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REPORTS

DATE:

7-10-1997



Tetra Tech EM Inc.

6121 Indian School Road, NE, Suite 205 ♦ Albuquerque, NM 87110 ♦ (505) 881-3188 ♦ FAX (505) 881-3283

July 10, 1997

Mr. Wayne Price, Environmental Engineer
Energy, Minerals and Natural Resources Department
Oil Conservation Division
Hobbs District Office
Post Office Box 1980
Hobbs, New Mexico 88241-1980

**RE: Work Plan for Leach Field Closure C-138, EPA Class 5 Wells
Former Pride Petroleum Services Lovington Yard
Lovington, New Mexico**

Dear Mr. Price:

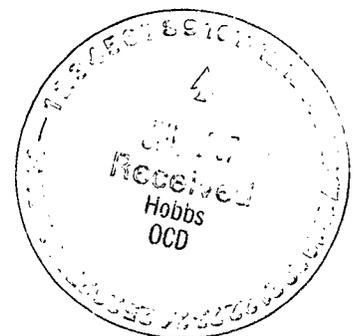
Tetra Tech Environmental Management, Inc. (Tetra Tech) has prepared the following workplan to close two inactive leach fields (Class V injection wells for the above referenced site. The work plan was developed based on recent site characterization activities conducted during the last week of May, 1997. This workplan was developed to close the leach fields in accordance with New Mexico Oil Conservation Division (NMOCD) Unlined Surface Impoundment Closure Guidelines as specified in the NMOCD's Discharge Plan Requirements and based on directives specified in your letter dated July 7, 1997 to the Goo Yea Landfarm and Controlled Recovery, Inc. It is our understanding that potential contamination of the leach field was the result of activities associated with the operation of an oil field service company that occupied the site. The two leach fields were previously abandoned and remain out of service.

Potential contaminants of concern are expected to be low level concentrations of petroleum hydrocarbons and metals that may have been discharged into the leach fields and potentially native soils in the immediate vicinity of the seepage pits.

SCOPE OF WORK

- 1) Tetra Tech will schedule a site inspection with Wayne Price of the Oil Conservation Division (OCD). Concurrent with this inspection, Tetra Tech will mobilize a track mounted excavator to the site to excavate the leach fields and near surface soils containing any observed potential contamination. The leach fields were utilized as part of routine maintenance activities during former oil field servicing activities. One seepage pit, referred to as the "south seepage pit" was identified south of the existing shop. A four inch PVC pipe leads from an approximately 2 feet by 2 feet sump located in the mechanics pit within the shop mechanics bay to a five feet diameter, 7 feet deep seepage pit. The top of the seepage pit structure is approximately 5 feet below ground level, and appears to have been used to discharge waste water from maintenance activities. Efforts will be made to remove the lines leading from the mechanics pit to the leach field to the maximum extent possible. The lines are estimated to be buried approximately five feet below ground level and effluent discharges from the piping system are anticipated to have migrated within the immediate area of the leach field area. Inspection of the fluids within the mechanics pit sump to contain liquids and solids.

S:\D\leach\Price\OCD\leach-072

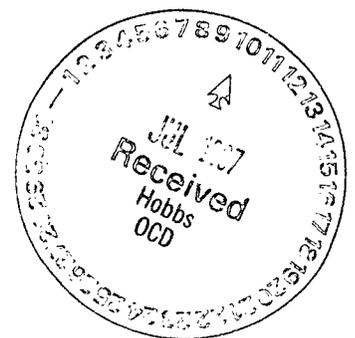


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Energy, Minerals and Natural Resources Department
Oil Conservation Division
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The second seepage pit, referred to as the "north west seepage pit" is located north of the wash pad area and comprises a 5 feet diameter, 9.5 feet deep seepage pit with the top of the structure approximately 2 feet below the ground surface. The sump was also observed to containe liquid and solids. Efforts will be made to remove the lines leading from the wash pad sump to the leach field to the maximum extent possible. The lines are estimated to be buried approximately two feet below ground level (BGL) and effluent discharges from the piping system are anticipated to have migrated to the near surface soils. The material derived from excavation activities will be staged, stockpiled on, and covered by plastic to mitigate the migration of the material.

- 2) During excavation activities, Tetra Tech will employ a local mobile testing laboratory equipped to perform total petroleum hydrocarbon (TPH) analysis comparable to Environmental Protection Agency (EPA) Method 418.1. The mobile laboratory will be used to determine the extents of excavation of the impacted soil. Upon establishing the limits of excavation, Tetra Tech personell will collect appropriate soil samples from the excavation area and submit via overnight courier to a laboratory for analyses of TPH, volatile organic compounds (VOC) using expanded EPA method 8240, semi-volatile organic compounds (SVOC) using EPA method 8270, eight RCRA metals and solid waste characteristics (ignitability, corrositivity, reactivity and toxicity). Sample analysis will characterize the material for waste stream classification in accordance to RCRA Subtitle C regulations. The limits of the excavations will be measured, photographed and the collected data assimilated into a Site Closure Report.
- 3) Should analytical results from the samples collected from the excavated material record levels of individual compounds that exceed EPA maximum concentrations levels (MCL's) for toxicity characteristics, a sampling plan to verify the soils remaining in the excavated area and soils in the immediate areas of the excavation will be submitted. Future analytical protocols will be developed based on a review of the analytical data. Only specific compounds exceeding EPA listed MCLs will be analyzed in order to minimize laboratory charges.
- 4) Based on analytical results reporting individual compound concentrations below the EPA listed MCL's, and OCD approval, the tested material will be considered non-hazardooous waste generated at an oil field facility. The material will be transported to the NMCOD permitted Goo-Yea waste disposal facility. Appropriate manifest documentation will accompany each load of transported material in accordance with Section 711 of the New Mexico Waste Managemnet Regulations.

For the purpose of this workplan, we estimate an excavation approximately 25 feet by 25 feet by 20 feet deep at both locations. These dimensions were used to calculate an approximate soil volume of 1,000 cubic yards (1,600 tons). Please note that this estimate assumes a conservative total yardage of contaminated soil to be removed. The actual volume will be accounted accordingly and documented. Once the laboratory results documenting acceptable concentrations have been received, the pits will be backfilled with clean, select fill and compacted to the original ground surface. The backfill will be tested in the field to insure 90% relative compaction is achieved.



