24S	37E	



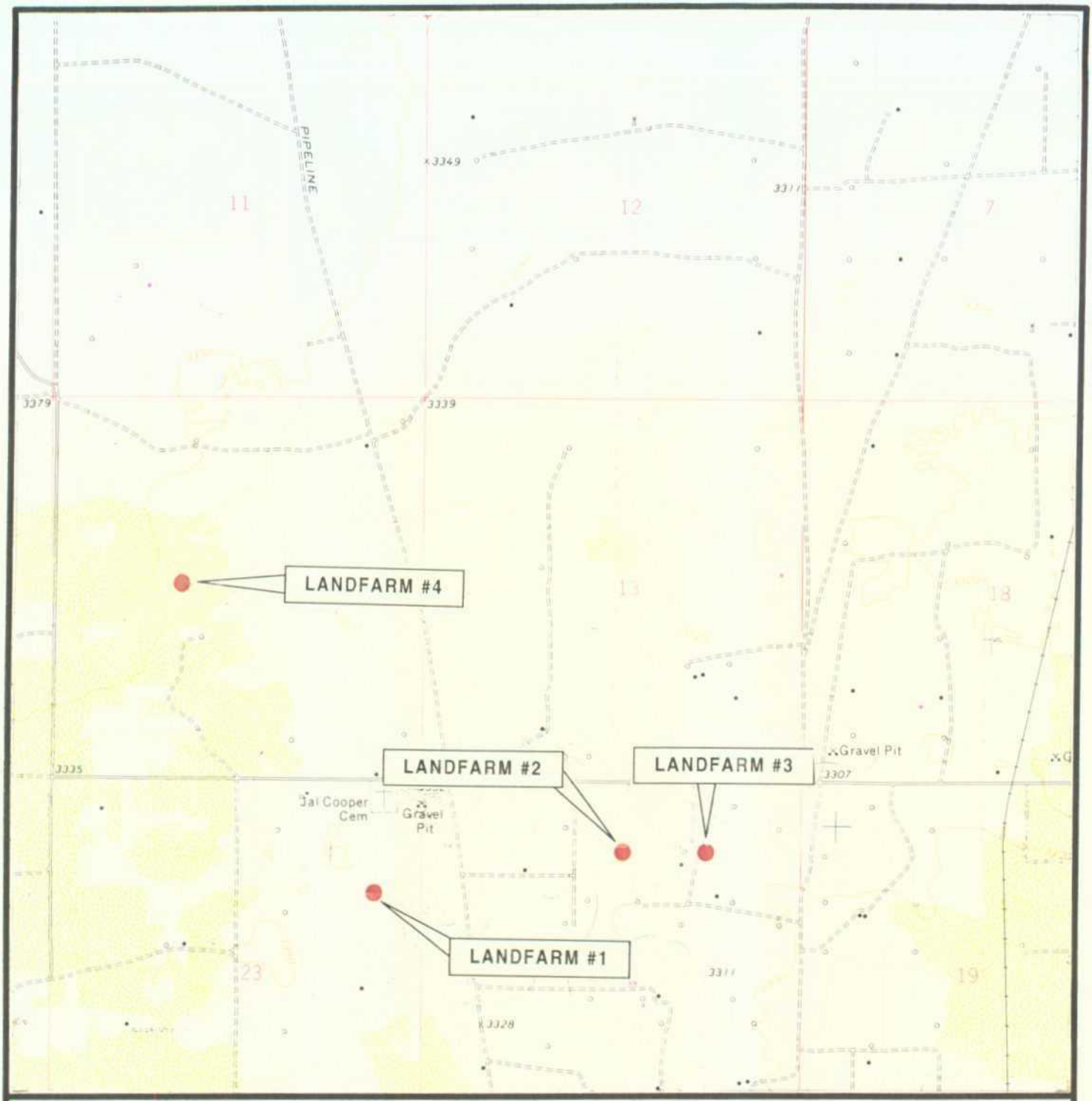
U.S.G.S. Topographic Map
Jal, NM Quandrangle
Photorevised 1979

N

SITE VICINITY MAP
Scale: 1" = 24,000'
Figure 1

EQUVA SERVICES, INC.

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 120
DALLAS, TX 75234-7420
(972) 484-3854



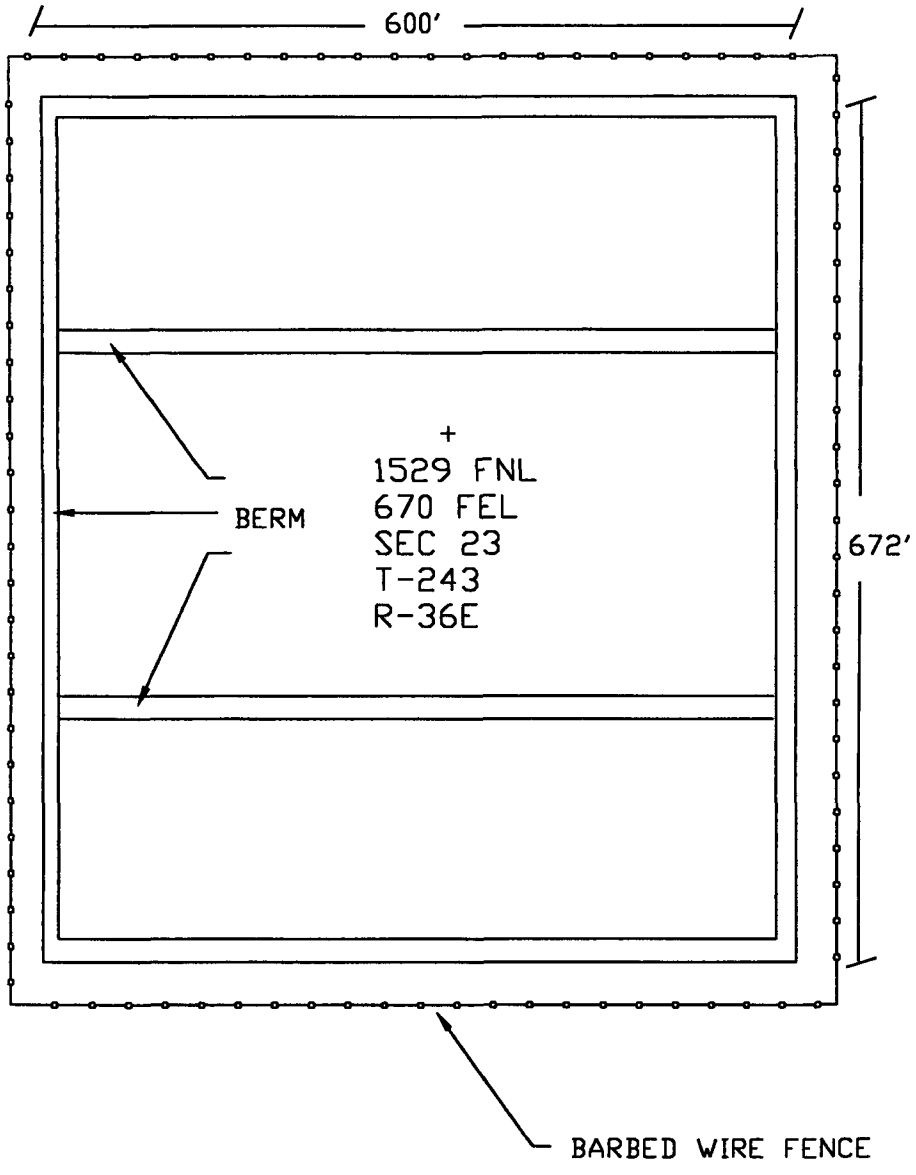
U.S.G.S. Topographic Map
Jal, NM Quandrangle
Photorevised 1979

N

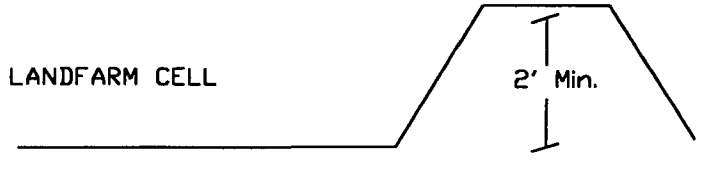
LANDFARM LOCATION MAP
Scale: 1" = 24,000'
Figure 2

EQUIVA SERVICES, INC.

