# GENERAL CORRESPONDENCE

YEAR(S): 2006 - 1995 HALLIBURTON

# Post Office Box 960 • Farmington, NM 87499 Phone 505.324.3500 • Fax 505.327.2534

June 19 , 2006 PM 12 53

Cle-99

Mr. Wayne Price Bureau Chief, Environment Oil Conservation Division New Mexico Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Dear Mr. Price,

Thank you for your time on Friday June 9<sup>th</sup>, 2006 to discuss the acid incident of June 5<sup>th</sup>, 2006 that occurred at Halliburton Energy Services, Inc.'s (HESI's) facility at 4109 East Main Street in Farmington, NM with Denise Tuck, Gary Winn, and myself. As we discussed, a precautionary evacuation of approximately 200 people, was ordered by the Farmington Fire Department at approximately 10:30 PM on June 5<sup>th</sup>, after a release of approximately 20 gallons of FE-1A (40 percent acetic acid and 60 percent acetic anhydride) into a self-contained concrete, containment area during a loading operation. No chemical was released to ground or water, but a strong vinegar smelling odor developed while the incident was being brought under control. Within 3.5 hours, the acid released to the containment was recovered and neutralized and the all clear was sounded. No injuries to Halliburton personnel or the local residents have been reported.

From what we can surmise the incident occurred for two reasons:

- An employee did not follow our process of utilizing a Job Safety Analysis in conjunction with our acid loading procedure prior to loading the acid.
- We had a leak in the schedule 80 C-PVC transfer line at the flow-meter connection.

Subsequently, HESI has taken the following remedial actions to minimize/eliminate the risk of reoccurrence:

- The connection on the transfer line that began to fail has been repaired.
- Our internal processes of utilizing a Job Safety Analysis prior to acid loading has been reviewed and reinforced with our materials handling department.
- We have instituted a new process to transport and mix undiluted FE-1A on location in lieu of doing so at the facility. Diluted FE-1A will continue to be mixed at the facility.
- As a precautionary measure only, the schedule 80 C-PVC piping of the acid dock will be replaced. We expect that our contractor will be available the week of June 19<sup>th</sup> to perform this operation.

At the time of release we determined that a C-141 report was not required as any release to ground or water did not occur and all material released to the containment was recovered. Further, the vapor released during the incident did not meet criteria for reporting as per our on-location and Houston Health, Safety, and Environment support expertise determined at the time of the incident and that subsequent vapor concentration calculations have confirmed.

Thank you again sir for your time and attention to this matter. Please call me at 505.324.3513 Office, 505.793.7477 Cell, or e-mail me at edward.flemma@halliburton.com should you have any further questions.

Yours sincerety

Edward R. Flemma District Manager

Halliburton Energy Services

Farmington, NM

cc:

Denise Tuck

Gary Winn

David Valdo, Health Compliance Officer, OSHA

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

# State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised October 10, 2003

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

# 2006 JUN 2Release Notication and Corrective Action

	(	OPERA'			Initia	al Report 🛮 🗷 F	inal Report
Name of Company Halliburton Energy Services, Inc.	C		dward Flemma		ict Mana	ger 	
Address 4109 East Main Street	T	elephone N	<sub>lo.</sub> 505-324-3	513			+
Facility Name Halliburton Farmington	<u> </u>	acility Typ	e Oil Field Se	rvices	Facility		
Surface Owner N/A   Mineral Owner	er N	N/A		6	Lease N	No. N/A	8
LOCATI	ON	OF RE	LEASE				
Unit Letter   Section   Township   Range   Feet from the   No	rth/S	outh Line	Feet from the	East/V	Vest Line	County	
						San Juan	
Latitude 36072'84"	+	Longitud	le 108o19'27"		<b>a</b>		
NATUR	RE (	OF REL	EASE				
Type of Release FE-1A leak to containment during acid loading operation						Recovered 20 gallor	
Source of Release leaking transfer line	8			esame	Date and	Hour of Discovery 0	6/05/2006
Was Immediate Notice Given? ☐ Yes ☐ No 📝 Not Requir	red	If YES, To	Whom? N/A - S	ee comr	nents on se	econd page	200
By Whom? N/A		Date and I	Iour N/A	<del></del>		A Bar	(C)
Was a Watercourse Reached?			olume Impacting t	he Wate	rcourse.	Con Con	TO S
☐ Yes 🗹 No		N/A				B MIN S	00 3
If a Watercourse was Impacted, Describe Fully.*						A LAGUELY	
No watercourse was impacted.						E CON	St. 107416.
·						JAST THE	. £
							· · · · · ·
Describe Cause of Problem and Remedial Action Taken.*	ot fo	llow our n	rocess of utiliz	ina a l	oh Safet	v Δnalveie in	<i>it</i> ,
	The cause of the problem was: 1. An employee did not follow our process of utilizing a Job Safety Analysis in conjunction with our acid loading procedure prior to loading the acid; and, 2. There was a leak in the transfer line at the						
flow meter connection. Continued on second page.	, u u		a, a.i.a, <u>z</u> . 1110.	·	a louit III		
Describe Area Affected and Cleanup Action Taken.*							
Area Affected: The spill was contained so no soil or groundwater were affected.							
Cleanup Actions Taken: 1) Material spilled in containment was neutralized and recovered.							
I hereby certify that the information given above is true and complete	to th	e best of my	knowledge and u	ınderstaı	nd that pur	suant to NMOCD rule	es and
regulations all operators are required to report and/or file certain release	se no	tifications a	nd perform correc	ctive act	ions for rel	eases which may end	anger
public health or the environment. The acceptance of a C-141 report by							
should their operations have failed to adequately investigate and reme or the environment. In addition, NMOCD acceptance of a C-141 repo							
federal, state, or local laws and/or regulations.	ni uc	cs not rene	e the operator of	respons	ionity for c	omphance with any (	Juici
a oo			OIL CON	SERV	ATION	DIVISION	
Signature:				ì	<u></u>	M 72110	N
	$\dashv$	Annroved by	District Supervis	or L	) En		200
Printed Name: Edward Flemma		ipproved by	. 10 ×		ov C	karlie 1	CYFIN
Title: District Manager	A	Approval Da	<u>te: 6/21/1</u>	06	Expiration	Date:	
E-mail Address: Edward Flemma@Halliburton.com	_  (	Conditions o	f Approval:			Attached □	
Date: 06/19/2006 Phone: 505-324-3513						Attached	
* Attach Additional Sheets If Necessary							

Release Notification and Correction Action Form C-141 Page 2 of 2

Please note that this form is being submitted at the direction of Mr. Wayne Price and Mr. Denny Foust of OCD. Halliburton has not previously provided notice of this release because the release did not meet the criteria that trigger a reporting requirement. The release was less than five barrels, was contained, and did not reach soil or water. In addition the release did not have a reasonable probability to endanger public health. The concentrations of material in the air at the property line were conservatively modeled using SCREEN3 software and did not exceed the ACGIH and OSHA PEL- 8 hour TWA exposure limits.

Describe Remedial Action Taken: 1) The connection on the transfer line that began to fail has been repaired. 2) The internal processes of utilizing a Job Safety Analysis prior to acid loading has been reviewed and reinforced with the materials handling department. 3) A new process to transport and mix undiluted FE-1A on location in lieu of doing so at the facility has been instituted. Diluted FE-1A will continue to be mixed at the facility. 4) As a precautionary measure only, the Schedule 80 CPVC piping at the acid dock will be replaced.

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student completes the summer program does not determine if they will stay in the same grade for the next school year.

In order to make the camp

In order to make the camp more enjoyable, organizers have come up with a theme. The theme for this year's camp is "Blast from the Past" and some classes have used that theme to propel their work.

For instance, Vickie Sheley, a

reading teacher, decided to have her students do research and learn about New Mexico history while making rockets.

"Because of the motto, I thought of rockets," said Sheley. "They get to research and interpret information that is tied to New Mexico."

The camp is only one program taking place in Farmington. At the elementary level

there are several programs at a number of elementary schools. Activities vary at each location and are also directed toward a specific skill level.

"Any student in school who needs an extra boost (can be recommended)," said Tulley. "All of the elementary programs are Title I funded, so any student in

See School A7.

# State officials downplay acid cloud

# Oil Conservation Division bureau chief: 'This was a freak accident'

— By Cory Frolik — The Daily Times

FARMINGTON — State officials are downplaying the formation of an acid cloud that caused the evacuation of more than 220 people on Monday night.

In a meeting with the Oil Conservation Division (OCD) on Friday, Halliburton Energy Services discussed the acid spill and the resulting vapor cloud.

By the end of the meeting, OCD administrators said they felt confident the spill was not due to negligence on behalf of Halliburton and that the company had things under control, according to Wayne Price, OCD environmental bureau chief.

"In my experience, Halliburton has had a state-of-the-art service yard, they go beyond the minimum requirements," he said. "I just think this was a freak accident that happened, an engineering problem that will be corrected."

The OCD implements and regulates New Mexico's ground water protection plan, according to the group's mission statement.

See Accident A7.

# Responders say they're prepared for emergencies; residents unsure

— By Nathan Gonzalez — The Daily Times

FARMINGTON — Twenty-seven-year-old Duranda Harrison said evacuation of the Animas Mobile Home Park where she lives on the city's east side, wasn't exactly as smooth as emergency responders claim.

Harrison and more than 220 other nearby residents

See Emergencies A5.

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New Mexico while enforcing the division's rules and the state's oil and gas statutes.

Halliburton has a water discharge permit with the OCD, said Price, adding that the OCD has developed a working knowledge of the company's operations.

"They have an excellent record, they are a very good company and corporate citizens," he said.

Due to Halliburton being an OCD-regulated facility, the task of reviewing the chemical spill falls to that organization alone. The New Mexico Environment Department (NMED) does not investigate incidents occurring at oil and gas facilities, according to NMED Communications Director Adam Rankin.

The Occupational Safety and Health Administration (OSHA) is not investigating the incident because they have not received any health or safety complaints, according to Herman

Hernandez, OSHA compliance officer. OSHA would have been notified if three individuals had been hospitalized or if there was a fatality, he said. The most severe symptoms evacuees exhibited were coughing and burning eyes, according to the Farmington Fire Department.

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Halliburton is not being fined for the leak by the OCD because the company did not violate any of the OCD's rules, Price said.

"(This incident) really fell between the cracks of the regulatory authority," he said, adding that the OCD protects only ground water, and in this instance, the material became vapor and never hit the ground.

If the company were cited it would be for an air quality violation, he added. The Four Corners Air Quality Task Force could not be reached for comment.

The Farmington Fire Department is seeking monetary reimbursement from Halliburton in the amount of \$10,000 to cover the cost of their emergency response.

The acid spill occurred when piping "fell apart" while Halliburton employees were mixing acid in

FE an acetic acid used for macturing oil wells.

"Basically it is a concentrated vinegar," Price said. In "an overabundance of precaution" Halliburton encouraged authorities to evacuate the nearby trailer parks because the smell would "cause fear and outrage," he said.

The acid Halliburton used was more "pungent" than harmful, Price said. Household vinegar, he added, is about 5 percent acidic, whereas Halliburton's fracturing agent is at about 30 percent.

"In a diluted form it is benign but rather obnoxious," he said.

Jess Benson, director of the New Mexico Poison Center in Albuquerque, said a 30-percent concentration can cause serious physical symptoms.

"What we would see with that is some irritation in the lungs or the skin. ... There can be coughing and choking, (it) could produce problems like a lot of fluid poring into the lungs," he said.