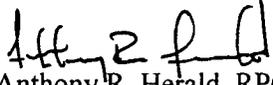
Mr. Wayne Price, Environmental Engineer
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- 5) The Site Closure Report will include a review and evaluation of analytical data, a description of methods, procedures, photographic documentation, waste stream manifest documentation, conclusions, and recommendations in accordance with OCD requirements.

We have tentatively scheduled the initiation of field activities on July 14 or 15, 1997. Previous to commencement of field activities, we are requesting a site inspection of the seepage pits. Please don't hesitate to call me at any time with your questions or comments. I appreciate your assistance in this matter.

Sincerely,

Tetra Tech EM, Inc.


Anthony R. Herald, RPG
Program Manager/Geologist

cc: Steve Tolson, Pride Petroleum Services
Chris Williams, Roger Anderson OCD, Santa Fe

U.S. CUSTOMS AND BORDER PROTECTION
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OCD



Tetra Tech EM Inc.

6121 Indian School Road, NE, Suite 205 ♦ Albuquerque, NM 87110 ♦ (505) 881-3188 ♦ FAX (505) 881-3283

July 10, 1997

Mr. Wayne Price, Environmental Engineer
Energy, Minerals and Natural Resources Department
Oil Conservation Division
Hobbs District Office
Post Office Box 1980
Hobbs, New Mexico 88241-1980

**RE: Leach Field Closure C-138, EPA Class 5 Wells
July 7 Letter Response
Former Pride Petroleum Services Lovington Yard
Lovington, New Mexico**

Dear Mr. Price:

Please review the attached site map illustrating site features and sample locations as requested. The following issues address C-138 discrepancies as discussed during a phone conversation on July 7, 1997 as well as items listed in your letter to the Goo Yea landfarm and Controlled Recovery, Inc., dated July 7, 1997.

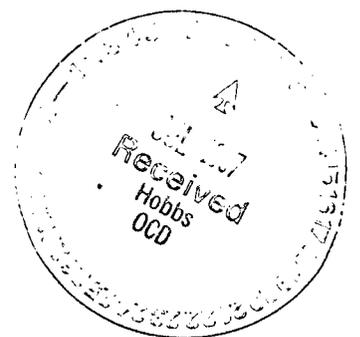
During the May 1997 restoration activities Tetra Tech EM Inc. (Tetra Tech) supervised the removal of:

- (I) 19 empty 55-gallon drums;
- (ii) 6 uncharged fire extinguishers;
- (iii) 5 empty 5-gallon grease containers;
- (iv) 30 tires;
- (v) 1,200 gallons of waste oil and water (mixture) from the AST containment area; and
- (vi) partial removal of surface impacted soils at various parking surface areas across the site.
- (vii) excavation of surface material above two seepage pits identified during initial site inspections.

These activities were performed to address the Initial Response Actions as detailed in the Guidelines for Remediation of Leaks, Spills and Releases. As part of the initial investigation, Tetra Tech EM inc. (Tt) excavated the surface cover and exposed two (2) seepage pits that were utilized as part of routine maintenance activities during former oil field servicing activities. One seepage pit, referred to as the "south seepage pit" was identified south of the existing shop. A four inch PVC pipe leads from an approximately 2 feet by 2 feet sump located in the mechanics pit within the shop to a five feet diameter, 7 feet deep seepage pit. The top of the seepage pit structure is approximately 5 feet below ground level, and appears to have been used to discharge waste water from maintenance activities.

The second seepage pit, referred to as the "north west seepage pit" is located north of the wash pad area and comprises a 5 feet diameter, 9.5 feet deep seepage pit with the top of the structure approximately 2 feet below the ground surface. Both sumps were observed to contained liquid and solids during the May 1997 field activities.

Site Data/Inspection/OC/CD/01



Mr. Wayne Price, Environmental Engineer
Energy, Minerals and Natural Resources Department
Oil Conservation Division
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Based on your directives and a review of the Guidelines for Remediation of Leaks, Spills and Releases published by the Oil field Conservation Division (OCD), these seepage pits are classified by the EPA as "Class 5 Wells", and a closure report is required documenting the remediation of these pits. Tentative arrangements have been made to perform a site inspection of the seepage pits both before and following closure characterization and restoration. In order to facilitate decommissioning of the seepage pits, Tetra Tech sampled the liquid from both of the sumps that drain to the seepage pits and submitted the liquid samples for laboratory analyses. Additionally, a composite sample of the soil material excavated from the hydrocarbon impacted surface areas, from impacted soils near the wash down sump, the wash pad oil/water separator sump and the mechanics bay sump were submitted for analysis.

The laboratory was instructed to perform a Toxicity Characteristic Leachate Procedure (TCLP) and Hazardous Waste analysis determination, RCI analyses to evaluate disposal options for impacted soils and liquid. Based on these analyses, the soil and liquid may be authorized for disposal under a manifest to the OCD permitted Rhino Environmental Services, Inc., Goo-Yea Landfarms facility near Bronco, Lea County. The liquid will be sent to the OCD permitted Controlled Recovery, Inc., facility in Hobbs. The samples collected and the respective analysis performed are discussed below.

The chain-of-custody attached to the laboratory report reference liquid samples So. Seep Pit and NW Seep Pit. The aqueous samples were documented to be a oil and water mixture and were collected from the fluids within each sump. Laboratory analysis was performed for the following parameters: benzene, toluene, ethyl benzene and xylenes (BTEX) using US Environmental Protection Agency (EPA) method 8020, total petroleum hydrocarbons (TPH) using EPA method 8015 gasoline range hydrocarbons (GRO) and volatiles organic compounds (VOC's) using expanded EPA method 8260. TCLP analysis of the liquids was not performed since we attempted to collect a composite sample of the representing the "worst case scenario." However, if a TCLP sample of the liquids is required by the OCD, all efforts will be made to satisfy these directives

Eight (8) confirmation soil samples were collected from various drive surface areas on the subject property. The samples were collected after the majority of visually stained soils were excavated. The excavated material is currently staged and stockpiled pending disposal/treatment authorization. The confirmation samples were analyzed for TPH using EPA method 418.1.