ENERCON SERVICES, INC.
2775 VILLA CREEK
SUITE 120
DALLAS, TX 75234-7420
(972) 484-3854



BERM DIAGRAM



NOT TO SCALE

LANDFARM #1 DIAGRAM

NOVEMBER 16, 1999

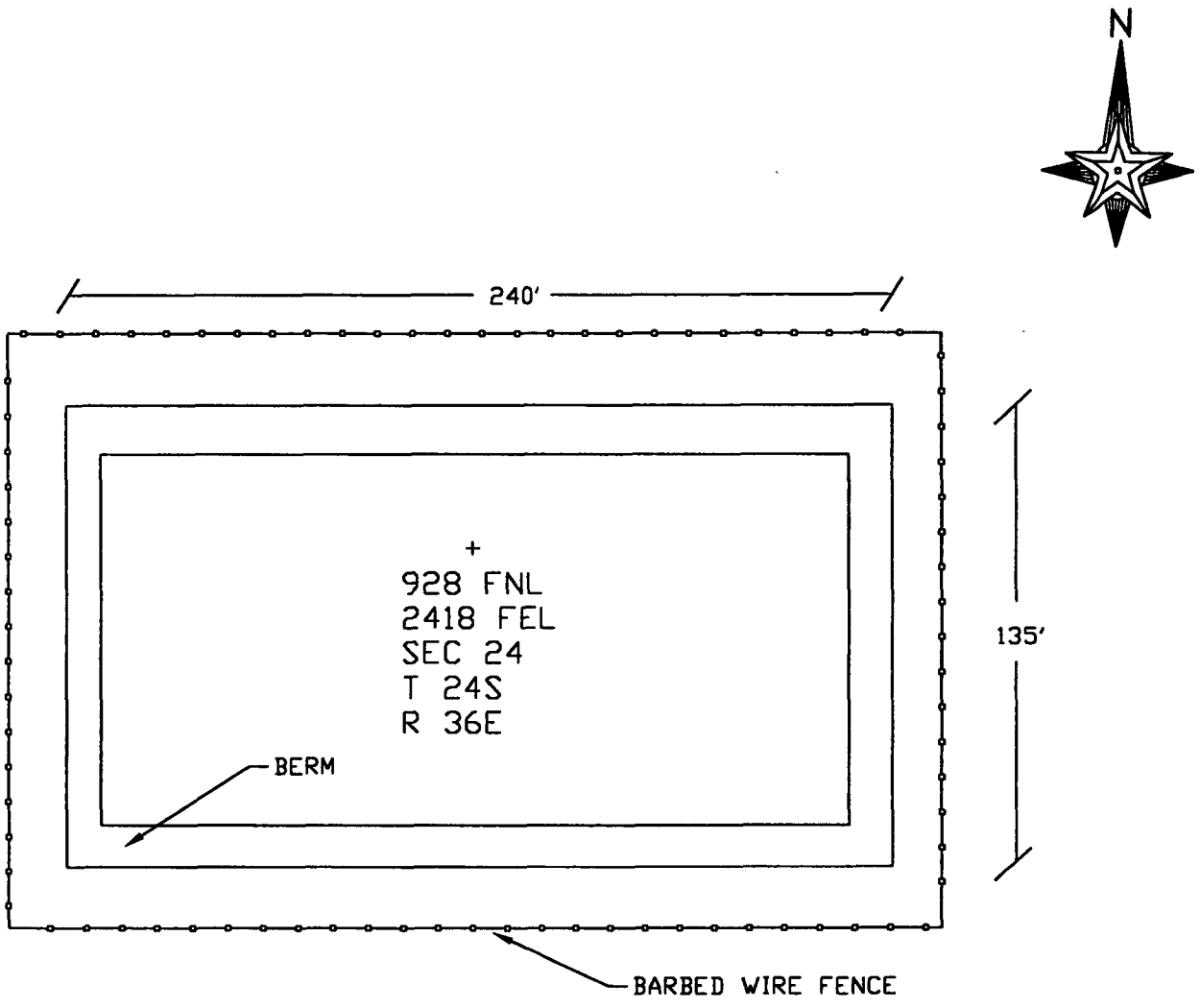
PREPARED FOR:
EQUIVA SERVICES, INC.

PREPARED BY:
ENERCON SERVICES, INC.
2775 VILLA CREEK, SUITE 120
DALLAS, TX 75234
972/484-3854

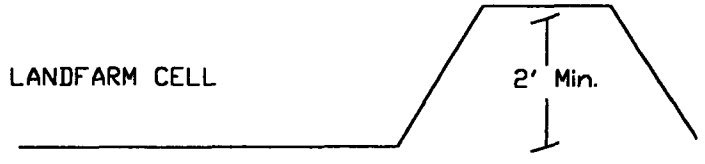
DRAWN BY: B. Mc

PROJECT NUMBER: ES-347

FIGURE 3

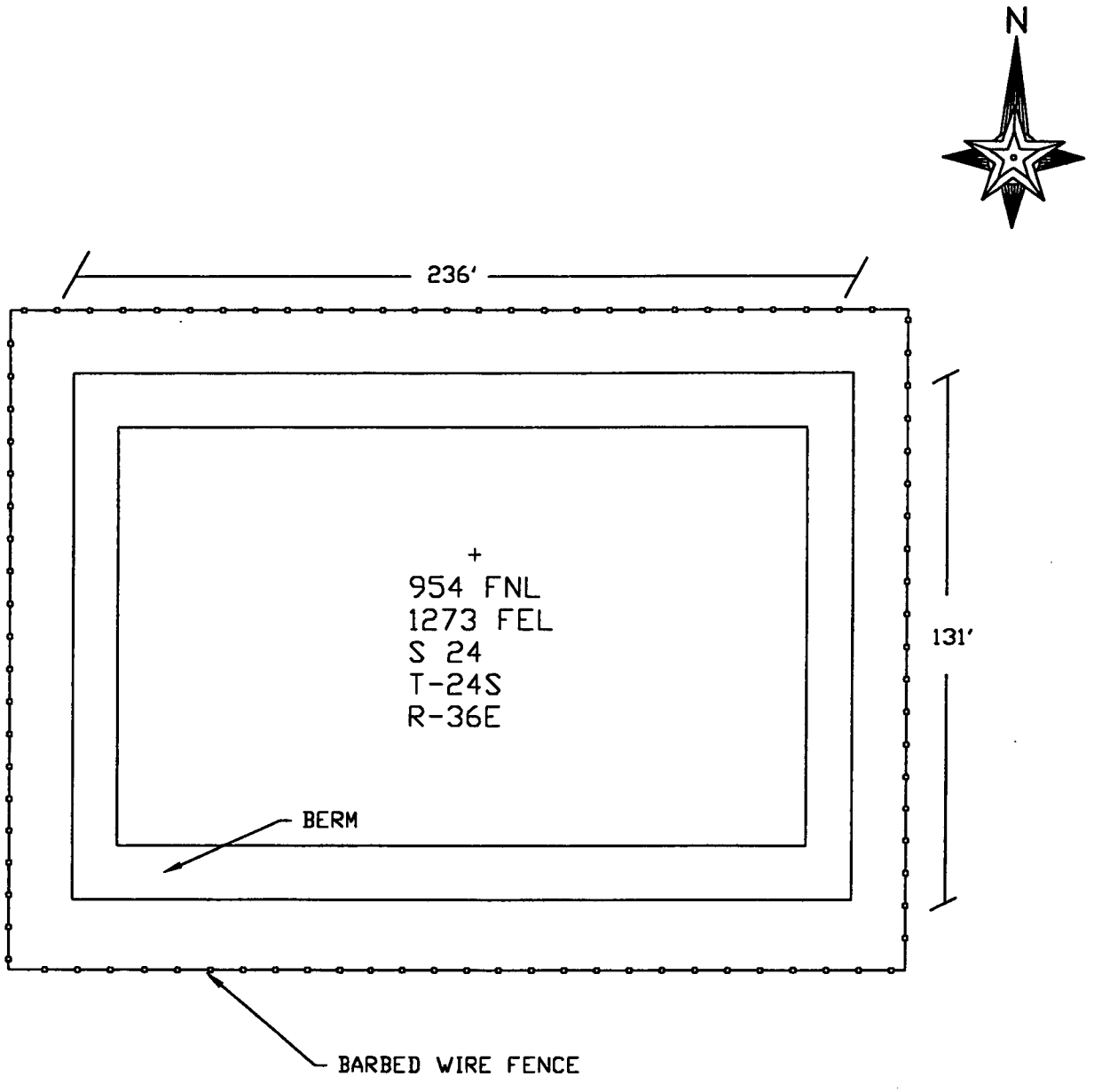


BERM DIAGRAM

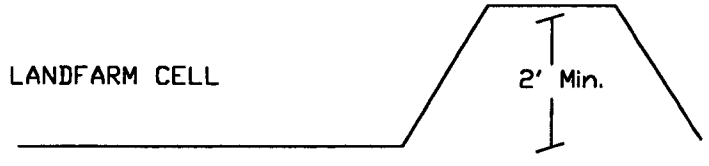


NOT TO SCALE

LANDFARM #2 DIAGRAM		NOVEMBER 16, 1999	
PREPARED FOR: EQUIVA SERVICES, INC.	PREPARED BY: ENERCON SERVICES, INC. 2775 VILLA CREEK, SUITE 120 DALLAS, TX 75234 972/484-3854	DRAWN BY: B. Mc PROJECT NUMBER: ES-347	FIGURE 4



BERM DIAGRAM



NOT TO SCALE

LANDFARM #3 DIAGRAM		NOVEMBER 16, 1999	
PREPARED FOR: EQUIVA SERVICES, INC.	PREPARED BY: ENERCON SERVICES, INC. 2775 VILLA CREEK, SUITE 120 DALLAS, TX 75234 972/484-3854	DRAWN BY: B. Mc PROJECT NUMBER: ES-347	FIGURE 5

TABLE 1
SOIL ANALYTICAL RESULTS
EQUIVA JAL/COOPER CEMETARY
LEA COUNTY, NEW MEXICO

Sample Location	Date	Benzene (in ug/L)	Toluene (in ug/L)	Ethylbenzene (in ug/L)	Xylenes (in ug/L)	Total BTEX (in ug/L)	TPH (in mg/L)	Depth to groundwater	NMOCD Ranking
Site 1 (1.5 feet)	10/08/99	ND	ND	ND	ND	ND	500	133.19'	0
Site 2 (2 feet)	10/04/99	ND	1	ND	1.3	2.7	520	133.19'	0
Site 3 (2 feet)	10/04/99	ND	ND	ND	ND	ND	465	133.19'	0
Site 4 (2 feet)	10/04/99	ND	ND	ND	ND	ND	980	133.19'	0
Site 5 (1.5') Southern Sect.	09/23/99	4.2	9.0	1.9	8.4	23.5	140	146.66'	0
Site 5 (1.5') Northern Sect.	09/23/99	ND	2.4	ND	4.6	7.0	60	146.66'	0
Site 5 (1.5') Central Sect.	09/23/99	3.1	13	1.6	8.4	26.1	310	146.66'	0
Site 6 (2 feet)	09/23/99	1.5	6.5	1.4	6.7	16.1	300	146.66'	0
Site 7 North sec. Surface	09/23/99	NS	NS	NS	NS	NS	10	146.66'	0
Site 7 (1.0') West Sect.	09/23/99	ND	ND	ND	ND	ND	15	146.66'	0
Site 7 (1.0') East Sect.	09/23/99	ND	1.1	ND	6.2	7.3	55	146.66'	0
Site 8 (1.5') North Sect.	09/23/99	ND	1.6	ND	2.0	3.6	315	146.66'	0
Site 8 (1.5') South Sect.	09/23/99	4.8	21.0	3.6	21.0	50.4	405	146.66'	0
NMOCD Rankings		10,000	NA	NA	NA	50,000	5,000	NA	NA