Acetic acid is used in most every type of well-fracturing, said Tom Dugan, president and operator of Dugan Production Corporation.

"It is an unusual occurrence to have a spill that bothers anyone," he said. "They are a good company and it was an accident that happened and no one got hurt and that's fortunate."

Monday's incident was not the first time Halliburton has been involved in a chemical spill in Farmington in recent years. Halliburton accidentally dumped 2,000 gallons of hydrochloric acid into Farmington's sewer system in December of 2000, according to a previous story in The Daily Times.

One Halliburton employee was reportedly injured while trying to clean up the spill, but on the whole, city wastewater officials said no significant effects resulted from the incident.

According to the National Response Center's database, in 2005 Halliburton reported 27 incidents involving chemical spills in the United States.

Πθριθθροί Sθυπθριμβ ος τρακό του απολογού του Television News that he saw U.S. qawi after the attack, Caldwell soldiers beating an injured man said he would check. In Washing-

rorest where the house was ne just outside Baqouba, 35 m northeast of Baghdad.

# **Emergencies**

(Continued from Page A1)

Hε

were forced from their homes by Farmington fire and police personnel, after a potentially flammable acid gas cloud loomed over their Gila Street neighborhood following an industrial accident at Halliburton Energy Services Monday evening.

"Everyone was going to sleep because no one said anything," she said. "You have little ones in this neighborhood. ... They should have been more cooperative in letting us know what was going on."

Susan Pope, 37, who lives in the same park, said police didn't

evacuate her family.

"Our landlord woke us up at 11:15. Police officers did not go door-to-door," she said noting that she never saw police until they began blocking E. Main Street and others in the area. "It happened at 10 o'clock. We didn't leave until 11:15. What if it had been a larger amount?"

However, the residents were never in serious harm as a result of the escaping cloud that blanketed the area with a strong vinegar smell, said Farmington Fire Chief Robert Martin.

"Nobody was going to die from this stuff," Martin said. "It's an irritant. But we decided to go ahead an evacuate them."

Martin said his department's Hazmat Team has trained specifically for acid spills, such as the one in Halliburton's yard, which kept people from their homes for about three hours.

After working with Halliburton staff, hazmat officials neutralized the acid spill. The task then turned to the ensuing plume of gas that escaped the containment area and threatened nearby homes where swamp coolers kept residents cool into the night.

Fire officials utilize computer software designed to map out the size of a gas plume and where it's migrated over time. Based on those computer models, fire and police officials can begin mobilizing and evacuating site-specific areas.

The Farmington Hazmat team has won national awards for its responses and handling of emergency scenarios, Martin said. The team took first place in a competition in Los Alamos earlier this year.

Following an evacuation, residents are collected in a centralized location. In Monday's incident, evacuees were directed to the Animas Valley Mall east of the spill and Gateway Park at Farmington Museum to the west.

"The mall presented a different problem," Martin said, adding that mall personnel "were caught off guard. They were under the assumption we were going to use the parking lot rather than the building."

Residents gathered at the mall grew frustrated because the manager refused to open the facility for use of bathrooms.

Lillian Rose, executive director of the San Juan Chapter of the American Red Cross, which is also mobilized to tend to evacuees, said following the spill, responders didn't anticipate keeping residents from their homes for an extended period of time. Had that been the case, a long-term shelter with cots would have been set up.

"The mall would not normally be a shelter set up," Rose said. "We have agreements with schools and churches. If it's going to take all night we are definitely going to set up a full-blown shelter. Then we can bring in cots, blankets and food."

Typically, the Red Cross selects shelter locations where people have access to showers, bathrooms and a kitchen.

"Each scenario can cause different responses. The safety of the community is first and foremost," Rose said.

On standby, while Farmin Hazmat tended to the spill, county emergency responders.

county emergency responders.
County Emergency Mana
Don Cooper, who has held
position for 14 years, said
county is fortunate to hav
regional hazmat team that co
the Four Corners area. Cooper
he has "100 percent" confidenc
the hazmat team.

"It depends on what happe Cooper said of situations we hazmat would be called. "So times it's unknown, but we he special teams like Farming Hazmat. We are very fortune they are very well trained and vequipped."

Farmington Hazmat has agments with the county, Aztec Bloomfield to respond to hardous spills and other incide but will respond wherever need Martin said.

Cooper said chemical spills not uncommon within the cou and area cities. Most often brol gas lines and truck spills car evacuations, he said.

San Juan County, includi Aztec, Bloomfield and Farmir ton, has received more than million in federal funding sin 9/11, Cooper said. Those fun have gone toward preparing fi police, hazmat and SWAT tear for emergency situations.

Daily Times reporter Co Frolik contributed to this story.

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Thirty-Five Years of Archaeological Research at Salmon Ruins, New Mexico (Three Volumes) Edited By Paul F. Reed

# **HALLIBURTON**

# MATERIAL SAFETY DATA SHEET

**Product Trade Name:** 

FE-1A ACIDIZING COMPOSITION

**Revision Date:** 

06-Apr-2004

# 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Trade Name:** 

FE-1A ACIDIZING COMPOSITION

Synonyms:

None

Chemical Family:

Organic acid Anhydride

Application: Ad

Additive

Manufacturer/Supplier

Halliburton Energy Services

P.O. Box 1431

Duncan, Oklahoma 73536-0431

Emergency Telephone: (281) 575-5000

**Prepared By** 

**Chemical Compliance** 

Telephone: 1-580-251-4335

# 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE	CAS Number	PERCENT	ACGIH TLV-TWA	OSHA PEL-TWA
Acetic acid	64-19-7	30 - 60%	10 ppm	10 ppm
Acetic anhydride	108-24-7	60 - 100%	5 ppm	5 ppm

# 3. HAZARDS IDENTIFICATION

**Hazard Overview** 

May cause eye, skin, and respiratory burns. May be harmful if swallowed.

Combustible. Reacts violently with water.

# 4. FIRST AID MEASURES

Inhalation

If inhaled, remove to fresh air. If not breathing give artificial respiration, preferably

mouth-to-mouth. If breathing is difficult give oxygen. Get medical attention.

Skin

In case of contact, immediately flush skin with plenty of soap and water for at least 15 minutes. Get medical attention. Remove contaminated clothing and launder before

reuse. Destroy or properly dispose of contaminated shoes.

**Eyes** 

In case of contact, or suspected contact, immediately flush eyes with plenty of water

for at least 15 minutes and get medical attention immediately after flushing.

Ingestion

Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek

medical attention. Never give anything by mouth to an unconscious person.

Notes to Physician

Not Applicable

# FIRE FIGHTING MEASURES

Flash Point/Range (F): 103 Flash Point/Range (C): 39 Flash Point Method: **PMCC Autoignition Temperature (F):** 630 **Autoignition Temperature (C):** 332 Flammability Limits in Air - Lower (%): 3 Flammability Limits in Air - Upper (%): 19

Fire Extinguishing Media Carbon Dioxide, Dry Chemicals, Foam. Water must not be used with open

containers.

**Special Exposure Hazards** May be ignited by heat, sparks or flames. Closed containers may explode in fire.

ı,

Decomposition in fire may produce toxic gases. Reaction with water may be highly

exothermic.

Fire-Fighters

Special Protective Equipment for Full protective clothing and approved self-contained breathing apparatus required for

fire fighting personnel.

**NFPA Ratings: HMIS Ratings:** 

Health 3, Flammability 2, Reactivity 2

Flammability 2, Reactivity 2, Health 3

# **ACCIDENTAL RELEASE MEASURES**

Personal Precautionary Measures Use appropriate protective equipment.

**Environmental Precautionary** 

Measures

Prevent from entering sewers, waterways, or low areas.

Procedure for Cleaning /

**Absorption** 

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials.

Neutralize to pH of 6-8. Scoop up and remove.

# HANDLING AND STORAGE

Avoid contact with eyes, skin, or clothing. Avoid breathing vapors. Wash hands after **Handling Precautions** 

use. Launder contaminated clothing before reuse.

Store away from alkalis. Store away from oxidizers. Store away from water. Keep **Storage Information** 

from heat, sparks, and open flames. Keep container closed when not in use.

# **EXPOSURE CONTROLS/PERSONAL PROTECTION**

Use in a well ventilated area. Local exhaust ventilation should be used in areas **Engineering Controls** 

without good cross ventilation.

**Respiratory Protection** Organic vapor/acid gas respirator.

**Hand Protection** Impervious rubber gloves.

Rubber boots. Full protective chemical resistant clothing. Skin Protection

Chemical goggles; also wear a face shield if splashing hazard exists. **Eye Protection** 

Evewash fountains and safety showers must be easily accessible. Other Precautions

# PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** 

Liquid

Color:

Clear colorless

FE-1A ACIDIZING COMPOSITION Page 2 of 6

Odor: Pungent acrid PH: Not Determined

Specific Gravity @ 20 C (Water=1): 1.05 Density @ 20 C (lbs./gallon): 8.74

Bulk Density @ 20 C (lbs/ft3): Not Determined

Boiling Point/Range (F): 259
Boiling Point/Range (C): 126

Freezing Point/Range (F):

Not Determined

Not Determined

Vapor Pressure @ 20 C (mmHg):11.7Vapor Density (Air=1):3.5Percent Volatiles:100Evaporation Rate (Butyl Acetate=1):0.97Solubility in Water (g/100ml):Soluble

Solubility in Solvents (g/100ml):

VOCs (lbs./gallon):

Viscosity, Dynamic @ 20 C (centipoise):

Viscosity, Kinematic @ 20 C (centistrokes):

Not Determined

Not Determined

Not Determined

Partition Coefficient/n-Octanol/Water: Not Determined Molecular Weight (g/mole): Not Determined

# 10. STABILITY AND REACTIVITY

Stability Data: Stable

Hazardous Polymerization: Will Not Occur

Conditions to Avoid Keep away from heat, sparks and flame. Do not allow water to get into container

because of violent reaction.

Incompatibility (Materials to

Avoid)

Strong alkalis. Strong oxidizers. Reacts with water.

**Hazardous Decomposition** 

**Products** 

Carbon monoxide and carbon dioxide.

Additional Guidelines Not Applicable

# 11. TOXICOLOGICAL INFORMATION

**Principle Route of Exposure** Eye or skin contact, inhalation.

**Inhalation** Causes severe respiratory irritation.

Skin Contact Causes severe burns.

Eye Contact Causes severe eye burns.

**Ingestion** Causes burns of the mouth, throat and stomach.

**Aggravated Medical Conditions** Skin disorders. Eye ailments.

Chronic Effects/Carcinogenicity Prolonged, excessive exposure may cause erosion of the teeth.

Other Information None known.

**Toxicity Tests** 

Oral Toxicity: Not determined

**Dermal Toxicity:** Not determined

FE-1A ACIDIZING COMPOSITION Page 3 of 6

Inhalation Toxicity:

Not determined

**Primary Irritation Effect:** 

Not determined

Carcinogenicity

Not determined

**Genotoxicity:** 

Not determined

Reproductive /

**Developmental Toxicity:** 

Not determined

# **ECOLOGICAL INFORMATION**

Mobility (Water/Soil/Air)

Not determined

Persistence/Degradability

Readily biodegradable

**Bio-accumulation** 

Not Determined

# **Ecotoxicological Information**

**Acute Fish Toxicity:** 

Not determined

Acute Crustaceans Toxicity: Not determined

Acute Algae Toxicity:

Not determined

**Chemical Fate Information** 

Not determined

Other Information

Not applicable

# **DISPOSAL CONSIDERATIONS**

**Disposal Method** 

Disposal should be made in accordance with federal, state, and local regulations.