The Composite sample was collected from the two (2) sumps supplying the seepage pits and the stockpiled soil excavated from various stained drive surface areas. The sample collected from the sumps were obtained from the solids side of the oil/water separator sump. This material was documented as a black, fine grained oily solid collected approximately 12 inches into the center of the material. Both samples were placed into a plastic "locking type bag and composite to represent the typical material identified within each respective seepage sump. The second part of the composite sample was collected from the excavated material. The samples were obtained from typical hydrocarbon stained soils from various portions of the stockpile. The soil from the stockpile and the solids from the seepage sumps were ultimately composited to represent the worst case scenario of impacted soils and solids. This sample was submitted for TCLP and RCI analysis. Analytical protocols were verbally approved during a June 2, 1997 phone conversation with Tetra tech employee John Harrie. The following table provides the analytical results of samples collected during site characterization activities.

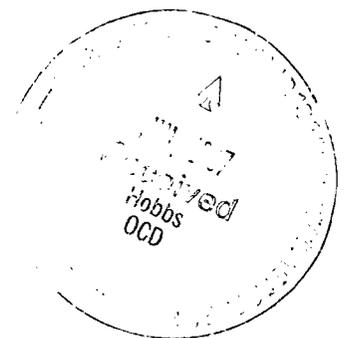


TABLE 1
TOXICITY LEACHATE CHARACTERISTICS PROCEDURE (TCLP) ANALYSES

ANALYSES	COMPOSITE SAMPLE	NM WQCC*
Corrosivity	6.5	
Ignitability	Not Hazardous	
Reactivity	Negative	
RCRA Metals (barium)	1.30 mg/l	1.0 /kg

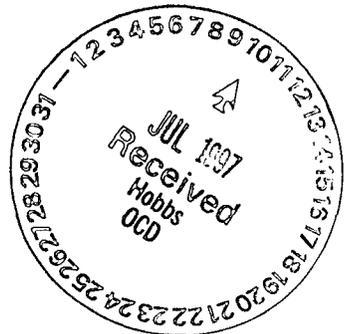
*NMWQCC - New Mexico Water Quality Control Commission Discharge Standard

TABLE 1 CONTINUED
SEEPAGE PIT LIQUID CHEMISTRY

Analyte	South Seepage Pit	Northwest Seepage Pit	NM WQCC*
Benzene	<5.0 ug/l (ppb)	25 ug/l (ppb)	10.0 ug/l
Butyl benzene (total)	45 ug/l (ppb)	20 ug/l (ppb)	NL
Ethyl benzene	29 ug/l (ppb)	<8.0 ug/l (ppb)	750 ug/l
p-Isopropyl toluene	55 ug/l (ppb)	10 ug/l (ppb)	NL
n-propyl benzene	8.6 ug/l (ppb)	<5.0 ug/l (ppb)	NL
Toluene	6.3 ug/l (ppb)	30 ug/l (ppb)	750 ug/l
Trimethylbenzene	36 ug/l (ppb)	<10 ug/l (ppb)	NL
Xylene (total)	210 ug/l (ppb)	29 ug/l (ppb)	620 ug/l
TPH (gas range)	140 mg/l (ppm)	57 mg/l (ppm)	NL

*NMWQCC - New Mexico Water Quality Control Commission Discharge Standard

NL - No NMWQCC Listing



Mr. Wayne Price, Environmental Engineer
Energy, Minerals and Natural Resources Department
Oil Conservation Division
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TABLE 1 CONTINUED
SURFACE AREA SOIL SAMPLE RESULTS IN mg/kg (ppm)

Soil Sample Location	TPH by EPA Method 418.1
SP SE1 0.3	32 ppm
SP SE2 0.2	4,800
SP N 0.2	2,500
SP S1 0.2	480
SP S2 0.2	12,000
SP S3 0.2	72
SPS4 0.2	13,000

Please note that the samples collected and the associated analytical parameters tested represent the worst case scenario of material impacted by previous site activities and were collected of appropriate waste stream material. Arrangements can be made to discuss in detail the laboratory analysis with the principal chemist at Anachem Laboratories at your convenience.

Additional discrepancies discussed such as the signed laboratory report and chain of custody documentation will be copied in original form to the Santa Fe office and to the Hobbs office. Efforts to initiate site closure activities as soon as possible due to pending lease transfer are requested. As a result of the permit denial and the request for TCLP analysis of the liquids within the seepage sumps will be collected as soon as possible in order to facilitate the permitting approval process. The analytical results of samples collected adequately characterize the solids as well as the liquids.

In the interim, we are requesting that a site inspection be performed at the beginning of the third week in July and to authorize the temporary staging and storage of investigative derived material until proper acceptance can be made. All material will be stored in appropriate containment and your inspection of the waste stream disposition and storage, as well as your guidance to facilitate these activities are requested. We are currently working with Allen Hodge, Controlled Recovery, Inc., and representatives of Rhino. A site closure plan will be provided to the OCD based on the results of our discussion. Please call me at your earliest convenience to discuss the contents of this letter.

Sincerely,

Tetra Tech EM, Inc.


Anthony R. Herald, RPG
Program Manager

Attachments: Laboratory report, chain-of-custody documentation and Site Map and Sample Locations Map
cc: Steve Tolson, Pride Petroleum Services

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ANACHEM INC.

8 Prestige Circle, Suite 104 Allen, Texas 75002
972/727-9003 • FAX # 972/727-9686 • 1-800-966-1186

Customer Name: PRC Environmental Mgmt., Inc.
Date Received: June 2, 1997 at 09:30:00
Date Reported: June 6, 1997
Submission #: 9706000001
Project: PRIDE LOVINGTON

SAMPLES The submission consisted of 10 samples with sample I.D.'s shown in the attached data tables.

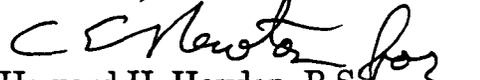
TESTS The samples listed in the attached result pages were analyzed for:

- * CORROSIVITY (EPA 9040)
- * IGNITABILITY (ASTM D92)
- * MERCURY DIGESTION, TCLP (EPA 7470)
- * MICROWAVE DIGESTION, TCLP (EPA 3015)
- * REACTIVITY (FULL)
- * TCLP NON-VOLATILE EXTRACTION (EPA 1311)
- * TCLP RCRA MERCURY (EPA 7470)
- * TCLP RCRA METALS (EPA 6010)
- * TCLP SEMI-VOLATILES (EPA 8270)
- * TCLP VOLATILES (EPA 8260)
- * TCLP ZHE FOR VOLATILE ORGANICS (EPA 1311)
- * TPH (EPA 418.1)
- * TPH GAS-RANGE (MOD EPA 8015)
- * VOLATILES (EXPANDED EPA 8260)

Distribution Of Reports

1-Mr. John Harrie of PRC Environmental Mgmt., Inc.
Ph. 505-881-3188 Fax 505-881-3283

Respectfully Submitted,
Anachem, Inc.