ND = Not detected NA = Not applicable NS = Not Sampled

TABLE 1(continued)
SOIL ANALYTICAL RESULTS
EQUIVA JAL/COOPER CEMETARY
LEA COUNTY, NEW MEXICO

Sample Location	Date	Benzene (in ug/L)	Toluene (in ug/L)	Ethylbenzene (in ug/L)	Xylenes (in ug/L)	Total BTEX (in ug/L)	TPH (in mg/L)	Depth to groundwater	NMOCD Ranking
Site 9 (1.5 feet)	09/13+10/04	ND	1.7	ND	1.7	3.4	680	142.25'	20
Site 10 (3.5') Nside of pipe	09/13/99	NS	NS	NS	NS	NS	6,000	142.25'	20
Site 10 (3.5') Sside of pipe	09/13/99	NS	NS	NS	NS	NS	9,900	142.25'	20
Site 10 (8.0') SS of pipe (north part of pit)	09/17/99	NS	NS	NS	NS	NS	6,500	142.25'	20
Site 10 (8.0') SS of pipe (Center part of pit)	09/17/99	NS	NS	NS	NS	NS	7,300	142.25'	20
Site 10 (8.0') Southeast sec.	09/17/99	NS	NS	NS	NS	NS	6,750	142.25'	20
Site 10 (8.0') Northside of pipe	09/20/99	NS	NS	NS	NS	NS	5,900	142.25'	20
Site 10 (8-10') Northwall	10/04/99	ND	ND	ND	6.5	6.5	1,520	142.25'	20
Site 10 (8-10') Eastwall	10/04/99	ND	ND	490	170	660	865	142.25'	20
Site 10 (8-10') Southwall	10/04/99	ND	ND	ND	ND	ND	35	142.25'	20
Site 10 (8-10') Westwall	10/04/99	ND	ND	ND	ND	ND	235	142.25'	20
Site 10 (12') Eastside	10/04/99	ND	ND	13	660	673	4,775	142.25'	20
Site 10 (12') Westside	10/04/99	ND	ND	230	120	350	895	142.25'	20
Site 10 (12') Northside	10/04/99	ND	ND	ND	61	61	6,750	142.25'	20
Site 10 (12') Central	10/04/99	ND	3.3	10	460	473.3	4,750	142.25'	20
Site 10 (12') Southside	10/04/99	ND	ND	ND	ND	ND	65	142.25'	20
Site 11 (8') Eastside	09/16/99	ND	35.0	190.0	2,500	2,725	660	142.25'	20
Site 11 (1.5') Adj. to pipe	09/16/99	ND	ND	ND	ND	ND	170	142.25'	20
Site 11 (1.5') Westside of pit	09/16/99	ND	ND	ND	ND	ND	150	142.25'	20
NMOCD Rankings		10,000	NA	NA	NA	50,000	100	NA	NA

ND = Not detected NA = Not applicable NS = Not Sampled

TABLE 1(continued)
SOIL ANALYTICAL RESULTS
EQUIVA JAL/COOPER CEMETARY
LEA COUNTY, NEW MEXICO

Sample Location	Date	Benzene (in ug/L)	Toluene (in ug/L)	Ethylbenzene (in ug/L)	Xylenes (in ug/L)	Total BTEX (in ug/L)	TPH (in mg/L)	Depth to groundwater	NMOCD Ranking
Site 12 (1.5 feet)	09/16/99	ND	ND	ND	ND	ND	635	142.25'	0
Site 13 (1.5 feet) southside	10/18/99	ND	ND	ND	ND	ND	30	177.15'	0
Site 13 (1.5') northside	10/18/99	ND	2	ND	2	4	270	177.15'	0
Site 14 (9 feet) westside	10/18/99	NS	NS	NS	NS	NS	11,500	177.15'	0
Site 14 (9 feet) center	10/18/99	NS	NS	NS	NS	NS	17,500	177.15'	0
Site 14 (9 feet) eastside	10/18/99	ND	ND	ND	160	160	1,400	177.15'	0
Site 15 (4 feet) underpipe	10/18/99	ND	81	450	2,600	3,131	10,300	177.15'	0
Site 16 (1.5 feet)	10/08/99	ND	ND	ND	ND	ND	725	133.19'	0
Site 17 (1.5 feet)	10/08/99	ND	ND	ND	ND	ND	500	133.19'	0
Site 18 (3 feet) southside	10/08/99	NS	NS	NS	NS	NS	6,350	121.97'	0
NMOCD Rankings		10,000	NA	NA	NA	50,000	5,000	NA	NA

ND = Not detected NA = Not applicable NS = Not Sampled

ATTACHMENT B

28510C Tomball Parkway PMB Suite 406, Tomball TX 77375
Phone 281-252-6914 Facsimile 281-252-6917

ENERCON SERVICES, INC.

EQUIVA JAL/COOPER
HEALTH AND SAFETY PLAN
PART A - IMMEDIATE INFORMATION

EQUIVA JAL/COOPER
HASP

The information in this RP HASP is provided solely for "the protection of the health and safety of Enercon Services, Inc. employees and subcontractors working under the direct supervision and control of Enercon Services, Inc. on this project. Enercon Services, Inc. assumes no liability for, or responsibility to, any other parties for the accuracy or completeness of the information contained herein for any use or reliance upon this RP HASP by any other party.

CONTENTS

PART A - SITE SPECIFIC HEALTH AND SAFETY PLAN INFORMATION

TABLES

APPENDICES

Enercon Services, INC.
RETAIL PETROLEUM
HEALTH AND SAFETY PLAN

PART A
EMERGENCY INFORMATION
HAZARD ANALYSIS
SITE-SPECIFIC REQUIREMENTS

This RP HASP addresses the safety issues associated with petroleum sites specifically involving the site activities described below. A laminated, color-coded reference card has been developed to provide health and safety guidance.

Project Activity/Task	Part C RP HASP Reference Card Required	
	Yes	No
Drilling		
Underground Storage Tank Removal		
Gauging, Bailing, Sampling Monitoring Wells		
Excavation and Trenching	YES	
Pilot Testing		
System Installation		
System Operation and Maintenance		
Confined Space Entry		
Air Monitoring		

For project activities at:

Jeffrey Kindley
Project Manager

Charles Harlan
Operations Manager

SITE EMERGENCY FORM

Contaminants of Concern: **Petroleum Hydrocarbons**
Minimum Level of Protection: Level D

Do not endanger your own life. Survey the situation before taking any action.

Enercon Services Office Telephone	972-484-3854
Project/Task Number	
Site Location Address	
Telephone Located at	Site (915) 631-6591

EMERGENCY PHONE NUMBERS **In the event of any emergency contact project manager or health and safety representative.**

Ambulance	911
Fire	911
Police	911
Hospital Name	
Hospital Phone Number	
Project Manager	Jeffrey Kindley
Health and Safety Representative	Jeffrey Kindley
Client Contact	Kyle Landreneau
Poison Control	800-764-7661 (800-POISON1)
State Agency	New Mexico OCD

UTILITY MARKER EMERGENCY TELEPHONE NUMBERS

Utility	Color Code	Telephone Number
Water Gas Electric Telephone/Cable Sewer	Blue Yellow Red Orange Green	
Dig Safe Telephone Number: 1-800-321-ALERT		

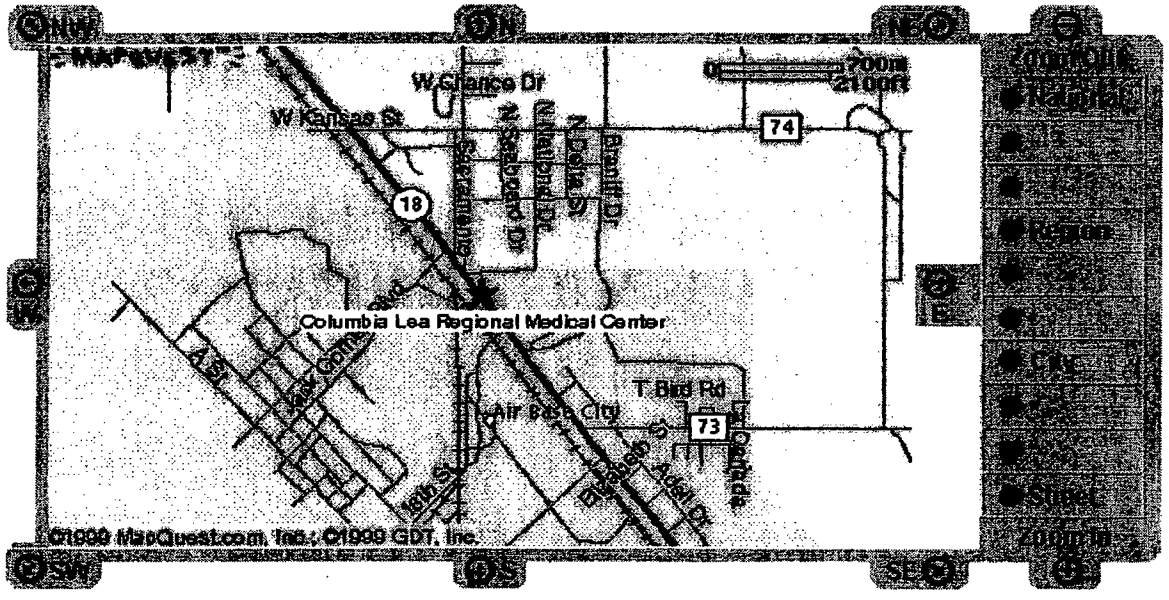
AOL NetFind | AOL Yellow Pages | **Search Results** Powered by superpages.com and switchboard

MORE INFO

Columbia Lea Regional Medical Center
5419 North Lovington Highway, Hobbs, NM 88240
(505) 392-6581
(505) 392-2487 (fax)

Search Again
Search Results
Create a New Map
Get Driving Directions

Appears in the Categories:
Counselors-Personal Problems, Hospitals, Medical Centers, Mental Health Services



Click map to recenter.
Click compass directions to move map.

Use Subject to License / Copyright

Hospital Location Map

HOSPITAL DIRECTIONS:	HOSPITAL INFORMATION:
North on Hwy 18 Hobbs, New Mexico	**Name:** Columbia Lea Regional Med. **Address:** 5419 N. Lovinton Hwy **City, State:** Hobbs, New Mexico **Phone:** Emergency: 911 General: 505-392-6581

PREFACE

This RP HASP is written to ensure the well-being of all Enercon Services, Inc. (Enercon) field personnel and the community surrounding the site. Accordingly, project staff and approved Enercon Services subcontractors must follow the policies and procedures established in this RP HASP. This RP HASP contains two sections: Parts A and B. Part A contains site-specific emergency information, hazard analysis, and project information. Part B contains standardized guidance procedures and practices to follow for all retail petroleum operations.