**Contaminated Packaging** 

If empty container retains product residues, all label precautions must be observed. Store away from ignition sources. Transport with all closures in place. Return for

reuse or disposal according to national or local regulations.

# TRANSPORT INFORMATION

# **Land Transportation**

## DOT

Corrosive Liquid, Flammable, N.O.S., 8, (3), UN2920, II, (39.4 C) (Contains Acetic Anhydride, Acetic Acid) NAERG 132

#### Canadian TDG

Corrosive Liquid, Flammable, N.O.S. (Contains Acetic Anhydride, Acetic Acid), 8, (3), UN2920, II, (39.4 C)

UN2920, Corrosive Liquid, Flammable, N.O.S. (Contains Acetic Anhydride, Acetic Acid), 8, (3), II

# Air Transportation

## ICAO/IATA

UN2920, Corrosive Liquid, Flammable, N.O.S., 8, (3), II (Contains Acetic Anhydride, Acetic Acid Solution)

> FE-1A ACIDIZING COMPOSITION Page 4 of 6

# Sea Transportation

#### **IMDG**

Corrosive Liquid, Flammable, N.O.S.(Contains Acetic Anhydride, Acetic Acid), 8, UN2920, II, (39.4 C), (3) EmS F-E, S-C

# **Other Shipping Information**

Labels:

Corrosive

Flammable Liquid

# 15. REGULATORY INFORMATION

# **US Regulations**

**US TSCA Inventory** 

All components listed on inventory.

EPA SARA Title III Extremely Hazardous Substances

Not applicable

EPA SARA (311,312) Hazard

Class

Acute Health Hazard

Fire Hazard

**EPA SARA (313) Chemicals** 

This product does not contain a toxic chemical for routine annual "Toxic Chemical

Release Reporting" under Section 313 (40 CFR 372).

EPA CERCLA/Superfund

EPA Reportable Spill Quantity is 1409 Gallons based on Acetic acid (CAS: 64-19-7).

Reportable Spill Quantity For This

**Product** 

**EPA RCRA Hazardous Waste** 

Classification

If product becomes a waste, it does meet the criteria of a hazardous waste as

defined by the US EPA, because of:

Ignitability D001 Corrosivity D002

**California Proposition 65** 

All components listed do not apply to the California Proposition 65 Regulation.

MA Right-to-Know Law

One or more components listed.

NJ Right-to-Know Law

One or more components listed.

PA Right-to-Know Law

One or more components listed.

Canadian Regulations

Canadian DSL Inventory

All components listed on inventory.

**WHMIS Hazard Class** 

B3 Combustible Liquids E Corrosive Material

# 16. OTHER INFORMATION

The following sections have been revised since the last issue of this MSDS Not applicable

# **Additional Information**

For additional information on the use of this product, contact your local Halliburton representative.

For questions about the Material Safety Data Sheet for this or other Halliburton products, contact Chemical Compliance at 1-580-251-4335.

# **Disclaimer Statement**

This information is furnished without warranty, expressed or implied, as to accuracy or completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

\*\*\*END OF MSDS\*\*\*

Founded 1849

# NOTICE OF PUBLICATION

STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPART-MENT OIL CONSERVATION

DIVISION

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(GW-099) - Halliburton Energy Services, Mr. Allen Rodrigue, 4109 East Main, Farmington, New Mexico 87401, has submitted a discharge plan renewal application for their Farmington Service Facility located in the NW/4 NE/4, Section 1, Township 29 North, Range 13 West, NMPM, San Juan County, New Mexico. All waste water is collected then discharged into the City of Sewage Farmington Treatment System

(POTW). Groundwater most likely to be affected by an accidental discharge is at a depth of approximately 80 feet with a total dissolved solids ranging from 600 mg/l to 900 mg/l. The discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

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 discharge plan application may be viewed at the above ad-

#### **EMNRD**

8:00 between dress a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any pro-posed discharge plan or its modification, 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 to him 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.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 24th day of September, 2002.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

SEAL

LORI WROTENBERY, Director Legal #72327 Pub. Oct. 18, 2002 AD NUMBER: 286560

ACCOUNT: 56660

LEGAL NO: 72327

P.O.#: 03-199-00005

181 LINES 1 time(s) at \$ 79.79 AFFIDAVITS: 5.25

TAX: TOTAL: 5.31

90.35

AFFIDAVIT OF PUBLICATION

STATE OF NEW MEXICO

COUNTY OF SANTA FE \_ 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 a copy of which is hereto attached was published #12327 in said newspaper 1 day(s) between 10/18/2002 and 10/18/2002 and that the notice was published in the newspaper proper and not in any supplement; the first publication being on the 18 day of October, 2002 and that the undersigned has personal knowledge of the matter and things set forth in this affidavit.

151 K. Goodles

LEGAL ADVERTISEMENT REPRESENTATIVE

Subscribed and sworn to before me on this 21 day of October A.D., 2002

Notary

Laura

2. Hrus

Commission Expires

11/23/03

101

# AFFIDAVIT OF PUBLICATION

Ad No. 46916

# STATE OF NEW MEXICO County of San Juan:

That she is the Advertising Manager of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the meeting of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication on the following day(s): Friday, October 18, 2002.

And the cost of the publication is \$74.20.

Connie Pruitt

ON 10.30.02 CONNIE PRUITT appeared before me, whom I know personally to be the person who signed the above document.

My Compaission Expires April 2, 2004.

Jack

# **COPY OF PUBLICATION**

918

enals

with a

#### NOTICE OF PUBLICATION

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

Notice is hereby given that pursuant to the New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, 1220 South Saint Francis Drive, Santa Fe, New Mexico 87505, Telephone (505) 476-3440:

(GW-099) - Halliburton Energy Services, Mr. Allen Rodrigue, 4109 East Main, Farmington, New Mexico 87401, has submitted a discharge plan renewal application for their Farmington Service Facility located in the NW/4 NE/4, Section 1, Township 29 North, Range 13 West, NMPM, San Juan County, New

Mexico. All waste water is collected then discharged into the City of Farmington Sewage Treatment System (POTW). Groundwater most likely to be affected by an accidental discharge is at a depth of approximately 80 feet total dissolved solids ranging from 600 mg/l to 900 mg/l. The

discharge plan addresses how spill, leaks, and other accidental discharges to the surface will be managed.

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 discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, 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 to him 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.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 24th day of September, 2002.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

SEAL .

LORI WROTENBERY, Director

Legal No. 46916, published in The Daily Times, Farmington, New Mexico, Friday, October 18, 2002.

# Ford, Jack

From:

Martin, Ed

Sent:

Tuesday, October 15, 2002 8:19 AM

To:

Farmington Daily Times (E-mail)

Cc:

Ford, Jack

Subject:

**Public Notice** 

Please publish the attached legal notice, one time only, on or before Friday, October 18, 2002. Upon publication, forward to this office:

- 1. Publisher's affidavit.
- 2. Invoice. Our purchase order number is 03-199-000048 If you have any questions, please contact me. Thank you.



Publ. Notice GW-099.doc

# Ed Martin

New Mexico Oil Conservation Division Environmental Bureau 1220 S. St. Francis Santa Fe, NM 87505

Phone: 505-476-3492 Fax: 505-476-3471

# Ford, Jack

From:

Martin, Ed

Sent:

Tuesday, October 15, 2002 8:16 AM

To:

Santa Fe New Mexican (E-mail)

Cc:

Ford, Jack; Olson, William; Bruce S. Garber; Chris Shuey; Colin Adams; Director, State Parks; Don Fernald; Don Neeper; Eddie Seay; Gerald R. Zimmerman; Jack A. Barnett; James Bearzi; Jay Lazarus; Lee Wilson & Associates; Marcy Leavitt; Martin Nee; Mike

Matush, Ned Kendrick, Regional Forester, Ron Dutton, Sectretary, NMED

Subject:

**Public Notices** 

Please publish the attached legal notices, one time only, on or before Friday, October 18, 2002. Upon publication, forward to this office:

1. Publisher's affidavit.

2. Invoice. Our purchase order number is **03-199-000050** If you have any questions, please contact me. Thank you.





Publ. Notice GW-099.doc Publ. Notice GW-277.doc Publ. Notice GW-052a.doc

# Ed Martin

New Mexico Oil Conservation Division Environmental Bureau 1220 S. St. Francis Santa Fe, NM 87505

Phone: 505-476-3492 Fax: 505-476-3471

# NOTICE OF PUBLICATION

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

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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 discharge plan application may be viewed at the above address between 8:00 a.m. and 4:00 p.m., Monday thru Friday. Prior to ruling on any proposed discharge plan or its modification, 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 to him 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.

If no hearing is held, the Director will approve or disapprove the plan based on the information available. If a public hearing is held, the Director will approve the plan based on the information in the plan and information presented at the hearing.

GIVEN under the Seal of New Mexico Conservation Commission at Santa Fe, New Mexico, on this 24th day of September, 2002.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

LORI WROTENBERY, Director

**SEAL** 

# 4109 East Main • Farmington, NM 87402 Phone 505.324.3540 • Fax 505.324.3545

September 16, 2002

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
P.O. Box 2088 2040 South Pacheco
Santa Fe, NM 87501

Attn.: Jack Ford,

RE: Notification of Correction to Discharge Plan Application for 2002 Farmington, NM

Dear Mr. Ford,

During an internal review of the Discharge application recently submitted to the State of New Mexico for the Halliburton Farmington Facilities, it was discovered that the cover letter referenced the GW-99 plan instead of the GW-2002 plan. Please add this letter to your file as clarification for the submittal. The correct subject line should have stated: GW-2002 Discharge Plan. We apologize for any inconvenience this may have caused. Please don't hesitate to contact me with any questions or comments.

Respectfally

Kellie J. Skeltøn

HSE Technical Professional NWA Rocky Mountains

CC:

Allen Rodrigue

File

NMOCD office, Aztec, NM

Jerry Beckman, Halliburton Requirements Management

production in the control of the con

# ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of check No dated 8-29-02
or cash received on in the amount of \$ [700,00
from Flassishen Energy Sus.
for Farmington Service Facility GW-099.
Submitted by: Mate: 5-02
Submitted to ASD by:
Received in ASD by:Date:
Filing Fee New Facility Renewal New Renewal
Modification Other
Organization Code 521.07 Applicable FY 2001
To be deposited in the Water Quality Management Fund.
Full Payment or Annual Increment

		Washington and Company of the Compan	NO 3553-2005	
		JRTON ENERGY SV	DS 56-194/422	
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# ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of che	eck No dated 8-29-02
or cash received on	in the amount of \$ 100.00
from fallbutton Eng. Sv.	700,00
for Farming for Serv. Fac.	au-099 ·
Submitted by: My Jo	Date: 9-5-02
Submitted to ASD by:	Date:
Received in ASD by:	Date:
Filing Fee New Facility	
Modification Other	
	<del></del>
Organization Code 521.07	Applicable FY 2001
To be deposited in the Water Qualit	y Management Fund
Full Payment or Annual	

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# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Betty Rivera
Cabinet Secretary

July 10, 2002

Lori Wrotenbery
Director
Oil Conservation Division

# CERTIFIED MAIL RETURN RECEIPT NO. 3929 9048

Mr. Mike Cornforth Senior Environmental Coordinator Halliburton Energy Services P.O. Drawer 1431 Duncan, Oklahoma 73536-0108

RE: Discharge Plan Renewal Notice

Dear Mr. Cornforth:

Halliburton Energy Services has the following discharge plan, which expires during the current calendar year.