Howard H. Hayden, B.S.
Chemist

Submission #: 9706000001 lims


C.E. Newton, Ph.D.
Chemist

NOTE: Submitted material will be retained for 60 days unless notified or consumed in analysis. Material determined to be hazardous will be returned or a \$20 disposal fee will be assessed. Our letters and reports are for the exclusive use of the client to whom they are addressed. The use of our name must receive our prior written approval. Our letters and reports apply to the sample tested and/or inspected, and are not necessarily indicative of the qualities of apparently identical or similar materials.

85295 to 85304

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U.S. DEPARTMENT OF JUSTICE
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Client Name: PRC Environmental Mgmt., Inc.
 Submission #: 970600001
 Project Name: PRIDE LOVINGTON
 Report Date: 06/06/97

Client Sample #: So. SEEP PIT

Laboratory ID #: 85295 Order Type: Normal Matrix: Liquid
 Sample Container: 2xVOA Vial
 Sampling Location: Not listed on the chain of custody.
 Sampling Date: 05/30/97

TPH GAS-RANGE (MOD EPA 8015)

Analyte	Results(mg/l)	Detection Limit
Gasoline-Range Petroleum Hydrocarbons	140	1.0

VOLATILES (EXPANDED EPA 8260)

Date Analyzed: 06/03/97

Analyte	Results(ug/l)	Detection Limit
Acetone	<10	10
Benzene	<5.0	5.0
Bromobenzene	<5.0	5.0
Bromochloromethane	<15	15
Bromoform	<10	10
2-Butanone (MEK)	<20	20
Butyl Benzene (total)	45	10
Carbon Disulfide	<10	10
Carbon Tetrachloride	<3.0	3.0
Chlorobenzene	<5.0	5.0
Chlorodibromomethane	<5.0	5.0
Chloroethane	<10	10
Chloroform	<10	10
Chlorotoluenes (total)	<10	10
1,2-Dibromo-3-chloropropane	<5.0	5.0
1,2-Dibromoethane	<10	10
Dibromomethane	<10	10
1,2-Dichlorobenzene	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0
Dichlorobromomethane	<3.0	3.0
Dichlorodifluoromethane	<10	10
1,1-Dichloroethane	<5	5
1,2-Dichloroethane	<5.0	5.0
cis-1,2-Dichloroethene	<10	10
trans-1,2-Dichloroethene	<10	10
1,1-Dichloroethene	<5.0	5.0
1,2-Dichloropropane	<6.0	6.0
2,2-Dichloropropane	<5.0	5.0
cis-1,3-Dichloropropene	<6.0	6.0
trans-1,3-Dichloropropene	<6.0	6.0
1,1-Dichloropropene	<10	10
Ethyl Benzene	29	8.0
Hexachlorobutadiene	<10	10
2-Hexanone	<10	10
Isopropyl Benzene	<5.0	5.0
p-Isopropyl toluene	55	5.0
4-Methyl-2-Pentanone	<5.0	5.0
Methyl Bromide	<10	10
Methyl Chloride	<10	10
Methylene Chloride	<15	15
Naphthalene	<10	10
n-Propyl benzene	8.6	5.0
Styrene	<10	10
1,1,2,2-Tetrachloroethane	<5.0	5.0
1,1,1,2-Tetrachloroethane	<10	10

Client Name: PRC Environmental Mgmt., Inc.
 Submission #: 9706000001
 Project Name: PRIDE LOVINGTON
 Report Date: 06/06/97

VOLATILES (EXPANDED EPA 8260)

<u>Analyte</u>	<u>Results(ug/l)</u>	<u>Detection Limit</u>
Tetrachloroethene	<3.0	3.0
Toluene	6.3	3.0
Trichlorobenzenes (total)	<15	15
1,1,1-Trichloroethane	<5.0	5.0
1,1,2-Trichloroethane	<5.0	5.0
Trichloroethene	<5.0	5.0
Trichlorofluoromethane	<10	10
1,2,3-Trichloropropane	<5.0	5.0
Trimethylbenzenes (total)	36	10
Vinyl Acetate	<5.0	5.0
Vinyl Chloride	<2.0	2.0
Xylene (Total)	210	10

Client Sample #: NW SEEP PIT

Laboratory ID #: 85296 Order Type: Normal Matrix: Liquid
 Sample Container: 2xVOA Vial, Liter Amber Bottle
 Sampling Location: Not listed on the chain of custody.
 Sampling Date: 05/30/97

TPH GAS-RANGE (MOD EPA 8015)

<u>Analyte</u>	<u>Results(mg/l)</u>	<u>Detection Limit</u>
Gasoline-Range Petroleum Hydrocarbons	57	1.0

VOLATILES (EXPANDED EPA 8260)

Date Analyzed: 06/03/97

<u>Analyte</u>	<u>Results(ug/l)</u>	<u>Detection Limit</u>
Acetone	<10	10
Benzene	25	5.0
Bromobenzene	<5.0	5.0
Bromochloromethane	<15	15
Bromoform	<10	10
2-Butanone (MEK)	<20	20
Butyl Benzene (total)	20	10
Carbon Disulfide	<10	10
Carbon Tetrachloride	<3.0	3.0
Chlorobenzene	<5.0	5.0
Chlorodibromomethane	<5.0	5.0
Chloroethane	<10	10
Chloroform	<10	10
Chlorotoluenes (total)	<10	10
1,2-Dibromo-3-chloropropane	<5.0	5.0
1,2-Dibromoethane	<10	10
Dibromomethane	<10	10
1,2-Dichlorobenzene	<5.0	5.0
1,3-Dichlorobenzene	<5.0	5.0
1,4-Dichlorobenzene	<5.0	5.0
Dichlorobromomethane	<3.0	3.0
Dichlorodifluoromethane	<10	10
1,1-Dichloroethane	<5	5
1,2-Dichloroethane	<5.0	5.0
cis-1,2-Dichloroethene	<10	10
trans-1,2-Dichloroethene	<10	10
1,1-Dichloroethene	<5.0	5.0
1,2-Dichloropropane	<6.0	6.0
2,2-Dichloropropane	<5.0	5.0
cis-1,3-Dichloropropene	<6.0	6.0
trans-1,3-Dichloropropene	<6.0	6.0