Based on the project activities and tasks conducted at this site, all personnel assigned to this project must read Part A of this RP HASP, the applicable sections of Part B, and then sign the Agreement and Acknowledgment Sheet on page iv to confirm that they understand and agree to abide by the provisions of this plan.

HAZARD ANALYSIS

For each task involved in this retail petroleum project, the types of hazards that may be encountered are identified in the "Hazard Analysis Matrix." For more detailed information, refer to the Part B RP HASP: "Standardized Retail Petroleum Health and Safety Information".

PROJECT SITE HAZARD ANALYSIS MATRIX

Hazards	Tasks							
	Drilling Boring Augering	UST Removal	Soil Sampling	Water Sampling	Pump Test	System Pilot Test	System Install.	System O&M
Potential H&S Impact to Community			Low					
Gasoline Fuels Exposure			Low					
OSHA Chemicals Exposure			Low					
Mechanical Equipment, and Construction			High					
Lifting and Material Handling			High					
Electrical			Low					
Fire and Explosion			Low					
Heat and Cold Stress			High					
Vehicular Traffic			Low					
Pedestrian Traffic			Low					
Overhead Utilities			High					
Underground Utilities			Med					
Noise			High					
Confined Space Entry			Low					
Poisonous Plants			Low					
Snakes, Spiders, and Insects			High					

SITE-SPECIFIC HEALTH AND SAFETY PROGRAM FORMS

Based on the site-specific hazard analysis, the following programs must be implemented and the accompanying forms, found in the appendices of the Part B RP HASP, completed. Attach all completed forms required for this project to the end of this Part A RP HASP.

Site-Specific Program	Required for Project	Part B RP HASP Appendix
Lockout/Tagout		C
Air Monitoring		E
Noise Monitoring		E
Excavation and Trenching	Yes	F
Confined Space Entry		G
Hot Work Permit		H
Daily Safety Meeting	Yes	J

AGREEMENT AND ACKNOWLEDGMENT SHEET

Enercon Services personnel have the authority to stop field activities at this site if any activity is not performed in accordance with the requirements of this RP HASP. All Enercon Services project personnel, subcontractor personnel, and visitors are required to sign the Agreement and Acknowledgment Sheet **prior** to conducting field activities at this site.

Enercon Services AGREEMENT AND ACKNOWLEDGMENT STATEMENT	
1. I have reviewed and fully understand Part A of this RP HASP and my responsibilities. **2. I am aware that additional, standardized health and safety information is available for me in Part B of this RP HASP.** **3. I agree to abide by the provisions of the RP HASP.**	
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date

Enercon Services AGREEMENT AND ACKNOWLEDGMENT STATEMENT	
1. I have reviewed and fully understand Part A of this RP HASP and my responsibilities. **2. I am aware that additional, standardized health and safety information is available for me in Part B of this RP HASP.** **3. I agree to abide by the provisions of the RP HASP.**	
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date

Enercon Services AGREEMENT AND ACKNOWLEDGMENT STATEMENT	
1. I have reviewed and fully understand Part A of this RP HASP and my responsibilities. **2. I am aware that additional, standardized health and safety information is available for me in Part B of this RP HASP.** **3. I agree to abide by the provisions of the RP HASP.**	
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date

Enercon Services AGREEMENT AND ACKNOWLEDGMENT STATEMENT	
1. I have reviewed and fully understand Part A of this RP HASP and my responsibilities. **2. I am aware that additional, standardized health and safety information is available for me in Part B of this RP HASP.** **3. I agree to abide by the provisions of the RP HASP.**	
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date

Enercon Services AGREEMENT AND ACKNOWLEDGMENT STATEMENT	
1. I have reviewed and fully understand Part A of this RP HASP and my responsibilities. **2. I am aware that additional, standardized health and safety information is available for me in Part B of this RP HASP.** **3. I agree to abide by the provisions of the RP HASP.**	
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date

Enercon Services AGREEMENT AND ACKNOWLEDGMENT STATEMENT	
1. I have reviewed and fully understand Part A of this RP HASP and my responsibilities. **2. I am aware that additional, standardized health and safety information is available for me in Part B of this RP HASP.** **3. I agree to abide by the provisions of the RP HASP.**	
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date
Name Company	Signature Date

ENERCON SERVICES, INC.

EQUIVA JAL/COOPER
HEALTH AND SAFETY PLAN
PART B - STANDARDIZED REFERENCE INFORMATION

EQUIVA JAL/COOPER

HEALTH AND SAFETY PLAN

CONTENTS

PART A - SITE-SPECIFIC HEALTH AND SAFETY PLAN INFORMATION

PART B - STANDARDIZED RETAIL PETROLEUM HEALTH AND SAFETY PLAN INFORMATION

TABLES

APPENDICES

Note: Pages iv-xv are presented in Part A and are not repeated here.

LIST OF ACRONYMS

ACGIH	American Conference of Governmental Industrial Hygienists
ANSI	American National Standards Institute
BTEX	Benzene, Toluene, Ethylbenzene, and Xylene
BWL	Body Water Loss
CET	Certified Environmental Trainer
CFR	Code of Federal Regulations
CGI	Combustible Gas Indicator
CHMM	Certified Hazardous Materials Manager
CIH	Certified Industrial Hygienist
COHN	Certified Occupational Health Nurse
CNS	Central Nervous System
CPR	Cardio-pulmonary Resuscitation
CRZ	Contaminant Reduction Zone
CSP	Certified Safety Professional
EMS	Emergency Medical Services
EPA	Environmental Protection Agency
EZ	Exclusion Zone
FID	Flame Ionization Detector
GFCI	Ground Fault Circuit Interrupter
HASP	Health and Safety Plan
HBV	Hepatitis B-Virus
HEPA	High Efficiency Particulate Air-Purifying
HR	Heart Rate
HSM	Health and Safety Manager
HSR	Health and Safety Representative
HSS	Health and Safety Specialist
IDLH	Immediately Dangerous to Life or Health
IP	Ionization Potential
JSA	Job Safety Analysis
LO/TO	Lockout/Tagout
LEL	Lower Explosive Limit
MD	Medical Director
mg/L	Milligrams per Liter
MSDS	Material Safety Data Sheet
NA	Not Available
NBR	Nitrile Butyl Rubber
NEC	National Electric Code
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Prevention Association
NRR	Noise Reduction Rating
OM	Operations Manager
OSHA	Occupational Safety and Health Administration
OT	Oral Temperature

LIST OF ACRONYMS (continued)

PEL	Permissible Exposure Limit
PID	Photoionization Detector
PIR	Preliminary Incident Report
PM	Project Manager
ppb	parts per billion
PPE	Personal Protective Equipment
ppm	parts per million
RCRA	Resource Conservation and Recovery Act of 1976
RN	Registered Nurse
RR	Relative Responses
SHSO	Site Health and Safety Officer
SLM	Sound Level Meter
SOW	Scope of Work
STEL	Short-Term Exposure Limit
TLV	Threshold Limit Value
TWA	8-hour Time-Weighted Average
ug/L	Micrograms per Liter
VP	Vapor Pressure
WBGT	Wet Bulb Globe Temperature
UST	Underground Storage Tank

1.0 INTRODUCTION

This Health and Safety Plan (HASP) is written to ensure the well-being of all ENERCON SERVICES, Inc. (ENERCON SERVICES) field personnel and the community surrounding the site. Accordingly, project staff and approved ENERCON SERVICES subcontractors must follow the policies and procedures established in the Retail Petroleum HASP. The Retail Petroleum HASP contains two sections: Parts A and B. Part A contains site-specific emergency information, hazard analysis, and project information. Part B contains standardized guidance procedures and practices to follow for all retail petroleum operations. It is intended to be used as a reference document to provide additional information to support Part A.

All work will comply with the Occupational Safety and Health Act (OSHA) standard, "Hazardous Waste Operations and Emergency Response" (29 CFR 1910.120), and other federal, state, and local procedures that require the development and implementation of a HASP. Generation of this document certifies that the workplace has been evaluated for the hazards as described. A hazard assessment has been performed and the adequacy of the personal protective equipment (PPE) selected is hereby certified per 29 CFR 1910.132(d) and is duly noted by the signature(s) and date appearing on the cover page of this document.

This Part of the HASP contains standardized information to address the health and safety issues associated with projects containing petroleum product contamination found on retail petroleum, bulk terminal, or refinery operations that typically involve the following activities.

- Field Survey and/or Walkover
- Aquifer Pump Test
- Drilling, Boring, Soil Sampling
- Tank Removal
- Well Installation
- Excavation and Trenching
- Well Monitoring and Maintenance
- Confined Space Entry
- Soil Gas Survey
- Groundwater Sampling
- Remediation System Pilot Testing
- Remediation System Installation
- Remediation System Operation and Maintenance

The minimum level of PPE for this project is Level D. Modified Level D will be worn when the possibility of contact to the skin or work uniform can occur from contaminated media (soil or water). Upgrade to Level C PPE will occur when the results of air monitoring reveal that action levels have been exceeded. Upgrade to Level B will occur only when specific approval and guidance has been given by the project manager (PM) and health and safety representative (HSR).

This HASP must be modified or amended when circumstances or conditions develop that are beyond the scope of routine petroleum product operations. Any changes in project work scope and/or site conditions as described must be amended in writing by the heath and safety representative, either the health and safety specialist (HSS) or health and safety manager (HSM), on the Retail Petroleum HASP Amendment Sheet (Appendix A). Such conditions include:

- Presence of Chlorinated Solvents
- Presence of Pesticides
- Level B Work
- Troubleshooting Energized Equipment

Table 1 presents an overview of the ENERCON SERVICES health and safety programs in which all field personnel are required to participate. These include the medical surveillance and comprehensive training programs in accordance with OSHA Hazardous Waste Operations and Emergency Response Standard, 29 CFR 1910.120.

Table 1. Health and Safety Programs

Activity	Description	Action
Medical Surveillance	■ The program tracks the physical condition of the Company's employees in compliance with Department of Transportation (DOT) regulations and OSHA standards, and other customer requirements.	■ Medical examinations and consultations are completed for all employees prior to assignment, annually, upon termination, and in the event of injury and/or illness resulting from exposure at the work site.
Training	■ Training requirements and programs comply with the OSHA Hazardous Waste Operations and Emergency Response regulation, 29 CFR 1910.120.	■ Field personnel must complete a minimum of 40 hours of hazardous waste activity instruction. ■ Field personnel must complete a minimum of three days supervised field instruction. ■ Field personnel assigned to the site will also receive 8 hours of refresher training each year. ■ On-site managers and supervisors directly responsible for employees engaged in hazardous waste operations receive an additional 8 hours of supervisory training. ■ Field personnel assigned to site also receive first aid/CPR and blood borne pathogen training.