GW-099 expires 12/30/2002 - Farmington Service Facility

WQCC 3106.F. If the holder of an approved discharge plan submits an application for discharge plan renewal at least 120 days before the discharge plan expires, and the discharger is not in violation of the approved discharge plan on the date of its expiration, then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved. A discharge plan continued under this provision remains fully effective and enforceable. An application for discharge plan renewal must include and adequately address all of the information necessary for evaluation of a new discharge plan. Previously submitted materials may be included by reference provided they are current, readily available to the secretary and sufficiently identified to be retrieved. [12-1-95]

The discharge plan renewal application for each of the above facilities is subject to WQCC Regulation 20NMAC 6.2.3114. Every billable facility submitting a discharge plan renewal will be assessed a fee equal to the filing fee of \$100.00. After January 15, 2001 renewal discharge plans require a flat fee equal to \$1,700.00 which is the flat fee schedule for oil field service facilities pursuant to revised WQCC Regulations 20NMAC 6.2.3114. The \$100.00 filing fee is to be submitted with each discharge plan renewal application and is nonrefundable.

Please make all checks payable to: NMED-Water Quality Management and addressed to the OCD Santa Fe Office. Please submit the original discharge plan renewal application and one copy to the OCD Santa Fe Office and one copy to the OCD Hobbs District Office. Note that the completed and signed application form must be submitted with your discharge plan renewal request. A complete copy of the regulations is also available on NMED's website at <a href="https://www.nmenv.state.nm.us">www.nmenv.state.nm.us</a>).

If any of the above-sited facilities no longer has any actual or potential discharges and a discharge plan is not needed, please notify this office. If Halliburton Energy Services has any questions, please do not hesitate to contact Mr. Jack Ford at (505) 476-3489.

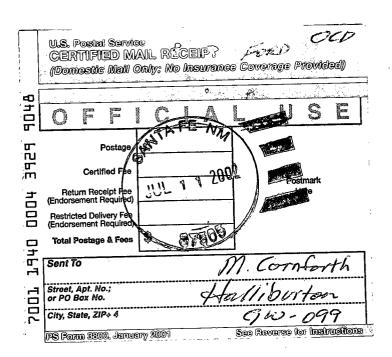
Sincerely,

Roger & Anderson

Oil Conservation Division

RCA/wjf

cc: OCD Aztec District Office





# NEW MEXICO ENERGY, MENERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

July 23, 2001

Lori Wrotenbery
Director
Oil Conservation Division

Ms. Kellie Skelton Halliburton Energy Services 4109 East Main Street Farmington, New Mexico 87401

RE: MICRO MAX DISPOSAL

Dear Ms. Skelton:

The Oil Conservation Division (OCD) is in receipt of your request for disposal of Micro max dry material utilized for downhole cementing operations. Based upon information provided in your request letter and the attached safety data sheets of the material the OCD would classify this as unused dry chemical material under 19.15.9.712.D.3.(g). As such, your request is **hereby approved** for disposal into the San Juan County landfill.

Your estimate of amount of such material to be generated at the facility is misleading. Please review your letter and provide the OCD with the correct information. If you have any questions contact me at (505) 476-3489.

Sincerely,

W. Jaok Ford, C.P.G.

Environmental Bureau

cc: OCD Aztec District Office

Ms. Martyne Kieling, OCD Santa Fe Office

Jack Ford



# HALLIBURTON ENERGY SERVICES

4109 East Main Street / Farmington, NM 87401

June 29, 2001

Denny Foust Oil Conservation Division 1000 Rio Brazos Road Aztec, NM 87410

Dear Denny Foust,

# **Subject:** Request for Micro Max Disposal

Halliburton Energy Services respectfully requests the disposal of Micro max from our Main yard facility into the San Juan County Landfill. An unused dry chemical is still in its original container. We make this request in accordance with the disposal rule 7-12 paragraph D.3g of the New Mexico disposal regulations.

Sincerely,

Kellie Skelton

/HSE/f/echnical Professional

cc: Allen Rodrigue

file



# NEW MEXICO ENERGY, MINERALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION AZTEC DISTRICT OFFICE 1000 RIO BRAZOS ROAD AZTEC, NEW MEXICO 87410 [508] 334-6178 Fax (505)334-6170

GARY E. JOHNSON GOVERNOR

JENNIFER A. SALISBURY CABINET SECRETARY

# **CERTIFICATE OF WASTE STATUS**

1. Generator Name and Address: Halliburton ENEOgy Darvices 4109 E: Main 81. Farmington, DM. 87401	2. Destination Name: Whate Municonand of Num Redico Croach Mesa Londfill 78 Romo 3140 Formington NM 87401
3. Originating Site (name):	Location of the Waste (Street address &/or ULSTR):
	2324.37 67 4.10 4720.0 (2310.0 201.0 201.0 4.10 4.10 4.10 4.10 4.10 4.10 4.10
Werehouse SAA.	
JAK.	1
Attach list of originating sites as appropriate	
4. Source and Description of Waste	6- 1 Puls 712 D 361
Micromax- unused org c	homical Rule 712 D.3(g)
l ·	
•	
Allen T Padarens	
HALLIBURTON ENERGY SER	representative for:
HALL BURTON ENERGY SER	VICES do hereby certify that,
according to the Resource Conservation and Recove	ry Act (RCRA) and Environmental Protection Agency's July,
1988, regulatory determination, the above described	waste is: (Check appropriate classification)
my many in the second s	ADV - 116' of Joseph Architek in the Superadorus has also association
	MPT oilfield waste which is non-hazardous by characteristic by product identification
anulysis st	by product identification
and that nothing has been added to the exempt or no	n-exempt non-hazardous waste defined above.
For NON-EXEMPT waste the following documenta  MSDS Information  RCRA Hazardous Waste Analysis  Chain of Custody	ation is attached (check appropriate items): Other (description):
to 20 NMAC 3.1 subpart 1403.C and D.	Naturally Occurring Radioactive Material (NORM) pursuant
Name (Original Signature): Ally Rody  Title: Shared SERVICE Superu  Date: 06-12-0(	
Title: Shared SERVICE SUPERV	ISUK
Date: 06-12-0(	



# Safety Data Sheet (93/112/EC)

# **MICROMAX**

**Revision Date:** 

22/03/2000

# 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

# Identification of Substances or Preparation

**Product Trade Name:** 

**MICROMAX** 

Synonyms:

None

Chemical Family:

Not determined

# Company Undertaking Identification

Halliburton Energy Services

Hill Park Court,

Springfield Drive

Leatherhead

Surrey KT22 7NL

United Kingdom,

Emergency Phone Number: +44 117 927 0086 or +1 713 676 3000

### **Prepared By**

Product Stewardship

Telephone: 1-580-251-4335

Manganese tetraoxide 1317-35-7

2	COMPO	SITION/INFORMATION	ON INCREDIENTS
	L.CJIVIPCJ	MILICANAMINE OR INFANTALIA	CHARACTER SOLEMAN

 Substance
 UK
 Germany
 Netherlands
 EEC

 Substance
 Weight
 OEL/MEL
 MAK/TRK
 MAC
 Classification

reiceit (78)

60 - 100%

1 mg/m3

0,5 mg/m3

1 mg/m3

Not applicable

# 3. HAZARDS IDENTIFICATION

# **Hazard Overview**

May cause Parkinson's Disease-like symptoms.

# 4. FIRST AID MEASURES



### Inhalation

If inhaled, remove from area to fresh air. Get medical attention if respiratory imitation develops or if breathing becomes difficult.

#### Skin

Wash with soap and water. Get medical attention if irritation persists.

### Eves

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

# Ingestion

Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

# **Notes to Physician**

Not Applicable

# 5. FIRE FIGHTING MEASURES

# Suitable Extinguishing Media

All standard fire fighting media

# Unsuitable Extinguishing Media

None known.

# Special Exposure Hazards

Not applicable.

# Special Protective Equipment for Fire-Fighters

Not Determined

**NFPA Ratings:** 

Health 1, Flammability 0, Reactivity 0

# 6. ACCIDENTAL RELEASE MEASURES

# **Personal Precautionary Measures**

Use appropriate protective equipment. Avoid creating and breathing dust.

# **Environmental Precautionary Measures**

None known.

## Procedure for Cleaning/Absorption

Scoop up and remove.

# 7. HANDLING AND STORAGE

# **Handling Precautions**

Avoid contact with eyes, skin, or clothing. Avoid creating or inhaling dust.

# Storage Information

. Store in a cool, dry location.



**EXPOSURE CONTROLS/PERSONAL PROTECTION** 

# **Engineering Controls**

Use in a well ventilated area. Localized ventilation should be used to control dust levels.

### Respiratory Protection

Dust/mist respirator.

## **Hand Protection**

Cloth gloves.

# **Skin Protection**

Normal work coveralis.

# **Eye Protection**

Wear safety glasses or goggles to protect against exposure.

### **Other Precautions**

Not Determined

# 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Solid Colour: Red brown Odour: Odourless Not Determined Specific Gravity @ 20 C (Water=1): 4.8 Density @ 20 C (kg/l): Not Determined Bulk Density @ 20 C (kg/M3): Not Determined Boiling Point/Range (C): Not Determined Freezing Point/Range (C): Not Determined Flash Point/Range (C): Not Determined Flash Point Method: Not Determined Autoignition Temperature (C): Not Determined Flammability Limits in Air - Lower (g/l): Not Determined Flammability Limits in Air - Lower (%): Not Determined Flammability Limits in Air - Upper (g/l): Not Determined Flammability Limits in Air - Upper (%): Not Determined Not Determined Vapor Pressure @ 20 C (mmHg): Vapor Density (Air=1): Not Determined **Percent Volatiles:** Not Determined **Evaporation Rate (Butyl Acetate=1):** Not Determined Solubility in Water (g/100ml): Miscible Solubility in Solvents (g/100ml): Not Determined Solubility in Sea Water (g/100ml): Not Determined VOCs (q/l): Not Determined Viscosity, Dynamic @ 20 C Not Determined (centipoise): Viscosity, Kinematic @ 20 C Not Determined (centistrokes): Partition Coefficient/n-Octanol/Water: Not Determined Molecular Weight (g/mole): Not Determined **Decomposition Temperature (C):** Not Determined

> MICROMAX Page 3 of 6

# 10. STABILITY AND REACTIVITY

Stability Data:

Stable

**Hazardous Polymerization:** 

Will Not Occur

**Conditions to Avoid** 

None anticipated

Incompatibility (Materials to Avoid)

None known.

**Hazardous Decomposition Products** 

None known.

**Additional Guidelines** 

Not Applicable

# 11. TOXICOLOGICAL INFORMATION

# **Principle Route of Exposure**

Eye contact. Inhalation. Skin contact.

#### Inhalation

May cause Metal Fume Fever which is characterized by chills, fever, aching muscles, dryness and metal taste in mouth and throat, headaches, sneezing, nausea, and irritation of the nose and trachea.

## **Skin Contact**

None known.

# **Eye Contact**

None known.

# Ingestion

Not determined

# **Aggravated Medical Conditions**

None known.

# Chronic Effects/Carcinogenicity

Prolonged or repeated exposure may result in manganism. Symptoms are similar to Parkinson's disease.

# Other information

None known.