Client Name: PRC Environmental Mgmt., Inc.
Submission #: 9706000001
Project Name: PRIDE LOVINGTON
Report Date: 06/06/97

VOLATILES (EXPANDED EPA 8260)

<u>Analyte</u>	<u>Results(ug/l)</u>	<u>Detection Limit</u>
1,1-Dichloropropene	<10	10
Ethyl Benzene	<8.0	8.0
Hexachlorobutadiene	<10	10
2-Hexanone	<10	10
Isopropyl Benzene	<5.0	5.0
p-Isopropyl toluene	10	5.0
4-Methyl-2-Pentanone	<5.0	5.0
Methyl Bromide	<10	10
Methyl Chloride	<10	10
Methylene Chloride	<15	15
Naphthalene	<10	10
n-Propyl benzene	<5.0	5.0
Styrene	<10	10
1,1,2,2-Tetrachloroethane	<5.0	5.0
1,1,1,2-Tetrachloroethane	<10	10
Tetrachloroethene	<3.0	3.0
Toluene	30	3.0
Trichlorobenzenes (total)	<15	15
1,1,1-Trichloroethane	<5.0	5.0
1,1,2-Trichloroethane	<5.0	5.0
Trichloroethene	<5.0	5.0
Trichlorofluoromethane	<10	10
1,2,3-Trichloropropane	<5.0	5.0
Trimethylbenzenes (total)	<10	10
Vinyl Acetate	<5.0	5.0
Vinyl Chloride	<2.0	2.0
Xylene (Total)	29	10

Client Sample #: SP SE 1 03

Laboratory ID #: 85297 *Order Type:* Normal *Matrix:* Soil
Sample Container: 4oz EPA Approved Glass Jar\Aqua Lid
Sampling Location: Not listed on the chain of custody.
Sampling Date: 05/30/97

TPH (EPA 418.1)

TPH Prep Date: 06/02/97

<u>Analyte</u>	<u>Results(mg/kg)</u>	<u>Detection Limit</u>
Total Petroleum Hydrocarbons	32	10

Client Sample #: SP SE 2 02

Laboratory ID #: 85298 *Order Type:* Normal *Matrix:* Soil
Sample Container: 4oz EPA Approved Glass Jar\Aqua Lid
Sampling Location: Not listed on the chain of custody.
Sampling Date: 05/30/97

TPH (EPA 418.1)

TPH Prep Date: 06/02/97

<u>Analyte</u>	<u>Results(mg/kg)</u>	<u>Detection Limit</u>
Total Petroleum Hydrocarbons	4800	10



Client Name: PRC Environmental Mgmt., Inc.
Submission #: 9706000001
Project Name: PRIDE LOVINGTON
Report Date: 06/06/97

Client Sample #: SP N 02

Laboratory ID #: 85299 *Order Type: Normal Matrix: Soil*
Sample Container: 4oz EPA Approved Glass Jar\Aqua Lid
Sampling Location: Not listed on the chain of custody.
Sampling Date: 05/30/97

TPH (EPA 418.1)

TPH Prep Date: 06/02/97

<u>Analyte</u>	<u>Results(mg/kg)</u>	<u>Detection Limit</u>
Total Petroleum Hydrocarbons	2500	10

Client Sample #: SP S1 02

Laboratory ID #: 85300 *Order Type: Normal Matrix: Soil*
Sample Container: 4oz EPA Approved Glass Jar\Aqua Lid
Sampling Location: Not listed on the chain of custody.
Sampling Date: 05/30/97

TPH (EPA 418.1)

TPH Prep Date: 06/02/97

<u>Analyte</u>	<u>Results(mg/kg)</u>	<u>Detection Limit</u>
Total Petroleum Hydrocarbons	480	10

Client Sample #: SP S2 02

Laboratory ID #: 85301 *Order Type: Normal Matrix: Soil*
Sample Container: 4oz EPA Approved Glass Jar\Aqua Lid
Sampling Location: Not listed on the chain of custody.
Sampling Date: 05/30/97

TPH (EPA 418.1)

TPH Prep Date: 06/02/97

<u>Analyte</u>	<u>Results(mg/kg)</u>	<u>Detection Limit</u>
Total Petroleum Hydrocarbons	12000	10

Client Sample #: SP S3 02

Laboratory ID #: 85302 *Order Type: Normal Matrix: Soil*
Sample Container: 4oz EPA Approved Glass Jar\Aqua Lid
Sampling Location: Not listed on the chain of custody.
Sampling Date: 05/30/97

TPH (EPA 418.1)

TPH Prep Date: 06/02/97

<u>Analyte</u>	<u>Results(mg/kg)</u>	<u>Detection Limit</u>
Total Petroleum Hydrocarbons	72	10

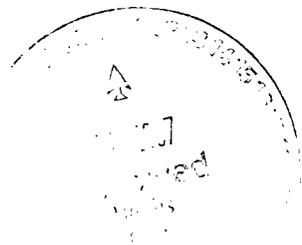
Client Sample #: SP S4 02

Laboratory ID #: 85303 *Order Type: Normal Matrix: Soil*
Sample Container: 4oz EPA Approved Glass Jar\Aqua Lid
Sampling Location: Not listed on the chain of custody.
Sampling Date: 05/30/97

TPH (EPA 418.1)

TPH Prep Date: 06/02/97

<u>Analyte</u>	<u>Results(mg/kg)</u>	<u>Detection Limit</u>
Total Petroleum Hydrocarbons	13000	10



Client Name: PRC Environmental Mgmt., Inc.
 Submission #: 9706000001
 Project Name: PRIDE LOVINGTON
 Report Date: 06/06/97