2.0 PETROLEUM PRODUCTS HAZARD ANALYSIS

2.1 Petroleum Contaminants

The possible contaminants of concern for petroleum projects have been summarized in Table 2. This provides a ready reference to identify possible health hazards, potential exposure routes, symptoms of exposure, and incompatible materials associated with recovered product and contaminated media (soil and water). For more definitive and complete information refer to Appendix D, and the Material Safety Data Sheets (MSDS) for those products.

Table 2. Petroleum Products Contaminants Profile

Chemical	Exposure Route	Symptoms of Overexposure	Incompatibilities
Gasoline	Inhalation	Intense burning of mucous membranes, throat, and respiratory tract, flushing of face, staggering gait, slurred speech, mental confusion.	Oxidizing agents such as hydrogen peroxide, nitric acid.
	Ingestion	Inebriation, drowsiness, blurred vision, dizziness, confusion, vomiting, cyanosis.	
	Skin Contact	Prolonged skin contact may result in dried, cracked skin causing a dermatitis.	
Diesel Fuel; Jet Fuel; Fuel Oils	Inhalation and/or	Irritation to respiratory passages, headache, dizziness and nausea, vomiting, loss of coordination	Oxidizing agents such as hydrogen peroxide, nitric acid.
	Ingestion	Chemical pneumonitis (when oil is aspirated in the lungs)	
	Skin Contact	Skin irritation, rash of acne pimples and spots.	
Aromatic Hydrocarbons Benzene Toluene Ethylbenzene Xylene	Inhalation	Irritation to eyes, nose, and respiratory passages.	Oxidizing agents such as hydrogen peroxide, nitric acid.
	Ingestion	Headache, dizziness, drowsiness, nausea, euphoria, and staggered gait.	
	Skin Contact	Prolonged skin contact may result in dried cracked skin causing a dermatitis. Toluene can be absorbed through the skin.	
		Benzene is a known carcinogen causing depression of blood cells in bone marrow.	
Tetraethyl Lead	Inhalation	Irritation to respiratory tract from contaminated soils containing tetraethyl lead.	Strong oxidizers, sulfuryl chloride, potassium permanganate.
	Ingestion	Headache, anxiety, insomnia, nervous excitation, mild tremors, metallic taste, and some stomach/intestinal upset.	
	Skin Contact	Skin reddening from contact with soil containing tetraethyl lead	

2.2 Petroleum Products Emergency First Aid Information

EMERGENCY FIRST AID

FIRST AID FOR PETROLEUM HYDROCARBON EMERGENCIES

Ingestion: DO NOT INDUCE VOMITING. Call Poison Control; follow instructions. Administer cardiopulmonary resuscitation (CPR), if necessary. Seek medical attention.

Inhalation: Remove person from contaminated environment. DO NOT ENTER A CONFINED SPACE TO RESCUE SOMEONE WHO HAS BEEN OVERCOME UNLESS PROPERLY EQUIPPED AND A STANDBY PERSON IS PRESENT. Administer CPR if necessary. Seek medical attention.

Skin Contact: Brush off dry material, remove wet or contaminated clothing. Flush skin thoroughly with water. Seek medical attention if irritation persists.

Eye Contact: Flush eyes with water for 15 minutes. Seek medical attention.

Exposure Symptoms: Headache, dizziness, nausea, drowsiness, irritation of eyes, nose, throat, breathing difficulties.

Contingency Plan: Report incident to PM and HSR after emergency procedures have been implemented.

RESPONDER MUST HAVE A CURRENT CERTIFICATE TO ADMINISTER FIRST AID OR CPR

1. Survey the situation. Do not endanger your own life. **DO NOT ENTER A CONFINED SPACE TO RESCUE SOMEONE WHO HAS BEEN OVERCOME UNLESS PROPERLY EQUIPPED AND A STANDBY PERSON IS PRESENT.**

2. Call 911 (if available) or the fire department **IMMEDIATELY**. Explain the physical injury, chemical exposure, fire, or release.

3. Decontaminate the victim without delaying life-saving procedures.

4. If the victim's condition appears to be noncritical, but seems to be more severe than minor cuts, he/she should be transported to the nearest hospital by trained Emergency Medical Services (EMS) personnel: let the doctor assume the responsibility for determining the severity of the injury. If the condition is obviously serious, EMS must transport the victim.

5. Notify the PM and the HSR. Complete the ENERCON SERVICES Preliminary Incident Report within 24 hours.

3.0 HAZARD IDENTIFICATION AND CONTROL

Precautions must be taken to prevent injuries and exposures to the following potential hazards.

Table 3. Potential Hazards and Controls

Potential Hazard	Control
Exposure to Petroleum Products (See Appendix D: MSDS Definitions and MSDSs)	1. Stand up-wind of petroleum products whenever possible. 2. Minimize contact and contact time with petroleum products. 3. Avoid walking through discolored areas, puddles, leaning on drums, or contacting anything that is likely to be contaminated. 4. Do not eat, drink, smoke and/or apply cosmetics in the exclusion zone (EZ). 5. Wear gloves when in contact with contaminated surfaces. 6. Safety glasses must be worn at a minimum. 7. Splash goggles must be worn when working with liquids. 8. >25 ppm organic vapors in breathing zone, sustained for 5 minutes, requires upgrade to Level C. 9. >250 ppm organic vapors in breathing zone, sustained for 5 minutes, requires upgrade from Level C to Level B. 10. If unknown materials are encountered, call the HSR.
Exposure to OSHA Defined Hazardous Materials (See Appendix D: MSDS Definitions and MSDSs)	1. All chemicals brought on site by ENERCON SERVICES personnel or their subcontractors, such as pipe glues, solvents, reagents, decontamination solutions, or any other OSHA defined hazardous material must be adequately labeled and the MSDSs available on-site. 2. MSDSs brought on-site can be attached in Appendix D or in the MSDS binder that is kept in the company vehicle. 3. Training on OSHA defined hazardous materials must be completed and documented. Use the Daily Tailgate Safety Meeting Form in Appendix J to record training attendance.
Vehicular Traffic	1. Wear traffic safety vest when vehicle hazard exists. 2. Use cones, flags, barricades, and caution tape to define work area. 3. Use vehicle to block work area. 4. Engage police detail for high-traffic situations. 5. Refer to section 6.3 for specific guidance.
Fall Protection	1. Asses the work to determine if there is a potential for falling. 2. Make a determination of the distance of the potential fall. 3. A fall protection system must be used for potential falls greater than 6 feet. 4. Consult a competent person, such as the HSR, regarding the applicability requiring fall protection and what type of protection systems should be

Potential Hazard	Control
	used. 5. Inspect all fall protection equipment and anchoring points prior to their use.
Vault Entry	1. Ensure personnel assigned meet CSE training requirements. 2. Complete CSE Hazard Analysis Form in Appendix G. 3. Complete CSE permit. Post sign. 4. Ensure pre-entry CSE safety meeting is conducted. 5. Remove vault cover using proper lifting techniques. 6. Promote natural ventilation by opening the space to fresh air, if needed utilize mechanical purge ventilation. 7. Conduct remote air monitoring prior to entry. 8. Attendant can act as CSE Supervisor and must be present at CSE entry point all times when entrant is in CSE. 9. Access work for fall hazards and ensure provisions for non-entry rescue have been met. 10. Enter only when safe; conduct continuous air monitoring.
Utility Lines Contact	1. Contact Dig Safe to have utility lines marked prior to excavation/trenching. 2. Refer to site drawings or customer interviews if on private property for utility locations. 3. Hand dig to 5 feet down and 5 feet each side of utility marker to avoid breaking utility lines. 4. Refer to Appendix F for Underground Utility Contact Prevention Management Plan.
Inclement Weather	1. Stop outdoor work during electrical storms, hail storms, and other extreme weather conditions such as extreme heat or cold temperatures. 2. Take cover indoors or in vehicle. 3. Listen to local forecasts for warnings about specific weather hazards such as tornados, hurricanes, and flash floods.
Noise	1. Wear hearing protection when equipment such as a drill rig, jackhammer, cut saw, air compressor, blower or other heavy equipment is operating on the site. 2. Wear hearing protection whenever you need to raise your voice above normal conversational speech due to a loud noise source; this much noise indicates the need for protection. 3. Conduct noise monitoring of suspected high noise operations at the beginning of the workday or start up of new operations to verify noise control/hearing protection requirements. 4. Follow noise action levels listed in Table 7, section 4.2.
Installation and	1. Competent person must be present during excavation/trenching activities;

Potential Hazard	Control
Operation of Soil Vapor Extraction System (SVE)	follow procedures in Appendix F. 2. SVE effluent pipe and galvanized steel SVE pipes from thermal SVE wells are "HOT" and must be labeled to prevent skin burns. 3. Lockout/Tagout (LO/TO) points must be identified for blower motors and specific LO/TO procedures followed using the form in Appendix C. 4. Monitor for petroleum hydrocarbons with PID/FID when possibility of exposure occurs such as during emission monitoring activities or system maintenance. Follow air monitoring schedule and action levels in Table 4, section 4.1.
Installation and Operation of Air Sparge System	1. Competent person must be present during excavation/trenching activities. Follow procedures in Appendix F. 2. Use hot work permit and procedures in Appendix H when welding, cutting or torching. 3. Ensure air delivery piping system has been leak tested prior to operation to prevent high pressure discharge. 4. Follow LO/TO procedures using form in Appendix C during maintenance operations.
Electric Shock	1. Maintain appropriate distance from overhead utilities; **20-foot minimum clearance from power lines required; 10-foot minimum clearance from shielded power lines**. 2. Use ground-fault circuit interrupters as required. 3. Perform LO/TO procedures using form in Appendix C. 4. Use three-pronged plugs and extension cords. 5. Contact your local underground utility-locating service. 6. Follow code requirements for electrical installations in hazardous locations.
Physical Injury	1. Wear hard hats and safety glasses when on-site. 2. Maintain visual contact with the equipment operator and wear orange safety vest when heavy equipment is used on-site. 3. Avoid loose-fitting clothing (driller and driller's helper). 4. Prevent slips, trips and falls; keep work area uncluttered. 5. Keep your hands away from moving parts (i.e., augers). 6. Test the emergency shutoff switch on the drill rig daily.
Back Injury	1. Use a mechanical lifting device or a lifting aid where appropriate. 2. If you must lift, plan the lift before doing it. 3. Check your route for clearance. 4. Bend at the knees and use leg muscles when lifting. 5. Use the buddy system when lifting heavy or awkward objects. 6. Do not twist your body while lifting.