**Toxicity Tests** 

**Oral Toxicity:** 

Not determined

**Dermal Toxicity:** 

Not determined

**Inhalation Toxicity:** 

Not determined

Primary Irritation Effect:

Not determined

Carcinogenicity
Not determined

Genotoxicity:

Not determined

Reproductive/Developmental

**Toxicity:** 

Not determined

# 12. ECOLOGICAL INFORMATION

# Mobility (Water/Soil/Air)

Not determined

# Persistence/Degradability

Not determined

## **Bio-accumulation**

Not Determined

# **Ecotoxicological Information**

Acute Fish Toxicity:

Not determined

Acute Crustaceans Toxicity:

Not determined

Acute Algae Toxicity:

Not determined

# **Chemical Fate Information**

Not determined

#### Other Information

Not applicable

# 13. DISPOSAL CONSIDERATIONS

# **Disposal Method**

Bury in a licensed landfill according to federal, state, and local regulations. If not contaminated, reuse product.

# **Contaminated Packaging**

Product may be stored in reusable containers. Do NOT contaminate. Transport with all closures in place.

# 14. TRANSPORT INFORMATION

# **Land Transportation**

## **ADR**

Not restricted

# Air Transportation

## **ICAO/IATA**

Not restricted



# NEW EXICO ENERGY, MENERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON
Governor
Jennifer A. Salisbury
Cabinet Secretary

June 14, 2001

Lori Wrotenbery
Director
Oil Conservation Division

Ms. Kellie Skelton Halliburton Energy Services 4109 East Main Street Farmington, New Mexico 87401

**RE:** COPPER SLAG DISPOSAL

Dear Ms. Skelton:

The Oil Conservation Division (OCD) is in receipt of your request for disposal of Copper Slag blasting material utilized for paint preparation at the Halliburton Farmington Service facility. Based upon information provided in your request letter and the attached laboratory analysis of the material the OCD would classify this as sandblasting sand material under 19.15.9.712.D.2.(n). As such, your request is **hereby approved** for disposal into the San Juan County landfill.

Your estimate of amount of such material to be generated at the facility is misleading. Please review your letter and provide the OCD with the correct information. If you have any questions contact me at (505) 476-3489.

Sincerely,

W. Jack Ford, C.P.G.

Environmental Bureau

cc:

OCD Aztec District Office

Ms. Martyne Kieling, OCD Santa Fe Office



martyne Kreling

## HALLIBURTON ENERGY SERVICES

4109 East Main Street / Farmington, NM 87401

June 4,2001

Denny Foust Oil Conservation Division 1000 Rio Brazos Road Aztec, NM 87410

Dear Denny Foust:

SUBJECT: REQUEST FOR COPPER SLAG DISPOSAL

Attached are the results of the TCLP analysis performed on Copper Slag used in paint and blasting area of the Main Yard facility. It is Halliburton Energy Service's request to take this to the San Juan County Landfill. Disposal will be an approximated 40,00 pounds per year. Please review the included documents and notify us of approval or the appropriate disposal requirements. Thank you, and if you have any questions or comments, please contact me at 505-324-3540.

Sincerely

Kellie Skelton

HSE Technical Professional Halliburton Energy Services

ks

cc: Allen Rodrigue

JUN 2001

JUN 2001

JUN 2001

OIL CON. DIV

DIST. 3

HALLIBURTON ENERGY SERVICES

DUNCAN TECHNOLOGY CENTER - DUNCAN, OKLAHOMA A HALLIBURTON COMPANY

# ANALYTICAL SERVICES PROJECT REPORT

paint short This report is the property of Halliburton Energy Services and neither it nor any part thereof nor a copy thereof is to be published or disclosed without first securing the express written approval of laboratory management; it may however, be used in the course of regular business operation by any person or concern and employees thereof receiving such report from Halliburton Energy Services.

Mr. Bill Loughridge

Halliburton Energy Services

4109 East Main

Farmington, NM 87401

Title:

**HES Copper Slag** 

Prepared By:

Kathy Black /

Submitted for:

TCLP Metals

Marked:

Copper Flag from Paint Shop

BN0461094-00

July 14, 2000



# **PURPOSE**

The purpose of this project was to analyze the submitted sample according to the procedures outlined in the EPA publication "Test Methods for Evaluating Solid Wastes. Volume IC, EPA SW 846, Method 1311, "Toxicity Characteristics Leaching Procedure", 1992. The extract was digested by EPA SW 846, Method 3051.

## CONCLUSION

The data section of this report contains the information generated from the sample. Environmental regulations concerning disposal of wastes are extremely complex. Therefore, it is advised that an opinion from Regulatory Affairs be obtained prior to disposal of any wastes.

# **PROCEDURES**

The data in this report was generated following published EPA procedures.

LIMITATION OF LIABILITY: This report was prepared by and is the property of Halliburton Energy Services, a Division of Halliburton Company; the dat ported is intended for the private information of the above named party; accordingly, any user of this report agrees that Halliburton shall not be liable for any loss canage, regardless of cause, including any act or omission of Halliburton, resulting from the use of this data reported herein; and Halliburton makes no warranties, expres or Implied, whether of fitness for a particular purpose, merchantability or otherwise, as to the ecouracy of the data reported,

# RESULTS

# Results By ICP:

Metal	Sample (mpl)	Blank (mpl)
Arsenic	<0.1	<0.1
Barium	0.41	<0.05
Cadmium	0.05	<0.01
Chromium	0.21	<0.01
Lead	0.21	<0.05
Selenium	<0.1	<0.1

7.3

# **Quality Control:**

Metal	Lab Control %R		
Arsenic	95		
Barium	103		
Cadmium	94		
Chromium	101		
Lead	97		
Selenium	104		

# **DATA BOOK REFERENCE**

Section	Book No.	Page No.(s)
Analytical Services	9058	39

cc: Eddie Watson Rick Eason

Respectfully submitted,

HALLIBURTON ENERGY SERVICES

Laboratory Analyst K. Black, D. Blanton rok

Ву

A.1 7/1

Ford, Jack From: Ford, Jack

Sent:

Friday, September 15, 2000 10:03 AM

To:

'Jim.Haney@Halliburton.Com'

Cc:

Foust, Denny

Subject:

Approval of Temporary Tank Installation

Dear Mr. Haney:

The OCD is in receipt of your notification of the installation of a temporary acid tank at Halliburton's Farmington facility (GW-099). Based upon the information furnished in your request and our telephone discussion this date the OCD herewith approves the temporary use of the poly acid tank. If you have any questions please contact me at (505) 827-7156.

W. Jack Ford Oil Conservation Division



#### HALLIBURTON ENERGY SERVICES

4109 East Main Street / Post Office Box 960 \ Farmington, NM 87499-0960 / 505-324-3500 / Fax: 505-327-2534

September 11, 2000

Jack Ford Environmental Bureau Oil Conservation Division 2040 S. Pacheco Santa Fe, New Mexico 87505



RE:

Halliburton Energy Services
Farmington Facility
San Juan County, New Mexico

Dear Jack Ford

We are moving in a 6,000 gal poly tank for temporary storage of HCL acid. The tank will be placed in the containment structure we currently have in operation. We are conducting an inspection of our existing tank and it has to be emptied for the inspection. If you need additional information and/or clarification please advise. My phone number is (505) 324-3504 and my e-mail address is <u>Jim.Haney@Halliburton.Com</u>.

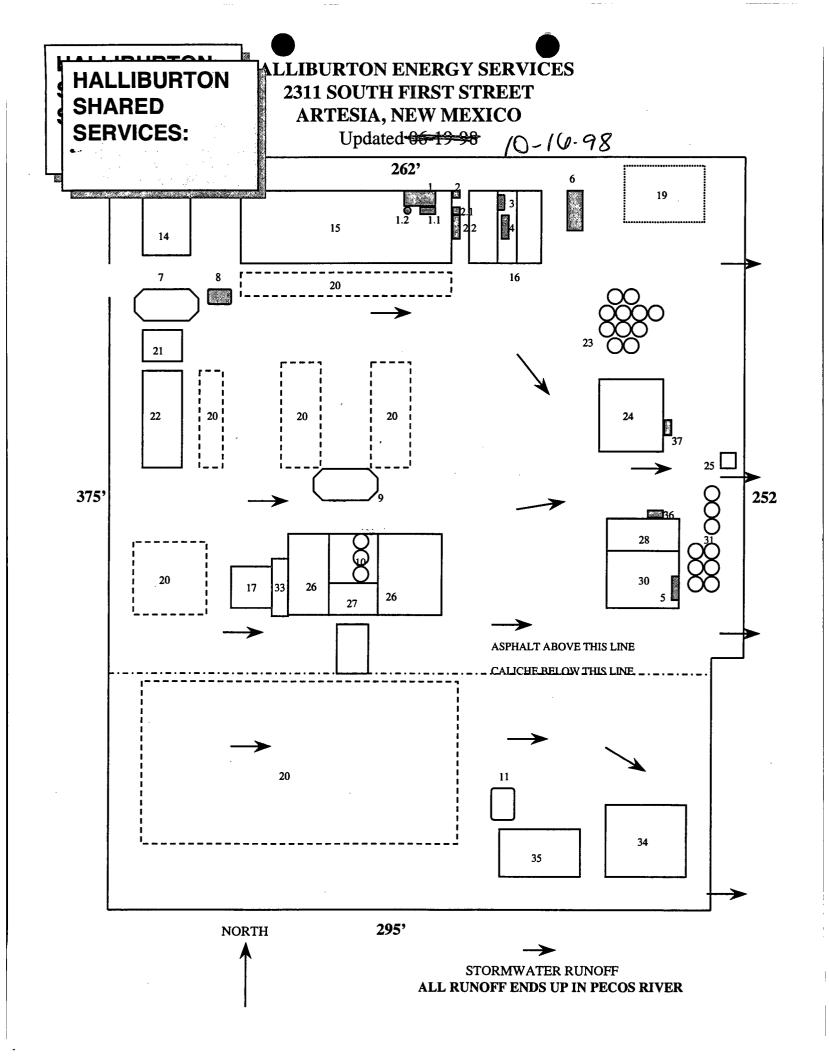
Regards,

James L. Haney

Shared Services Supervisor Halliburton Energy Services

CC:

Denny G. Foust – Deputy O&G Inspector



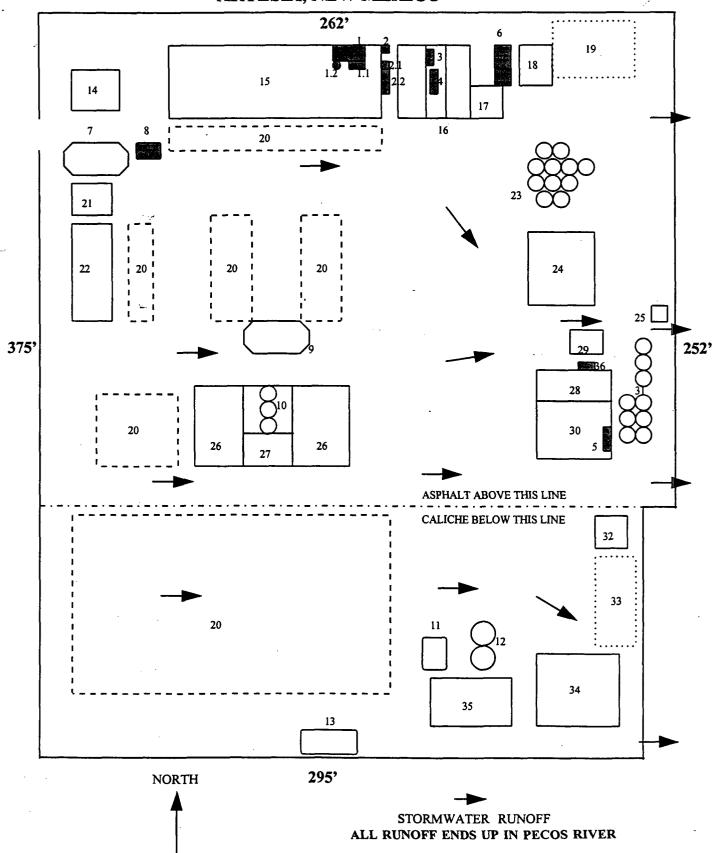
# HALLIBURTON ENERGY SERVICES 2311 SOUTH FIRST STREET ARTESIA, NEW MEXICO

Updated 10-12-98

- 1. New Anti-freeze 220 gallon
- 1.1 New 15/40 Oil 2 @ 275 gallon
- 1.2 New 80w-90 Oil 55 gallon
- 1.2 New Tractor Hydraulic 55 gallon
- 2. Used Oil-325 gallon
- 2.1 Used Oil-115 gallon
- 2.2 Used Anti-freeze 3 drums @ 55 gallon
- 3. New Oil-275 gallon
- 3. Rock Drill Oil-275 gallon
- 4. Hydraulic Oil, 90 wt. Oil, Grease 4 drums @ 55 gallon
- 5. Assorted Liquid Chemicals, 55 gallon drums & 5 gallon buckets
- 6. Oil/Water Separator- Abandoned
- 7. UST Gasoline Leak-Remediation in Process
- 8. Gasoline Storage Tank-500 gallon
- 9. Control Station-Remediation in Process
- 10. Underground Grit Tanks
- 11. Fresh Water Tank
- 14. Office Building
- 15. Truck Shop
- 16. Grease Rack
- 17. Head Rack
- 18. Plug Room
- 19. Outside Equipment Storage
- 20. Cement pump truck vehicle Parking
- 21. Office Building
- 22. Office Building and Field Lab
- 23. Bulk Cement Storage Tanks\*
- 24. Cement Additive Warehouse\*
- 25. Densometer Storage
- 26. Wash Rack
- 27. Grit Pit
- 28. Tool Shop
- 30. Warehouse
- 31. Sand Storage Tanks\*
- 34. Chemical Terminal\*
- 35. Chemical Additive Room\*
- 36. Soap Tank 275 gallon
- 37. Radioactive Storage

\*OUT OF SERVICE

# HALLIBURTON ENERGY SERVICES 2311 SOUTH FIRST STREET ARTESIA, NEW MEXICO



# HALLIBURTON ENERGY SERVICES 2311 SOUTH FIRST STREET ARTESIA, NEW MEXICO

- 1. New Anti-freeze 220 gallon
- 1.1 New 15/40 Oil 2 @ 275 gallon
- 1.2 New 80w-90 Oil 55 gallon
- 1.2 New Tractor Hydraulic 55 gallon
- 2. Used Oil-275 gallon
- 2.1 Used Oil-115 gallon
- 2.2 Used Anti-freeze 3 drums @ 55 gallon
- 3. New Oil-275 gallon
- 3. Rock Drill Oil-275 gallon
- 4. Hydraulic Oil, 90 wt. Oil, Grease 4 drums @ 55 gallon
- 5. Assorted Liquid Chemicals, 55 gallon drums & 5 gallon buckets
- 6. Oil/Water Separator- Abandoned
- 7. UST Gasoline Leak-Remediation in Process
- 8. Gasoline Storage Tank-320 gallon
- 9. AST Diesel Tank Leak-Remediation in Process
- 10. Underground Grit Tanks
- 11. Fresh Water Tank
- 12. Underground Neutralization Tanks\*
- 13. Flochek Tank-Empty\*
- 14. Office Building
- 15. Truck Shop
- 16. Grease Rack
- 17. Head Rack
- 18. Plug Room
- 19. Outside Equipment Storage
- 20. Vehicle Parking
- 21. Office Building
- 22. Office Building and Field Lab
- 23. Bulk Cement Storage Tanks\*
- 24. Cement Additive Warehouse\*
- 25. Densometer Storage
- 26. Wash Rack
- 27. Grit Pit
- 28. Tool Shop
- 29. Tool Storage
- 30. Warehouse
- 31. Sand Storage Tanks\*
- 32. Pump Packing Room
- 33. Outside Equipment Storage
- 34. Chemical Terminal\*
- 35. Chemical Additive Room\*
- 36. Soap Tank 275 gallon

# <u>District 1</u> 1625 N. French Dr. Hobbs, NM 88240 District II 811 South First, Artesia, NM 88210 District III

# State of New Mexico Energy Minerals and Natural Resou

Form C-141 Revised March 17, 1999 RECEIVING Copies to appropriate OIL COADISTICE Office in accordance with Rule 116 on back

Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87505 1000 Rio Brazos Road, Aztec, NM 87410 District IV 2040 South Pacheco, Santa Fe, NM 87505 side of form Release Notification and Corrective Action **OPERATOR** Final Report Name of Company Contact HALLIBURTON ENRORY SERVICES ROBERT SMITH | JEM HANEY Address Telephone No. 4109 E. MAEN ST. FARMENUTUN N.M. 87410 505-324-3500 Facility Name Facility Type YARO MAIN STREET PACELITY Surface Owner Mineral Owner Lease No. LOCATION OF RELEASE North/South Line Unit Letter Section Township Range Feet from the Feet from the East/West Line County NATURE OF RELEASE Type of Release Volume of Release Volume Recovered <u> LGC-8</u> 15 GALLOWS 15 GALLONS Source of Release Date and Hour of Occurrence Date and Hour of Discovery LGC-8 LOAD LINE 3-27-00 2:30 PM 3.27.00 2.30 Pm If YES, To Whom? Was Immediate Notice Given? Yes No Not Required DENNY FORST By Whom? Date and Hour JEM HANEY 327.00 2:51 Pm Was a Watercourse Reached? If YES, Volume Impacting the Watercourse. Yes X No NiA If a Watercourse was Impacted, Describe Fully.\* Describe Cause of Problem and Remedial Action Taken.\* BOLTS ON VITRUEL COUPLING. (LOC-8 LOAD LINE) HAD BEEN LOSSENSO BY UNKNOWN PERSONS. WHEN PUMP ON LOC-6 ACHO: NE GYSTON WAS ENAMED THE COUPLING SHAYED OUT 15 6-712015 OF LOCE PROBLEMENT ENFRONT OF THE CEMBNT BLUK TAKES. COUPLING WAS REPAILED ADDITIONAL SECULARY HAS BEEN ADOSO. Describe Area Affected and Cleanup Action Taken.\* LGC-8 PICKED UP WITH ASSORBENT MATGREAL. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for

compliance with any other federal, state, or local laws and/or regulations. OIL CONSERVATION DIVISION Signature: RERELT SMLTH Approved by Denty J. Frank Chaves Printed Name: RORERT SMLTH Title: HSE ADUZSOR Attached Date: 3.28-00 Phone: 505 324 3500 Conditions of Approval:



## HALLIBURTON ENERGY SERVICES

OIL CONSERVATION DIA

4109 East Main Street / P.O. Box 960 / Farmington, New Mexico 87499-0960 / Tel: 505-324-3500 / Fax: 505-327-2534

October 5, 1998

Roger C. Anderson Chief, Environmental Bureau Oil Conservation Division 2040 S. Pacheco Santa Fe, New Mexico 87505

RE:

Discharge Plan Renewal GW-099

1. Han

Halliburton Energy Services Farmington Facility San Juan County, New Mexico

Dear Roger C. Anderson:

Please find enclosed the signed copy of the conditions of approval for the Discharge Plan GW-099. If you need additional information and/or clarification please advise. My Phone number is (505) 324-3504 and my e-mail address is Jim.Haney@Halliburton.Com.

Regards,

James L. Haney

Shared Services Supervisor Halliburton Energy Services

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

May 29, 1998

# CERTIFIED MAIL RETURN RECEIPT NO. Z-357-869-968

Mr. Mike Cornforth Sr. Environmental Specialist Halliburton Energy Services P.O. Box 1431 Duncan, Oklahoma 73536-0108

**RE:** Minor Modification Construction Projects

Farmington Facility GW-099 Halliburton Energy Services

Dear Mr. Cornforth:

The New Mexico Oil Conservation Division (OCD) has received a notification, dated May 15, 1998 proposing the construction of a contained liquid chemical storage, larger contained washrack drying area, and a contained empty container storage area at the Halliburton Farmington facility (GW-099) located in the NW/4 NE/4 of Section 1, Township 29 North, Range 13 West, NMPM, San Juan County, New Mexico. The request is considered a minor modification to the above referenced discharge plan and public notice will not be issued. Based upon information supplied with the proposal the requested minor modification is hereby approved.

The Application for modification was submitted pursuant to Water Quality Control Commission (WQCC) Regulation 3107.C and is approved pursuant to WQCC Regulation 3109.

Please note that "When a plan has been approved, discharges must be consistent with the terms and conditions of the plan". Pursuant to Section 3107.C Halliburton Energy Services is required to notify the Director of any facility expansion, production increase or process modification that would result in a significant modification in the discharge of potential ground water contaminants.

The OCD approval does not relieve Halliburton Energy Services of liability should operation of the facility result in contamination of surface waters, ground waters or the environment.

Mr. Mike Cornforth May 29, 1998 Page 2

If you have any questions please feel free to call me at (505)-827-7156.

Sincerely,

W. Jack Ford, C.P.G.

Geologist

Environmental Bureau Oil Conservation Division

OCD Aztec District Office cc:

Z		
Z 357	869	968
US Postal Service		
Receipt for Ce	rtified	l Mail
No Insurance Coverage		
Do not use for Internati	onal Mail	(See reverse)
Sent to Mike	Cor	north
Street & Number	- اربط	tow
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Postage	\$	
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Special Delivery Fee		
Restricted Delivery Fee		
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Return Receipt Showing to Whom Date, & Addressee's Address	m,	
TOTAL Postage & Fees	\$	
Postmark or Date	zw.	-099



### HALLIBURTON ENERGY SERVICES

May 15, 1998

Post Office Drawer 1431 / Duncan, Oklahoma 73536-0108 / Tel: 405-251-4197 / Fax: 405-251-3969

State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division P.O. Box 2088 Santa Fe, NM 87501

Attn: Jack Ford

Re: GW-99 Discharge Plan

Farmington Service Facility San Juan County, New Mexico MAY 2 2 ISS8

Dear Mr. Ford,

By way of this letter I am notifying you of modifications proposed for the Halliburton Energy Services Facility, located at 4109 E. Main, Farmington, NM. These modifications will affect the GW-99 Discharge Plan. The proposed modifications include:

Construction of a contained, liquid chemical container storage area Construction of a larger, contained washrack grit drying area Construction of a contained empty container storage area

All construction will be above-grade. Details of the modifications will be provided upon completion of the construction to assure utmost accuracy.

These modifications will not create any additional discharges. Furthermore, these modifications, once completed will decrease the potential for the facility to impact the stormwater runoff. We will continue to operate under the original discharge plan criteria until the permit is renewed.

For more information, please feel free to contact me at the letterhead number.