Client Sample #: COMPOSITE

Laboratory ID #: 85304 Order Type: Normal Matrix: Soil
 Sample Container: 32oz EPA Approved Glass Jar\Aqua Lid
 Sampling Location: Not listed on the chain of custody.
 Sampling Date: 05/30/97

CORROSIVITY (EPA 9040)

Analyte	Results	Detection Limit
Corrosivity	6.5	

IGNITABILITY (ASTM D92)

Ignitability: DOES NOT IGNITE AT ROOM TEMPERATURE; NOT HAZARDOUS

MERCURY DIGESTION, TCLP (EPA 7470)

Mercury Digestion Date: 06/03/97

MICROWAVE DIGESTION, TCLP (EPA 3015)

Microwave Digestion Date: 06/03/97

REACTIVITY (FULL)

Reactive Cyanide (EPA 9010): <0.2 mg/kg
 Reactive Sulfide (EPA 9030): <0.3 mg/kg
 Reactivity To Air: Negative
 Reactivity To Diluted HCl: Negative
 Reactivity To Diluted NaOH: Negative
 Reactivity To Water: Negative

TCLP NON-VOLATILE EXTRACTION (EPA 1311)

TCLP Extraction Date: 06/02/97

TCLP RCRA MERCURY (EPA 7470)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7439-97-6	TCLP Mercury	<0.0004	0.0004	0.2

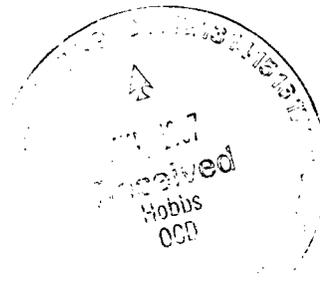
TCLP RCRA METALS (EPA 6010)

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
7440-38-2	Arsenic	<0.061	0.061	5
7440-39-3	Barium	1.30	0.001	100
7440-43-9	Cadmium	<0.008	0.008	1
7440-47-3	Chromium	<0.0075	0.0075	5
7439-92-1	Lead	<0.040	0.040	5
7482-49-2	Selenium	<0.050	0.050	1
7440-39-2	Silver	<0.030	0.030	5

TCLP SEMI-VOLATILES (EPA 8270)

Prep Date:: 06/03/97

C.A.S.#	Analyte	Results(mg/l)	Detection Limit	Haz.Limit
no C.A.S.	Cresol (Total)	<1.0	1.0	200.0
121-14-2	2,4-Dinitrotoluene	<0.10	0.10	0.13
118-74-1	Hexachlorobenzene	<0.10	0.10	0.13
87-68-3	Hexachlorobutadiene	<0.20	0.20	0.5
67-72-1	Hexachloroethane	<0.10	0.10	3.0
98-95-3	Nitrobenzene	<0.50	0.50	2.0
87-86-5	Pentachlorophenol	<0.20	0.20	100.0
110-86-1	Pyridine	<0.50	0.50	5.0



Client Name: PRC Environmental Mgmt., Inc.
Submission #: 9706000001
Project Name: PRIDE LOVINGTON
Report Date: 06/06/97

TCLP SEMI-VOLATILES (EPA 8270)

<u>C.A.S.#</u>	<u>Analyte</u>	<u>Results(mg/l)</u>	<u>Detection Limit</u>	<u>Haz.Limit</u>
95-95-4	2,4,5-Trichlorophenol	<0.50	0.50	400.0
88-06-2	2,4,6-Trichlorophenol	<0.50	0.50	2.0

TCLP VOLATILES (EPA 8260)

Date analyzed: 06/03/97

<u>C.A.S.#</u>	<u>Analyte</u>	<u>Results(mg/l)</u>	<u>Detection Limit</u>	<u>Haz.Limit</u>
71-43-2	Benzene	<0.10	0.10	0.5
56-23-5	Carbon Tetrachloride	<0.10	0.10	0.5
108-90-7	Chlorobenzene	<0.10	0.10	100
67-66-3	Chloroform	<0.10	0.10	6.0
106-46-7	1,4-Dichlorobenzene	<0.10	0.10	7.5
107-06-2	1,2-Dichloroethane	<0.10	0.10	0.5
75-35-4	1,1-Dichloroethylene	<0.10	0.10	0.7
78-93-3	Methyl Ethyl Ketone	<0.10	0.10	200.0
127-18-4	Tetrachloroethylene	<0.10	0.10	0.7
79-01-6	Trichloroethylene	<0.10	0.10	0.5
75-01-4	Vinyl Chloride	<0.10	0.10	0.2

TCLP ZHE FOR VOLATILE ORGANICS (EPA 1311)

TCLP ZHE Extraction Date: 06/02/97



Report To: PRC Environmental Mgmt. Inc.

Project: Pride Lovington

Lab Number: 9706000001

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QUALITY CONTROL DATA

TPH results are reported in parts per million (ppm) in solid.

	Value 1	Value 2	% Var.
TPH:	22	20	9.1

CONCENTRATION UNITS: TPH - ppm

DETECTION LIMITS: TPH - 10

<u>ANALYST</u>	<u>ANALYTE</u>	<u>DATE EXTRACTED</u>	<u>DATE ANALYZED</u>
Anthony Taylor	TPH	6/2/97	6/2/97

VOLATILE ORGANICS QUALITY CONTROL DATA

<u>METHOD</u>	<u>ANALYST</u>	<u>MATRIX</u>	<u>DATE EXTRACTED</u>	<u>DATE ANALYZED</u>		
8260	Howard Hayden	Liquid	----	6/3/97		
<u>SPIKE COMPOUND</u>	<u>SPIKE AMOUNT</u>	<u>% REC 1</u>	<u>% REC 2</u>	<u>% REC QC LIMIT</u>	<u>% VAR. % VAR.</u>	<u>% VAR QC LIMIT</u>
1,1-Dichloroethene	20 ppb	107	97.1	20-234	9.3	25.0
Trichloroethene	20 ppb	115	102	71-157	11	25.0
Benzene	20 ppb	112	105	37-151	6.3	25.0
Toluene	20 ppb	110	103	47-150	6.4	25.0
Chlorobenzene	20 ppb	108	108	37-160	0.0	25.0