Potential Hazard	Control
Heat Stress	1. Increase water intake while working. 2. Increase number of rest breaks and/or rotate workers in shorter work shifts. 3. Watch for signs and symptoms of heat exhaustion and fatigue. 4. Plan work for early morning or evening during hot months. 5. Use ice vests when necessary. 6. Rest in cool, dry areas. 7. In the event of heat stroke, bring the victim to a cool environment and initiate first aid procedures. Immediately seek medical attention. 8. Refer to Appendix I for specific procedures to follow and signs and symptoms of heat stress.
Cold Stress	1. Take breaks in heated shelters when working in extremely cold temperatures . 2. Remove the outer layer of clothing and loosen other layers to promote evaporation of perspiration, upon entering the shelter. 3. Drink warm liquids to reduce the susceptibility to cold stress. 4. Be aware of cold stress symptoms such as shivering, numbness in the extremities and sluggishness. 5. Refer to Appendix I for specific procedures to follow and signs and symptoms of cold stress.
High Crime Areas	1. Be aware of surroundings. 2. Use the buddy system. 3. Request police detail when appropriate.
Insects Spiders	1. Tuck pants into socks. 2. Wear long sleeves. 3. Use insect repellent. 4. Avoid contact by always looking ahead to where walking, standing, sitting, leaning, grabbing, lifting or reaching-in-to. 5. Check for signs of insect/spider bites, such as redness, swelling, and flu-like symptoms.
Poisonous Snakes	1. Avoid walking in areas where snake may nest or hide. Always look ahead to where walking for signs of snakes. 2. Use extreme caution when moving or lifting objects which could be used by snakes as cover. 3. Never reach under or behind objects or into other areas where snakes may hide. 4. Poisonous snake bites are medical emergencies - seek immediate treatment. 5. Wear sturdy leather boots.

Potential Hazard	Control
Poisonous Plants (Such as Poison Ivy, Oak or Sumac)	1. Avoid entering areas infested with poisonous plants. 2. Immediately wash any areas that come into contact with poisonous plants. 3. Utilize PPE when possibility of walking into infested areas occurs.
Ladders	1. Assess work areas for fall hazards. 2. Make sure ladder rungs are sturdy and free of cracks. 3. Use ladders with secure safety feet. 4. Pitch ladders at a 4:1 ratio. 5. Secure ladders at the top when possible. 6. Do not use ladders for access to air stripper towers above six feet - use aerial lift. 7. Use non-conductive ladders near electrical wires.
Fire Control	1. Smoke only in designated areas. 2. Keep flammable liquids in closed containers. 3. Keep site clean; avoid accumulating combustible debris such as paper. 4. Follow Hot Work Safety Procedures when welding or performing other activities requiring an open flame. 5. Isolate flammable and combustible materials from ignition sources. 6. Ensure fire safety integrity of equipment installations according to NEC specifications.
Static Electricity	1. Do not create static discharge in flammable atmospheres. 2. Electrically bond and ground pumps, transfer vessels, tanks, drums, bailers and probes, when moving flammable liquids. 3. Electrically bond and ground vacuum trucks and the tanks they are emptying. 4. Do not splash fill containers with flammable liquids.
Drilling/Boring Operations	1. Driller and helper must be present during all active operations. 2. Driller helper and other site personnel must know location of emergency shut off switch and test it daily for proper function. 3. Unauthorized personnel must be kept clear of drilling rig. 4. Area of drilling operation must be cordoned off/barricaded. 5. When hazardous conditions are deemed present, operation must be shut down.
Well Installation, Well Development, Well Gauging, Well Bailing, Soil/Ground-	1. Wear appropriate PPE to avoid skin, eye, and inhalation contact with contaminated groundwater and/or soil. 2. Stand upwind when conducting tasks and minimize possible inhalation exposure; especially when first opening monitoring wells. 3. Conduct air monitoring to determine level of respiratory protection. 4. Utilize engineering controls such as portable venturi air movers to draw

Potential Hazard	Control
water Sampling	away or blow away chemical vapors.
Rapid Response	1. Ensure emergency response activities have been completed prior to beginning rapid response field activities. 2. Conduct hazard assessment of project site and communicate findings through a "Tailgate Safety Meeting" to all ENERCON SERVICES employees and subcontractors prior to beginning rapid response field activities. 3. Communicate applicable ENERCON SERVICES health and safety programs to other contractors on site that may be impacted and coordinate field activities with them.
Welding, Cutting, Brazing	1. Conduct fire safety evaluation. 2. Complete Hot Work Permit using form in Appendix H. 3. Follow job safety analysis (JSA) guidelines for hot work in Appendix H. 4. Ensure flammable materials are protected from hot work, sources of ignition 5. Ensure fire watch/fire extinguisher is on standby by hot work location.
Cleaning Equipment	1. Wear appropriate PPE to avoid skin and eye contact with isopropyl alcohol, Alconox, or other cleaning materials. 2. Stand upwind to minimize any potential inhalation exposure. 3. Dispose of spent cleaning solutions and rinses accordingly.

4.0 AIR MONITORING AND NOISE MONITORING PLANS

4.1 Air Monitoring

Air monitoring must be performed on all sites in accordance with ENERCON SERVICES practices. Organic vapor concentrations are monitored in the field with a flame ionization detector (FID) or photoionization detector (PID) with a 10.2 eV lamp. Flammable vapor and/or gas are monitored with an oxygen/combustimeter (O_2/LEL) real-time instrument. Airborne dust/particulate concentrations are measured with a real-time aerosol monitor (using a scattered light photometric sensing cell) when there are visible signs of airborne dust (sustained >5 minutes) and engineering controls, such as wet methods prove ineffective. Detector tube grab sampling can be conducted as an option for benzene, when results of non-specific real-time monitor action levels are reached or when their presence is suspected. All readings are taken in the worker's breathing zone to determine whether an action level has been met and/or exceeded. Readings must be sustained for 5 minutes for upgrade in PPE. Air monitoring results must be documented on the Vapor Monitoring Form (Appendix E).

ATTENTION:

Site personnel assigned responsibility to conduct air monitoring must have been trained in air monitoring equipment operation and calibration prior to its use.

Air monitoring action levels (Table 4) have been developed by ENERCON SERVICES to indicate the chemical concentrations in the breathing zone that require an upgrade in level of PPE. Option 1 air monitoring schedule involves conducting detector tube sampling for benzene to verify its presence. Option 2 air monitoring schedule assumes the presence of benzene and requires automatic upgrade in respiratory protection. All workers on-site who may be exposed to petroleum product vapors must have been properly fitted with PPE (i.e., respirators) and have been trained in their use (i.e., donning and doffing). The action levels have been derived from the estimated concentration, corrected to PID/FID response factors at which it is expected that benzene could be present at 0.5 ppm in air. Air monitoring measurements will be taken in the breathing zone of the worker most likely to have the highest exposure. Transient peaks will not automatically trigger action. Action will be taken when levels are consistently exceeded in a 5-minute period. The action levels apply to all tasks performed on this site. Guidelines for frequency of air monitoring are presented in Table 6. Job tasks that require air monitoring are listed in Table 5.

Engineering controls such as the venturi air mover (supplied by compressed air) to exhaust or dilute vapors emanating from monitoring wells or when conducting intrusive activities can be utilized as a means to downgrade PPE requirements (Level C to D).

Table 4. Option 1, Air Monitoring Action Levels - Uses Detector Tubes

Instrument*	Function	Measurement	Action
Photoionization Detector (PID) 10.2 eV Lamp; Flame Ionization Detector (FID) - Measures total organic vapors.			
Verify benzene concentration using detector tubes when 10 ppm PID reading has been sustained for 5 minutes and, at a minimum, during every hour of sustained Level C work activities.		Background - 10 ppm	Level D required.
		> 10 - 25 ppm	Level D required, monitor for benzene with detector tube to determine concentration.
		> 25 - 250 ppm	Upgrade to Level C. Full-face cartridge respirator is required.
		> 250 - 1,200 ppm	Upgrade to Level B. Contact PM and HSR for guidance and approval.
		> 1,200 ppm	Stop work. Contact PM and HSR for guidance and approval.
Benzene Detector Tubes		0 - 0.5 ppm	Level D required.
		> 0.5 - 50 ppm	Upgrade to Level C.
		> 50 - 1,200 ppm	Upgrade to Level B. Contact PM and HSR for guidance and approval.
		> 1,200 ppm	Stop work. Evacuate area. Contact PM and HSR for guidance.
Oxygen/Combustible (O2/LEL) Measures Oxygen (O_2) and LEL			
A decrease O_2 reading of 0.1 percent (e.g., 20.9 percent to 20.8 percent) actually represents a change in the total air envelope of approximately 0.5 percent or 5,000 ppm. This represents little hazard if the displacing gas is inert; if the displacing gas is toxic/flammable/reactive, such a concentration represents a real hazard.		O_2 = 20.9 %	Acceptable.
		O_2 > 19.5 - 20.8 %	Verify reasons for O_2 depletion with appropriate air monitoring instrumentation before work continues. Utilize appropriate engineering controls/PPE once atmospheric contaminants have been verified.
		O_2 > 20.9 - 22 %	Verify reasons for O_2 enrichment before entering area. Utilize appropriate engineering controls/PPE to control O_2 enrichment atmosphere.
		O_2 > 22 %	**Leave area immediately;** this atmosphere is extremely flammable. Notify PM or HSR for guidance.
		O_2 < 19.5%	**Leave area immediately;** this atmosphere is oxygen deficient. Verify reasons for O_2 depletion with appropriate air monitoring instrumentation before work continues. Utilize appropriate engineering controls/PPE once atmospheric contaminants have been verified.
		LEL < 10 %	Acceptable conditions. Continue normal activity.
		LEL > 10%	**Leave area immediately.** Contact PM or HSR for guidance on venting and other safety measures.