Sincerely,

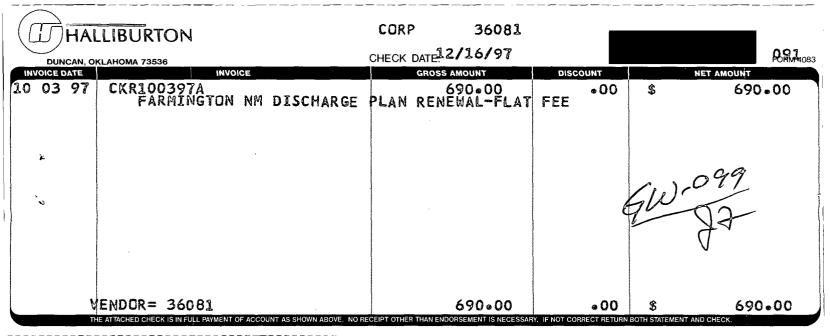
Mike Cornforth

Sr. Environmental Specialist

cc: Jim Haney, Shared Services Supervisor

Tom Allen, Environmental Coordinator

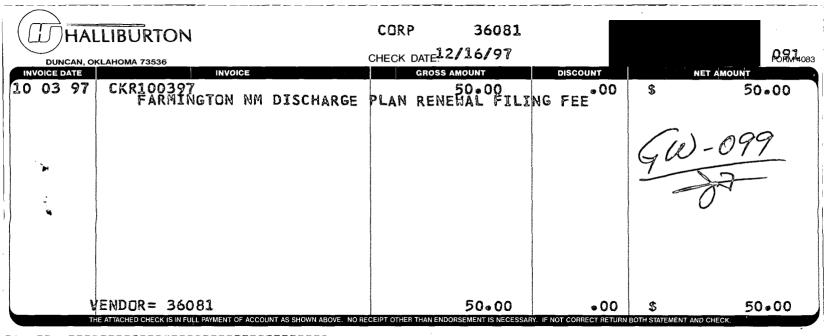
Pat Cook, HSE Manager



## ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASE

or cash received on	in the amount of \$ 690.00
from Hallahuston	
for Farmington	GW 099
Submitted by:	Date:
Submitted to ASD by:	Quela: 3/27/98
Received in ASD by:	Date:
Filing Fee New Fac	cility Renewal
Modification Other	<del>-7</del>
Organization Code <u>521.07</u>	Applicable FY 98
To be deposited in the Water	Quality Management Fund.
Full Payment or A	

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# ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of check No.	dated /2/16/97.
or cash received on in the a	mount of \$ 50.00
from Halliluntan	
for faminaton	60-099 00 May
Submitted by:	Date:
Submitted to ASD by: Rand	Date: 3/27/98
Begginged in ten to	_Date:
Filing Fee XR New Facility Res	neval
Modification Other	
(squaility)	
Organization Code <u>521.07</u> Applical	ole FY <u>98</u>
To be deposited in the Water Quality Manager	ment Fund.
Full Payment or Annual Increment	

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NMED-WATER QUALITY MANAGEMENT OIL CONSERVATION DIVISION 2040 SOUTH PACHECO STREET SANTA FE NM 87505 Jun H. Muter Coll Make 4



#### HALLIBURTON ENERGY SERVICES

Post Office Drawer 1431 / Duncan, Oklahoma 73536-0108 / Tel: 405-251-4197 / Fax: 405-251-3969 March 20, 1998

State of Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division 2040 South Pacheco Santa Fe, NM 87501



Attention: Mr. Jack Ford

RE: GW-99 Plan

Farmington Service Center

Dear Mr. Ford:

Attached are two copies of the Stormwater Plan for the Farmington facility. The plan is Attachment V. of the Discharge Plan. I noted on the application that this plan was forthcoming. Please insert in the appropriate place. Another copy of this plan is being sent to the Aztec office for inclusion in the application they received.

Attachment VI., Spill Contingency Plan, is being developed with the aid of an outside consulting firm. The Contingency Plan will be site specific with chemical specific response information. Completion date is estimated to be mid-June for the Farmington facility. This has been completed for the Hobbs and Artesia facilities.

If questions arise, please call me at the letterhead number.

Sincerely,

Mike Cornforth

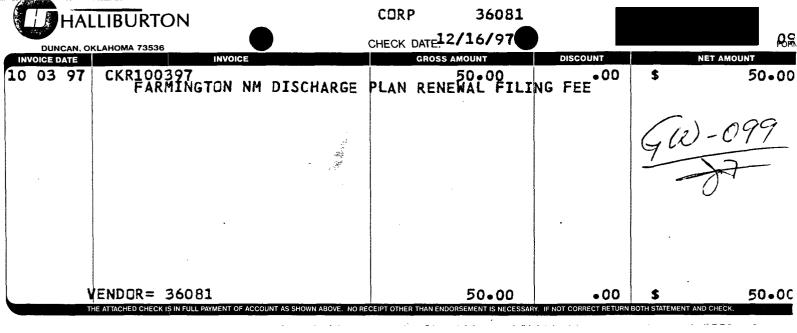
Sr. Environmental Specialist

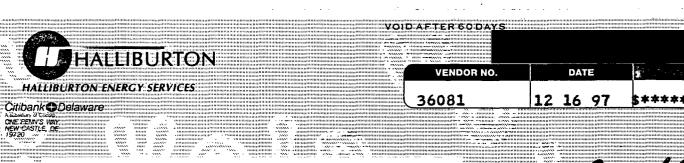
mike Cornforth

c: Mr. Jim Haney

Mr. Tom Allen

NMOCD, Aztec, New Mexico





NMED-WATER QUALITY MANAGEMENT OIL CONSERVATION DIVISION 2040 SOUTH PACHECO STREET SANTA FE NM 87505 

CORP

36081

690.00

DUNCAN OKLAHOMA 73536

CHECK DATE 12/16/97

CHECK DATE 12/16/97

GROSS AMOUNT

690.00

CKR100397A
FARMINGTON NM DISCHARGE

PLAN RENEWAL-FLAT

FEE

CHECK DATE 12/16/97

GROSS AMOUNT

690.00

\$ 690.00

\$ 690.00



**VENDOR= 36081** 

OID AFTER SO DAYS		5 <u>2-20</u> .
VENDOR NO.	DATE	AMOUNT
36081	12 16 97	\$******690.00

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NMED-WATER QUALITY MANAGEMENT OIL CONSERVATION DIVISION 2040 SOUTH PACHECO STREET SANTA FE NM 87505 690.0C



## **PUBLICATION**

No. 39016

# STATE OF NEW MEXICO County of San Juan:

DENISE H. HENSON being duly sworn says: That she is the Classified Manager of THE DAILY TIMES, a daily newspaper of general circulation published in English at Farmington, said county and state, and that the hereto attached Legal Notice was published in a regular and entire issue of the said DAILY TIMES, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for publication on the following day(s)

Monday, February 2, 1998

and the cost of publication is: \$64.83

On 2-9-98 DENISE H. HENSON

appeared before me, whom I know personally to be the person who signed the above document.

My Commission Expires November 1, 2000

## COPY OF PUBLICATION

#### Legals

#### **NOTICE OF PUBLICATION**

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

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan applications(s) have been submitted to the Director of the Oil Conservation Division, 2040 South Pacheco, Santa Fe, New Mexico 87505, Telephone (505) 827-7131:

(GW-099) - Halliburton Energy Services, Michael Cornforth, (405) 251-4197, P. O. Drawer 1431, Duncan, Oklahoma 73536-0108, has submitted a discharge application for the Halliburton Service facility located in the NW/4 NE/4 of Section 1, Township 29 North, Range 13 West NMPM, San Juan County, New Mexico. Approximately 2,200 gallons per day of waste water is collected in the truck washrack and floor sump then discharged into the City of Farmingtor Sewage Treatment System (POTW). Ground water most likely to be affected in the event of ar accidental discharge is at a depth of approximately 80 feet with a total dissolved solids concentration ranging from 600 mg/1 to 900mg/1. The discharge plan addresses how spills, leaks and other accidental discharges to the surface will be managed.

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, o this 15th day of January 1998.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

/s/Kathleen A. Garland KATHLEEN A. GARLAND, Acting Director

SEAL

Legal No. 39016 published in The Daily Times, Farmington, New Mexico on Monday, February 1998.

Of the second

# The Santa Fe New Mexican

# nce 1.849 We Read You.

ATTN: SALLY MARTINEZ 2040 S. PACHECO ST. SANTA FE, NM 87505 [5

NM OCD

OIL CONSERVATION DIVISION

AD NUMBER: 9292 ACCOUNT: 56689 LEGAL NO: 62953 P.O. #: 98-199-00257 at \$ 67.20 168 LINES ONCE Affidavits: 5.25 Tax: Total:

#### NOTICE OF **PUBLICATION**

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

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GIVEN under the Seal of New Mexico Oil Conservation Notary Commission at Santa Fe, Commission New Mexico, on this 15th day of January 1998.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION ... GAKLAND, Acting Director Legal #62953 KATHLEEN A. GARLAND, Pub. January 29, 1998

## AFFIDAVIT OF PUBLICATION

sion at the address give STATE OF NEW MEXICO COUNTY OF SANTA FE

I, BETSY PERNER being first duly sworn declare and say that I am Legal Advertising Representative of THE SANTA FE NEW MEXICAN, a daily news paper 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 Newscation of this notice during paper duly qualified to publish legal notices and advertisesubmitted and a public hear ments under the provisions of Chapter 167 on Session Laws of ing may be requested by any 1937; that the publication # 62953 a copy of which is for a public hearing shall set hereto attached was published in said newspaper once each ONE consecutive week(s) and that the no-WEEK for will be held if the Director de tice was published in the newspaper proper and not in any termines there is significant supplement; the first publication being on the 29 day of JANUARY 1998 and that the undersigned has personal If no public hearing is held, knowledge of the matter and things set forth in this affidation the Director will approve or information in the discharge Subscribed and sworn to before me on this JANUARY A.D., 1998 day of

OFFICIAL SEAL B. MATHIE MOTARY PUBLIC

202 Last Marcy Street · P.O. Box 2048 · Santa Fe, New

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

January 26, 1998

THE NEW MEXICAN
202 E. Marcy
Santa Fe, New Mexico 87501

RE: NOTICE OF PUBLICATION

PO #96-199-002997

ATTN: Betsy Perner

Dear Sir/Madam:

Please publish the attached notice one time immediately on receipt of this request. Please proofread carefully, as any error in a land description or in a key word or phrase can invalidate the entire notice.

Immediately upon completion of publication, please send the following to this office:

- 1. Publisher's affidavit.
- 2. Invoices for prompt payment.

We should have these immediately after publication in order that the legal notice will be available for the hearing which it advertises, and also so that there will be no delay in your receiving payment.

Please publish the notice on Thursday, January 29, 1998

Sincerely,

Sally E. Martinez

Administrative Secretary

Attachment

January 26, 1998

Farmington Daily Times

Attention: Advertising Manager

Post Office Box 450

Farmington, New Mexico 87401

Re: Notice of Publication

2 NOTICES

Dear Sir/Madam:

S Postal Service Receipt for Certified Mail No Insurance Coverage Provided. Do not use for International Mail (See reverse) Sent to Street & Number Post Office Similagions Daily Certified Fee Special Delivery Fee Restricted Delivery Fee Return Receipt Showing to Whom & Date Delivered Return Receipt Showing to Whon Date, & Addressee's Address TOTAL Postage & Fees Postmark or Date

Please publish the attached notice one time immediately on receipt of this request. Please proofread carefully, as any error in a land description or in a key word or phrase can invalidate the entire notice.