TCLP SEMI-VOLATILES QUALITY CONTROL DATA

<u>METHOD</u>	<u>ANALYST</u>	<u>MATRIX</u>	<u>DATE EXTRACTED</u>	<u>DATE ANALYZED</u>		
8270	Dennis Shaw	Liquid	6/3/97	6/4/97		
<u>SPIKE COMPOUND</u>	<u>SPIKE AMOUNT</u>	<u>% REC 1</u>	<u>% REC 2</u>	<u>% REC QC LIMIT</u>	<u>% VAR. % VAR.</u>	<u>% VAR QC LIMIT</u>
Phenol	200 ppb	99.1	97.7	10-120	1.4	42.0
2-Chlorophenol	200 ppb	92.4	92.4	23-134	0.0	40.0
Acenaphthene	100 ppb	66.3	75.4	47-145	12	31.0
Pyrene	100 ppb	79.4	86.5	52-125	8.2	31.0

13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00

AS
137
Received
Robbs
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Report To: PRC Environmental Mgmt. Inc.
 Project: Pride Lovington
 Lab Number: 9706000001
 Page 9 of 9

QUALITY CONTROL DATA

<u>ANALYTE</u>	<u>DATE ANALYZED</u>	<u>SPIKE (ppm)</u>	<u>STAND. DEV.</u>	<u>COEFF. OF VAR %</u>	<u>REC1%</u>	<u>REC2%</u>
Reactive Cyanide	6/4/97	----	9.5	10	79	70.5
Reactive Sulfide	6/4/97	----	74	16	110	90
Mercury	6/5/97	----	0.233	2.8	103	99
Arsenic	6/3/97	----	0.041	0.8	110	109
Barium	6/3/97	----	0.243	4.0	99	106
Cadmium	6/3/97	----	0.099	2.0	100	97
Chromium	6/3/97	----	0.134	2.3	109	112
Lead	6/3/97	----	0.024	0.5	89	88
Selenium	6/3/97	----	0.378	6.9	112	101
Silver	6/3/97	----	0.022	0.8	97	99

Standard Deviation = $(x1-x2)/1.414$

Coefficient of Variability % = $(S.D./Avg.) \times 100$

Recovery % = $[(spiked-unsiked)/expected] \times 100$

Wayne Price

From: Wayne Price
Sent: Tuesday, July 15, 1997 1:45 PM
To: Mark Ashley; Martyne Kieling; Pat Sanchez; Roger Anderson
Cc: Chris Williams
Subject: Pride Ser. Co.-Lovington Class V closures.
Importance: High

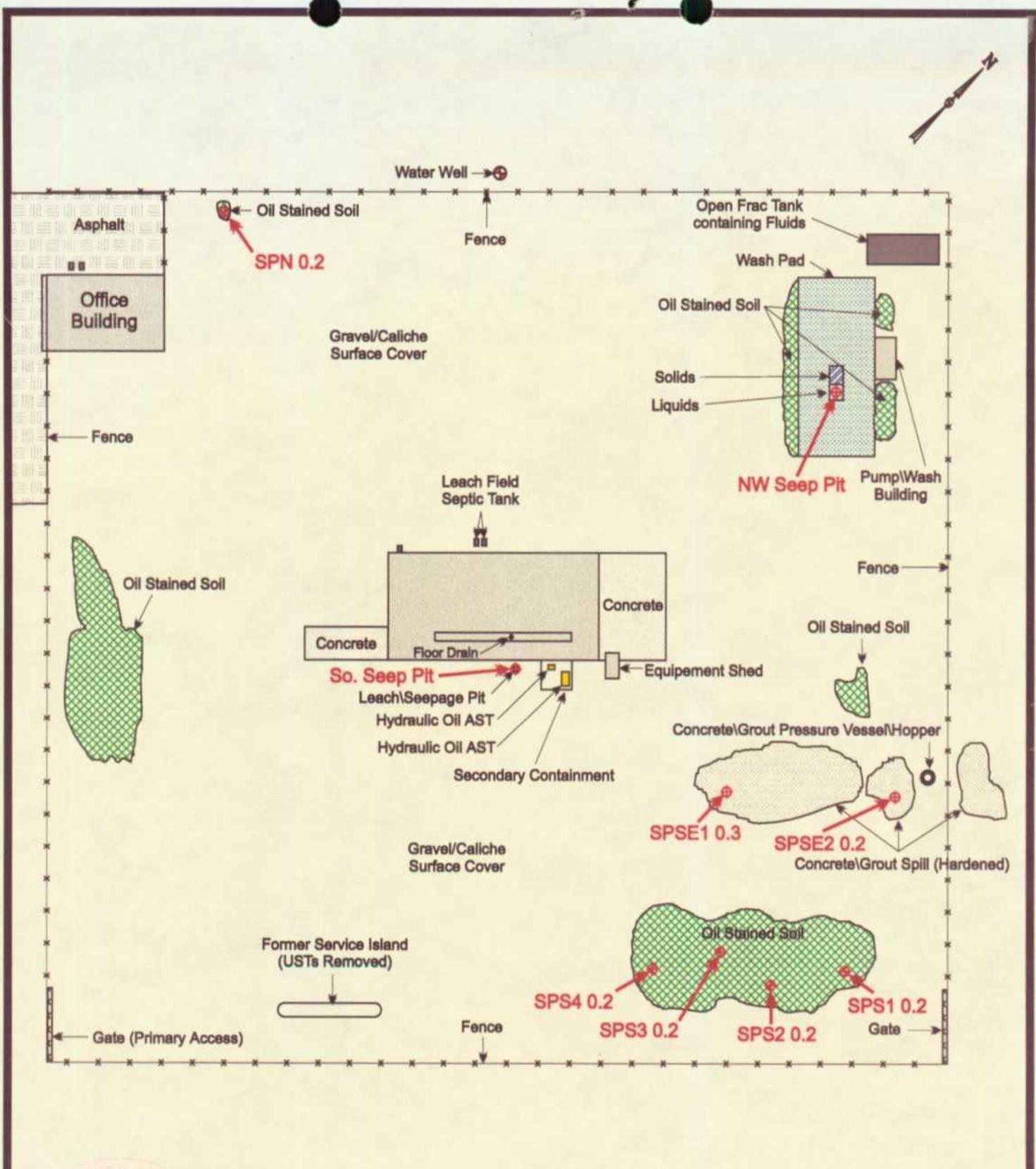
Dear Team,

For the third time, I have instructed Pride's consultant (Tetra Tech) that all Class V closures are handled out of Santa Fe, unless directed otherwise. Per my telephone conversation with Mr. Tony Herald (Tetra) he assured me that the submittal will be FED-EX to Roger.