***Note: Instruments must be calibrated according to manufacturer's recommendations.**

Table 4. Option 2, Air Monitoring Action Levels - Without Detector Tube Use

Instrument	Function	Measurement	Action
Photoionization Detector (PID) Flame Ionization Detector (FID)		10.2 eV Lamp Measures total organic vapors	
Conduct air monitoring for petroleum products using PID or FID - detector tubes are not required to be used.		Background - 10 ppm	Level D required.
		> 10 - 75 ppm	Upgrade to Level C - Option to use half-mask cartridge respirator.
		> 75 - 250 ppm	Upgrade to Level C. Must use full-face cartridge respirator.
		> 250 - 500 ppm	Upgrade to Level B. Contact PM and HSR for guidance and approval.
		> 500 ppm	Stop work. Contact PM and HSR for guidance and approval.
Oxygen/Combustimeter (O2,LEL)		Measures oxygen level (O_2) and LEL	
A decrease O_2 reading of 0.1 percent (e.g., 20.9 percent to 20.8 percent) actually represents a change in the total air envelope of approximately 0.5 percent or 5,000 ppm. This represents little hazard if the displacing gas is inert; if the displacing gas is toxic/flammable/ reactive, such a concentration represents a real hazard.		O_2 = 20.9 %	Acceptable.
		O_2 > 19.5 - 20.8 %	Verify reasons for O_2 depletion with appropriate air monitoring instrumentation before work continues. Utilize appropriate engineering controls/PPE once atmospheric contaminants have been verified.
		O_2 > 20.9 - 22 %	Verify reasons for O_2 enrichment before entering area. Utilize appropriate engineering controls/PPE to control O_2 enrichment atmosphere.
		O_2 > 22 %	**Leave area immediately;** this atmosphere is extremely flammable. Notify PM or HSR for guidance.
		O_2 < 19.5%	**Leave area immediately;** this atmosphere is oxygen deficient. Verify reasons for O_2 depletion with appropriate air monitoring instrumentation before work continues. Utilize appropriate engineering controls/PPE once atmospheric contaminants have been verified.
		LEL < 10 %	Acceptable conditions. Continue normal activity.
		LEL > 10%	**Leave area immediately.** Contact PM or HSR for guidance on venting and other safety measures.
***Note: Instruments must be calibrated according to manufacturer's recommendations.**			

Table 5. Air Monitoring Summary

Job Task	Level PPE	Instrument	Frequency
Drilling/Boring/ Soil Sampling	Level D or Modified Level D	PID[1] or FID[2], O_2/LEL[3], or DT[4]	Start up of work, then 15 minutes to continuously based upon air monitoring results - monitor continuously with real time instruments if action levels have been reached.
Well Installation	Level D or Modified Level D	PID or FID, O_2/LEL, or DT	Start up of work at each new task location - continue to conduct air monitoring if instrument registers presence of petroleum product vapors.
Well Monitoring and Maintenance	Level D or Modified Level D	PID or FID, O_2/LEL, or DT	Start up of work at each new task location - continue to conduct air monitoring if instrument registers presence of petroleum product vapors.
Soil Gas Survey	Level D or Modified Level D	PID or FID, O_2/LEL, or DT	Start up of work at each new task location - continue to conduct air monitoring if instrument registers presence of petroleum product vapors.
Aquifer Pump Test	Level D or Modified Level D	PID or FID, O_2/LEL, or DT	Start up of work at each new task location - continue to conduct air monitoring if instrument registers presence of petroleum product vapors.
Tank Removal	Level D or Modified Level D	PID or FID, O_2/LEL, or DT	Start up of work at each new task location - continue to conduct air monitoring if instrument registers presence of petroleum product vapors.
Excavation/ Trenching	Level D or Modified Level D	PID or FID, O_2/LEL, or DT	Start up of work at each new task location - continue to conduct air monitoring if instrument registers presence of petroleum product vapors.
Groundwater Sampling	Level D or Modified Level D	PID or FID, O_2/LEL, or DT	Start up of work at each new task location - continue to conduct air monitoring if instrument registers presence of petroleum product vapors.

[1] PID, Photoionization Detector
[2] FID, Flame Ionization Detector
[3] O_2/LEL, Oxygen Level and Combustible Gas Meter
[4] DT, Benzene Detector Tube

Note: "Start up of work at each new task location" means to monitor the air quality at each new operation on the site. The breathing zone is the area inside a 1-foot radius around the head.

Table 6. Air Monitoring Frequency Guidelines

Conduct periodic monitoring when:

1. It is possible that an immediate danger to life or health (IDLH) or a flammable atmosphere has developed, or

2. There is an indication that exposures may have risen over permissible exposure limits or published exposure levels since the last monitoring. Look for a possible rise in exposures associated with these situations:

   - **Change in site area** - work begins on a different section of the site
   - **Change in contaminants** - handling contaminants other than those first identified
   - **Visible signs of particulate exposure from intrusive activities such as drilling/boring and excavation**
   - **Perceptible chemical odors or symptoms of exposure**
   - **Change in on-site activity** - one operation ends and another begins
   - **Handling leaking drums or containers**
   - **Working with obvious liquid contamination** (e.g., a spill or lagoon)

Conduct air monitoring when the possibility of volatilization exists (such as with a new monitoring well or a well containing known product).

Conduct air monitoring on a well at a site known to have little contamination (documented by experience or laboratory data), only if an odor emanates from the well.

4.2 Noise Monitoring

Noise monitoring must be performed in accordance with ENERCON SERVICES practices. Noise levels are monitored in the field with either a Type I or Type II Sound Level Meter (SLM). Noise dosemeter readings can also be obtained to determine the percent (%) noise dose. Noise levels and % dose measured are then compared to limits listed in OSHA standard 29 CFR 1910.95, Hearing Conservation.

Action levels listed in Table 7 will trigger upgrade in PPE to include appropriate hearing protectors (muffs or plugs) or initiate possible noise control engineering. Noise monitoring equipment must be calibrated prior to use each shift and checked at the end of the shift to determine accuracy. Noise readings must be recorded on data form in Appendix E, Noise Monitoring Form. Selection of hearing protection must match the employee's needs and the ability to attenuate noise below 90dB(A). Each hearing protection device (muff or plugs) has a Noise Reduction Rating (NRR) assigned by the Environmental Protection Agency (EPA). To calculate the hearing protector's effectiveness, use the following formula:

$$\text{Noise Reading dB(A)} - (\text{NRR} - 7\text{dB}) < 90\text{dB(A)}$$

Table 7. Noise Monitoring

Instrument	Measurement	Action
Type I or Type II SLM - Calibrate Before Use		
Noise monitoring is conducted when high noise levels are perceived to be present where employees are required to work and in work areas where designated as "High Noise"	>80 dB(A) - 85 dB(A)	Hearing protection recommended. Limit work duration to 8-hour shifts.
	>85 dB(A) - 90 dB(A)	Hearing protection required. Limit work duration to 8-hour shifts. Post signs.
	>90 dB(A) - 115 dB(A)	Hearing protection required. Investigate use of engineering controls. Limit work duration to 8-hour shifts. Post signs.
	> 115 dB(A)	Stop work. Contact HSR and PM.

5.0 CONFINED SPACE ENTRY PROCEDURES

Site work may require personnel to enter confined spaces. **No ENERCON SERVICES employee or subcontractor shall enter an area identified as a confined space without using the CSE procedures described in Appendix G and the site-specific entry procedures presented in Appendix G.** The purpose of the CSE procedure is to protect employees from potentially hazardous environments and to facilitate immediate rescue in an emergency situation. A CSE Permit must be posted at the entrance to each confined space.

6.0 CHEMICAL HAZARD CONTROL

6.1 Chemical Handling Procedures

Personnel must practice the chemical-specific handling procedures outlined below.

Table 8. Chemical Handling Procedures

Chemical	Description	Procedures
Acids and Bases Acids: including hydrochloric, nitric, and sulfuric acids Bases: including sodium hydroxide	Extremely corrosive materials with a variety of uses.	Wear gloves and eye-splash protection while using acid dispensed from a small dropper bottle during water sampling. Wear a full-face, air-purifying respirator equipped with combination cartridges (organic vapor/acid gas) as well as Tyvek® coveralls and nitrile and/or NBR gloves for large volume applications. Have an eye wash bottle and/or portable eye wash station on-site. Cap all drums after dispensing chemicals. Do not add anything into a virgin chemical drum, including unused product. Avoid mixing strong acids and bases. Consult HSR for task-specific evaluation. If mixing is absolutely necessary, do it slowly. Avoid vapors or fumes that are generated. When diluting acids, add the acid to water in small quantities and mix cautiously. When diluting bases, add water to the base in small quantities and mix cautiously.
Activated Carbon	Granular adsorbent medium used to remove residual hydrocarbons from water and/or air.	Use respiratory protection when activated carbon creates a dusty environment. Contact HSR for task-specific evaluation.

6.2 PPE

Based on the hazards that may be encountered during site activities, PPE as follows was selected. Only PPE that meets the following American National Standards Institute (ANSI) standards are to be worn.

- Eye protection - ANSI Z87.1-1989,
- Head protection - ANSI Z89.1-1986, and
- Foot protection - ANSI Z41-1991.

Employees must maintain proficiency in the use and care of PPE that is to be worn. Typically this is covered during formal and informal refresher training sessions presented by ENERCON SERVICES. Specific PPE requirements are reviewed during Daily Tailgate Safety Meetings.

Level D is the minimum acceptable level for sites where petroleum hydrocarbons are the contaminants of concern. Upgrade to Modified Level D occurs when the possibility of contact to the skin or work uniform can occur from contaminated media. Upgrade to Level C will occur when results of air monitoring reveals action levels have been exceeded. Upgrade to Level B occurs when results of air monitoring reveals action levels have been exceeded, and site personnel meet training requirements. Wear hearing protection when in areas where high noise levels are generated.