I have set up a site inspection for this Friday. I will send you a report. Any waste disposal will be handled using the C-138 process. The work plan and closure will be approved by your group unless you direct otherwise.

For you info the first two C-138's were denied for certain deficiencies. When Pride re-submits I will review, approve if ok and send to you.

Thanks!



Date: 7/8/97 KWA AL File: S:\Data\shar\Prde\Graphics\001-0594f1

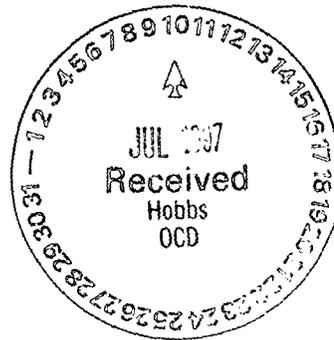
⊕ Sample Location
SPN 0.2 Sample I.D.

Figure 1
Site and Sample
Location Map

Pride Petroleum-Lovington Facility
 3851 HWY 18
 Lovington, New Mexico

Scale: 1" = 60'

PRC ENVIRONMENTAL MANAGEMENT, INC.





STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

July 7, 1997

Daniele Berardelli
GooYea Landfarm
P.O. Box 25547
Albuquerque, NM 87125

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

Re: C-138 submittal for Pride Petroleum dated 6-16-97; received in part June 20 & 27, 1997.
Leach field closure (EPA class V wells).

Dear Ms. Berardelli:

The C-138 submittal referenced above is hereby denied until the following deficiencies are corrected;

1. Please supply a copy of the Chain of Custody that reflects the receipt by the laboratory. The copy that was supplied does not indicate which lab sample numbers are assigned to samples. Also there is no information supplied as to which preservatives were used.
2. The laboratory analysis must be signed-off by the appropriate laboratory personnel.
3. Please provide information and rationale as to why the seven soil samples taken should be composited into one sample.
4. Please arrange with your client for an on-site inspection. The NMOCD will require this before any soils are disposed of off-site. The NMOCD Environmental Bureau also requires a field report from the NMOCD District office before any closure activities begin for the EPA type class V wells. Once the District office sends in the field report the final closure will be handled and approved out of the NMOCD Santa Fe, NM office.

If you require any further information or assistance please do not hesitate to call (505-393-6161) or write this office.

Sincerely Yours,

A handwritten signature in cursive script, appearing to read "Wayne Price".

Wayne Price-Environmental Engineer

cc: Chris Williams-NMOCD District I Supervisor-email
Roger Anderson-Environmental Bureau Chief, Santa Fe, NM-email
Martyne Kieling-Environmental Bureau, Santa Fe, NM-email

file: gooyeapr



STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

July 7, 1997

Billie Charo
Controlled Recovery, Inc.
P.O. Box 369
Hobbs, NM 88241

Re: C-138 submittal for Pride Petroleum dated (08/18/97) ?; received June 20, 1997. Leach field closure (EPA class V wells).

Dear Ms. Charo:

The C-138 submittal referenced above is hereby denied for the following reasons;

1. The submittal date is incorrect.
2. The analytical supplied is not complete. The waste stream is for a liquid matrix, the analytical supplied is for in part liquid and soil. Please submit the correct TCLP analysis as per EPA SW-846 for characteristics of hazardous waste per Subpart C CFR 40 261.20-.24.
3. The liquid analysis supplied is incomplete. EPA Method 8260 normally does not include all of the characteristics of hazardous waste.
4. Please supply a copy of the Chain of Custody that reflects the receipt by the laboratory. The copy that was supplied does not indicate which lab sample numbers are assigned to samples. Also there is no information supplied as to which preservatives were used.
5. The laboratory analysis must be signed-off by the appropriate laboratory personnel.

If you require any further information or assistance please do not hesitate to call (505-393-6161) or write this office.

Sincerely Yours,

A handwritten signature in cursive script that reads "Wayne Price".

Wayne Price-Environmental Engineer

cc: Chris Williams-NMOCD District I Supervisor-email
Roger Anderson-Environmental Bureau Chief, Santa Fe, NM -email
Martyne Kieling-Environmental Bureau, Santa Fe, NM-email

file: criptide

P. O. Box 1980
 Hobbs, NM 88241-1980
 District II - (505) 748-1283
 811 S. First
 Artesia, NM 88210
 District III - (505) 334-6178
 1000 Rio Brazos Road
 Aztec, NM 87410
 District IV - (505) 827-7131

NEW MEXICO
 Energy Minerals and Natural Resources Department
 Oil Conservation Division
 2040 South Pacheco Street
 Santa Fe, New Mexico 87505
 (505) 827-7131

Originated 8/8/97

Submit Original
 Plus 1 Copy
 to appropriate
 District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input type="checkbox"/> Non-Exempt: <input checked="" type="checkbox"/>	4. Generator Pride Petroleum
Verbal Approval Received: Yes <input type="checkbox"/> No <input type="checkbox"/>	5. Originating Site Lovington Facility
2. Management Facility Destination Controlled Recovery, Inc.	6. Transporter Pate Trucking
3. Address of Facility Operator P.O. Box 369 Hobbs	8. State NM
7. Location of Material (Street Address or ULSTR) 3851 Hwy 18	Lovington, NM
9. Circle One:	
A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.	
B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.	
All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

The following analytical is from the Pride Petroleum Lovington Facility. The waste was generated from oil water separation and seepage pit. I have included a certificate of waste and a chain of custody.

*all data
 very thorough
 TCEP?
 C-0-x - 5.30 M 400?
 MB sign?*

*DENIED
 7/17/97*

*SEE ATTACHED
 LETTER!*

**GOOD THINGS
 RECEIVED**

Estimated Volume 750 gallons cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE: Billie Charo TITLE: Office Manager DATE: 08/18/97
Waste Management Facility Authorized Agent
 TYPE OR PRINT NAME: Billie Charo TELEPHONE NO. (505)393-1079

(This space for State Use)

APPROVED BY: _____ TITLE: _____ DATE: _____

APPROVED BY: _____ TITLE: _____ DATE: _____