Table 9. PPE

Level	Requirements
Level D	■ Work uniform ■ Steel-toed boots ■ Approved safety glasses or goggles ■ Hard hat ■ Fluorescent vest, when vehicular traffic is on or adjacent to the site ■ Nitrile gloves for water sampling handling
Modified Level D	■ Level D ■ PE-coated Tyvek® suit, NBR outer, and nitrile inner gloves if skin contact with contaminants is possible. ■ Chemical resistant booties. ■ Hearing protection (muffs and/or plugs).
Level C	■ Level D and Modified Level D. ■ NIOSH/MSHA-approved full-face or half-face respirator with organic vapor/acid gas HEPA cartridges
Level B	■ Level D and Modified Level D ■ NIOSH/MSHA approved full-face positive pressure demand supplied air respirator, either airline or self contained.
Prior to using, all equipment must be inspected to ensure proper working condition.	

6.3 Site Control: Work Zones

Work zones will be established in order to (1) delineate high-traffic locations, (2) identify hazardous locations, and (3) contain contamination within the smallest area possible. Employees entering the work zone must wear the proper PPE for that area. Work and support areas will be established based on ambient air data, necessary security measures, and site-specific conditions. Listed in Table 10 are general guidelines for developing site security and work zone definitions.

Table 10. Site Security and Work Zone Definition

WORKING IN STREET OR ROADWAY

- Wear traffic vest and hardhat when vehicle hazard exists.
- Use cones, flag-mounted cones, caution tape, and/or barricades.
- Use vehicle strobe"light and block area with truck.
- Develop traffic patternization plan for high traffic situations (as appropriate):
  - use flag person
  - use flashing arrow sign
  - use "MEN WORKING" signs liberally
  - obtain lane closing permits
  - engage police details

WORKING AT EXCAVATION/TRENCHING SITES

- "Competent person" is required per OSHA 29 CFR 1926 Subpart P.
- Safeguard open excavations by restricting unauthorized access.
- Highlight work area using prominent warning signs (cones, saw horses/barricades, and signage) placed a minimum of 10 feet back from excavation opening.
- Maintain zone definition along perimeter with ***continuous string*** of yellow orange caution tape.

EXCAVATIONS LEFT UNATTENDED OR OVERNIGHT

Use one of the following methods to address these situations:

- Surround entire perimeter with plastic or cloth construction net fencing. Anchor fence to ground using steel posts driven into ground. Space out posts no greater than 8 feet apart. Fence height minimum 4 feet high. Fence material must be of a quality capable of withstanding a pressure of 200 pounds. ***Place fence a minimum of 10 feet back from excavation opening.***
- Place 8-foot-long barricades affixed with flashing lights end to end with 4-foot high construction net fence attached to barricades.
- Utilize temporary curbing or concrete "jersey" barriers affixed with flashing signal lights or other effective warning signs.

6.4 Decontamination Procedures

Operations conducted at this site have the potential to contaminate field equipment and PPE. To prevent the transfer of contamination to vehicles, administrative offices and personnel, the procedures presented in Table 11 must be followed.

Table 11. Decontamination Procedures

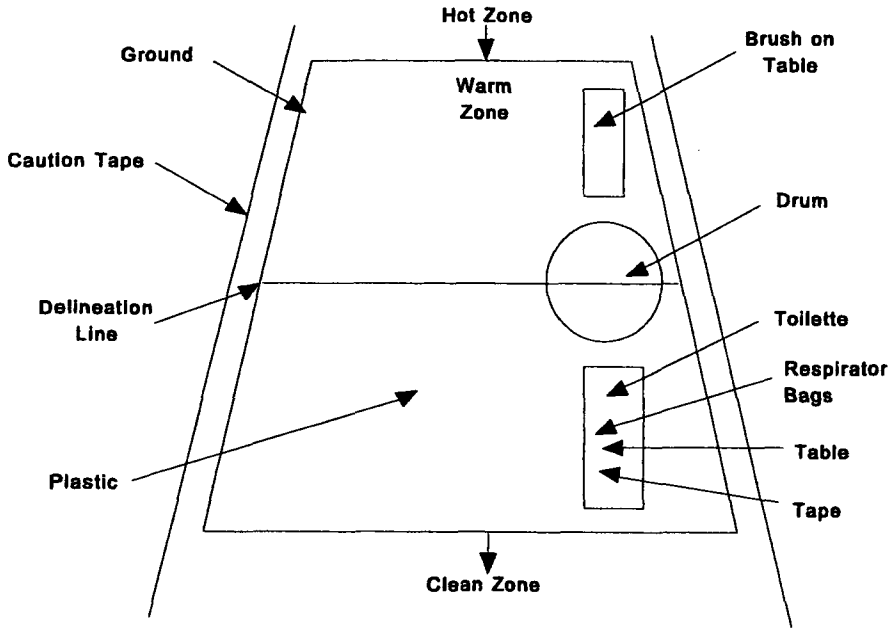
Item	Examples	Procedure
Field Equipment	Bailers, interface probes, hand tools, drill augers, and miscellaneous sampling equipment	Decontaminate with a solution of detergent and water; rinse with water prior to leaving the site. Protect from exposure by covering with disposable covers such as plastic to minimize required decontamination activities.
Disposable PPE	Tyvek® suits, inner latex gloves, respirator cartridges	Dispose of according to the requirements of the client and state and federal agencies. Change out respirator cartridges on a daily basis and dispose accordingly.
Nondisposable PPE	Respirators	Wipe out respirator with disinfecting pad prior to donning. Decontaminate on-site at the close of each day with a solution of an approved sanitizing solution.
	Boots and gloves	Decontaminate outside with a solution of detergent and water; rinse with water prior to leaving the site. Protect from exposure by covering with disposable covers such as plastic to minimize required decontamination activities.

6.5 Example Decontamination Diagram

If Level C or Level B PPE is required, a CRZ will be constructed in a centralized common area with a travel path from the EZ demarcated with 4-foot-high cones. The decontamination procedure for this project site is a two-stage process.

STAGE 1
- Remove gross contamination with a brush.
- Remove outer boots and dispose in a drum.
- Remove Tyvek suit and dispose in a drum.
- Remove outer gloves and dispose in a drum.
- Walk to Stage 2.

STAGE 2
- Remove respirator.
- Remove cartridge and dispose in a drum.
- Clean respirator and insert into a bag.
- Remove inner gloves and dispose.



- Wipe hands with a toilette and dispose.
- Walk out of decontamination area.

7.0 CONTINGENCY PLANS AND FIELD COMMUNICATIONS

Table 12 (Sections 7.1 - 7.4) presents contingency plans for potential emergency situations.

Table 12. Contingency Plans for Site Emergencies

Situation	Action
7.1 Evacuation	1. Immediately notify all on-site personnel of an emergency requiring evacuation. 2. Leave the dangerous area and report to a pre-designated rally point. 3. Notify EMS, as appropriate. 4. Account for all personnel. 5. Contact the PM and the HSR as soon as possible. 6. Maintain site security and control measures for community safety until emergency responders arrive.
7.2 Medical Emergency	1. Survey the situation: **Do not enter an area that may jeopardize your safety.** ■ Establish the patient's level of consciousness. ■ Call for help. ■ Contact EMS and inform them of patient's condition. 2. Primary Assessment (patient unconscious) ■ Arousal ■ Airway ■ Breathing ■ Circulation **Only trained personnel should perform CPR or First Aid.** 3. Secondary Assessment (patient conscious) ■ Check for bleeding: control with direct pressure. ■ Do not move patient (unless location is not secure). ■ Monitor vital signs. ■ Provide First Aid to the level of your training. ■ Contact the PM and HSR as soon as possible. ■ Document the incident on ENERCON SERVICES's Preliminary Incident Report (PIR) form.
7.3 Fire Emergency	1. **Evacuate the area.** 2. Notify EMS. 3. Extinguish small fires with an all-purpose extinguisher. 4. Contact the PM and HSR. 5. Document the incident using the PIR form.
7.4 Spill/Release	Prevent problems by documenting the location of underground lines (e.g., product, sewer, telephone) before starting site work. If you drill through a line or tank or another leak occurs, document the spill/release in writing. Include dates, times, actions taken, agreements reached, and names of people involved. In the event of a spill/release, follow this plan. 1. Wear appropriate PPE; stay upwind of the spill/release. 2. Turn off equipment and other sources of ignition. 3. Turn off pumps and shut valves to stop the flow/leak. 4. Plug the leak or collect drippings in a bucket, when possible.

Situation	Action
	5. Place sorbent pads to collect product, if possible. 6. Call Fire Department immediately if fire emergency develops. 7. Inform ENERCON SERVICES PM about the situation. 8. Determine if the client wants ENERCON SERVICES to repair the damage of if the client will use an emergency repair contractor. 9. Based on agreements, contact emergency spill contractor for containment of free product. 10. Advise the client of spill discharge notification requirements and determine who will complete and submit forms. Do not submit or report to agencies without the client's consent. Document each interaction with the client and regulators and note, in writing; name, title authorizations, refusals, decisions, and commitments to actions. 11. Do not transport or approve transportation of contaminated soils or product until proper manifests have been completed and approve. Be aware that soils/product may meet criteria for hazardous waste. 12. Do not sign manifests as generator of wastes; contact the regional compliance manager to discuss waste transportation.
Notifications - The PM must contact the client or generator. The generator is under obligation to report to the proper government agencies. If the spill extends into waterways, the Coast Guard and the National Response Center ([800] 424-8802) must be notified immediately by the client or with his permission.	

7.5 Field Communications

Communications at the work site can be accomplished by verbal and/or non-verbal means to ensure contact with all ENERCON SERVICES and subcontractors. Verbal communication can be impacted by the on-site background noise and while wearing respiratory protection. Table 13 lists the type of communication methods and equipment to use, depending on site conditions. Communication equipment must be checked daily to ensure proper operation and all project personnel must be initially briefed on the communication methods prior to starting work and reviewed in Daily Tailgate Safety Meetings as a reminder.

Table 13. Field Communication Methods

Communication Device	Type of Communications	Signal
Telephone On-Site or Cellular Telephone	Emergency notification	Initiate phone call using applicable emergency numbers
Two-Way Radio	Emergency notification among site personnel	Initiate radio communication with Code Red message
Compressed Air Horn	Hailing site personnel for non-emergency	One long blast, one short blast
Compressed Air Horn	Hailing site personnel for emergency evacuation	Three long continuous blasts
Visual	Hailing site personnel for distress, need help	Arms waved in circle overhead
Visual	Hailing site personnel for emergency evacuation	Arms waved in criss-cross over head
Visual	Contaminated air/strong odor	Hands clutching throat
Visual	Break, lunch, end of day	Two hands together, break apart