Immediately upon completion of publication, please send the following to this office:

- 1. Publisher's affidavit in duplicate.
- 2. Statement of cost (also in duplicate).
- 3. Certified invoices for prompt payment.

We should have these immediately after publication in order that the legal notice will be available for the hearing which it advertises, and also so that there will be no delay in your receiving payment.

Please publish the notice no later than February 2, 1998

Sincerely,

Administrative Secretary

Attachment

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 15th day of January 1998.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

KATHLEEN A. GARLAND, Acting Director

SEAL

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STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

KATHLEEN A. GARLAND, Acting Director



### HALLIBURTON ENERGY SERVICES

Post Office Drawer 1431 / Duncan, Oklahoma 73536-0108 / Tel: 405-251-4197 / Fax: 405-251-3969

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
P.O. Box 2088 2040 South Pacheco
Santa Fe, NM 87501

March 19, 1998

Attn: Jack Ford

RE: GW-99 Discharge Plan Farmington Service Facility

MAR 2 3 1998

OCCUMENTATION DIVISION

Dear Mr. Ford,

Attached to this letter are two copies of Halliburton's application for a Discharge Permit as per Sections 3104 and 3105 of the WQCC Regulations. Another copy of the application has been sent to the Aztec Office.

Two checks are also included. One for the \$50 filing fee and one for \$690 covering the flat fee for service companies.

You will notice that two of the attachments are missing. Attachment V, Stormwater Pollution Prevention Plan and Attachment VI, Spill Contingency Plan. These plans are being revised to coincide with the Discharge Plan. These two plans will be sent shortly under separate cover.

If any questions arise I will still be the contact.

Once again I want to thank you for your help and patience.

Sincerely

Mike Cornforth

Sr. Environmental Coordinator

cc:

Jim Haney Tom Allen

File

NMOCD office, Aztec, NM



## HALLIBURTON ENERGY SERVICES

Post Office Drawer 1431 / Duncan, Oklahoma 73536-0108 / Tel: 405-251-4197 / Fax: 405-251-3969

State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division P.O. Box 2088 2040 South Pacheco Santa Fe, NM 87501

Attn: Jack Ford

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Sr. Environmental Coordinator

cc:

Jim Haney Tom Allen

File

NMOCD office, Aztec, NM

March 19, 1998

May Copy

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

Energy Minerals and Natural Resources Department
Oil Conservation Division

2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131 Submit Origi Plus 1 Cop to Santa 1 Copy to appropri District Ofi

Revised 12/1

DISCHARGE PLAN APPLICATION FOR SERVICE COMPANIES,
GAS PLANTS, REFINERIES, COMPRESSOR, AND CRUDE OIL PUMP STATIONS
(Refer to the OCD Guidelines for assistance in completing the application)

	(17013. to the GOD Californies for assistance in completing the application)
	New X Renewal Modification
1.	Type:Oilfield Service Facility
2.	Operator: Halliburton Energy Services
	Address: P. O. Box 960, Farmington, NM 87499
	Contact Person: Jim Haney Phone:
3.	Location: NW /4 NE /4 Section 1 Township 29N Range 13W Submit large scale topographic map showing exact location.
4.	Attach the name, telephone number and address of the landowner of the facility site.
5.	Attach the description of the facility with a diagram indicating location of fences, pits, dikes and tanks on the facility
6.	Attach a description of all materials stored or used at the facility.
<b>7</b> .	Attach a description of present sources of effluent and waste solids. Average quality and daily volume of waste water must be included.
8.	Attach a description of current liquid and solid waste collection/treatment/disposal procedures.
9.	Attach a description of proposed modifications to existing collection/treatment/disposal systems.
10.	Attach a routine inspection and maintenance plan to ensure permit compliance.
11.	Attach a contingency plan for reporting and clean-up of spills or releases.
12.	Attach geological/hydrological information for the facility. Depth to and quality of ground water must be included.
13.	Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCI rules, regulations and/or orders.
14.	CERTIFICATION
	I herby certify that the information submitted with this application is true and correct to the best of my knowledge and belief.
	NAME: Mike Cornforth Title: Sr. Environmental Specialist
	Simon 3/19/93

## **DISCHARGE PLAN APPLICATION**

Part 1. Type of Operation

Oil Field Service Facility

Part 2. Name of Operator or Legally Responsible Party and Local Representative

Halliburton Energy Services P.O. Box 960 Farmington, New Mexico 87499

Local Contact: Mr. Jim Haney (505) 324-3500

Part 3. Location of the Discharge Plan Facility

The Farmington Facility is located in the NW/4 NE/4, Section 1, Township 29 North, Range 13 West, NMPM, San Juan County, New Mexico.

Part 4. Landowners

Halliburton Energy Services, Inc. 5151 San Felipe Houston, Texas 77056

Part 5. Facility Description

The **Farmington Halliburton Energy Services** facility is located at 4109 E Main, Farmington, NM 87402. The primary services provided are hydraulic fracturing, cementing and acidizing oil and gas wells. Maintenance of trucks and oilfield service equipment, blending and loading of liquid and non-liquid chemicals and storage of these chemicals occurs at this facility. A description of these activities is provided below:

The facility layout is depicted in Attachment I.

Chemical Terminal (Labeled Chemical Terminal on Attachment I)

Hydrochloric acid is stored, in concentrated form, in a steel, rubber-lined enclosed tank. The tank is within a coated concrete secondary containment. Connections for loading of the acid are located within the secondary containment. Any spills occurring inside the containment are recovered, transferred to a storage tank and reused.

Additional chemical additives are stored in the acid additive drum storage area. Additives are stored in either DOT quality drums or portable containers. This area is curbed for secondary containment.

Acid is loaded onto Halliburton transports from an overhead line through a hatch on the top of the transport. The transport is located on a coated concrete loading bay during the loading process. The loading bay is equipped with a trough that leads directly to the chemical terminal secondary containment. Spills in the secondary containment area drain to a sump, is pumped into the acid return tank and reused.

A liquid gel concentrate is stored and loaded from this same area. The gel concentrate is a solution of gel in diesel. The gel concentrate is stored in an enclosed tank within secondary containment. Loading and mixing operations occur on the same loading bay as the acid. Sacks of gel are stored inside a warehouse prior to mixing. Also, certain drummed chemical additives for the gel concentrate system are stored in same warehouse. Any spills occurring inside the warehouse are immediately cleaned and properly disposed.

## Cement Bulk Storage Area (Labeled as such on Attachment I)

Bulk cement and cement additives are stored in a series of fully enclosed storage vessels. Sacked cement additives are stored in the cement material warehouse. Any spills occurring inside the warehouse are immediately cleaned and properly disposed. Mixing and transferring of materials from the cement bulk plant to the truck is done pneumatically. A dust collection system is used to control emissions from the facility while handling the bulk chemicals and additives.

## Sand Bulk Plant Area (Attachment I)

All materials stored in this area are non-liquid, dry chemicals. Bulk sand and proppants are stored in fully enclosed storage vessels. Loading and unloading of the sand is done pneumatically.

# Maintenance Shop (Labeled Truck Shop on Attachment I)

Truck maintenance is performed in enclosed shops. The main truck shop is equipped with a concrete foundation and curbing that is self contained. Any spills in the shop area cannot escape the shop area are immediately cleaned and properly disposed. Three solvent based parts washers are located in the Maintenance shop area. Truck servicing is performed in the main shop. All used oil is collected in a used oil tank. The used oil tank is located in the wash rack area within concrete secondary containment. Used oil filters are drained at least 12 hours and placed in a drum and shipped to our TSDF and waste management facility in Duncan, OK and are ultimately recycled.

## Wash Rack Area (Labeled Wash on Attachment I)

Truck and equipment washing is performed in this area. The building is roofed and walled on three sides. The structure is designed to capture overspray, wash water and grit. Each wash bay drains to a sump for grit separation. The sumps drain to a three stage oil/water separator, then to the sewer.

Adjacent to the wash rack is a concrete pad for drying washrack grit. The grit is removed from the sumps on a regular basis, placed on the drying slab, allowed to dry and sent to a land treatment facility. The drying slab is contained on three sides with concrete walls and on the fourth side by a removable steel plate to allow access and removal of the grit. (South East Corner of Wash Bay, Attachment I)

Trucks and equipment are lubricated in the Grease Room in the Washrack area. Lubricants are stored in bulk storage tanks, drums and pails, all of which are within concrete secondary containment and are covered.

**Drum Storage Area** (Located directly between the Chemical Terminal and Tools on Attachment I) The drum and portable container storage area is constructed with a paved floor and curbing for secondary containment. An inspection of this area is conducted daily, and documented weekly. Any spills or leaks in this area is cleaned and disposed of properly as they are discovered.

## Truck and Equipment Parking Areas (Attachment I)

Oilfield service trucks and equipment are parked in the areas labeled on Attachment I.

### Miscellaneous

In addition to the above, certain other waste management practices are followed. Trash containers are conveniently located throughout the facility and are regularly emptied by a waste management service. Paved surfaces are inspected and cleaned as required. Weeds and debris are removed as needed. Good housekeeping practices are adhered to at this facility.

## Past Spills, Leaks and Stormwater Runoff

There have been no significant spills at this facility in the past three years.

The facility is constructed such that all stormwater runoff leaves the property at one point just south of the paint shop and denoted on Attachment I by the arrow pointing south. The facility receives significant stormwater runon from adjacent properties and roads on the north and west.

# Part 6. Materials Stored or Used at the Facility

A complete list of chemical products utilized in servicing oil wells is included in this application as Attachment II.

	Name	General Makeup or Specific Brand	Solid or Liquid	Type of Container	Estimated Volume Stored	Location
1.	Drilling Fluids	None				
2.	Brines (KCl, NaCl, etc.)	Weak NaCl	Liquid	Tank	Neutralized HCl	Chemical Terminal
3.	Acids/Caustics	Hydrochloric acid	Liquid	Tank	13,000 gal	Chemical Terminal
4.	Detergents/Soaps	Howco Suds AQF II SSO 21MW Washrack Soap	Liquid Liquid Liquid Liquid	Drum Drum Drum Drum	165 gal 440 gal 660 gal 55 gal	Drum Area Drum Area Drum Area Washrack Area
5.	Solvents & Degreasers	Safety Kleen	Liquid	Drum	20 gal	Shop, Grease room
6.	Paraffin Treatment/ Emulsion Breakers	Lo Surf	Liquid	Drum	275 gal	Drum Storage Area
7.	Biocides	BE-6 BE-3S	Solid Solid	Can Can	400 lbs 40 lbs	Cement Sand Plant
8.	Other Materials	Poz Mix A Cement Gilsonite Sand Flyash Gelling Agents Gel Breakers Emulsifiers De-emulsifiers Inhibitors Crosslinkers	Solid Solid Solid Solid Solid Liquid Liquid Liquid Liquid Liquid Liquid	Tank Tank Tank Tank Tank Sack/Can Sack/Can Drum/Pail Drum/Pail Drum/Pail Tote/Drum	142,000 lbs 279,000 lbs 80,000 lbs 842,000 lbs 3,750 lbs 1,000 lbs 1,000 lbs 500 gal 100 gal 200 gal 1000 gal	Cement & Sand Plant  " " " Drum Storage  " " " " "

# Part 7. A. Sources and Quantities of Effluent and Waste Solids Generated at the Facility

	Waste Type	Types of major effluent	Quantities (per month)	Major Additives
1.	Truck Wastes	Neutralized Acid Returns	2500 gal	NaCl
2.	Truck Washing	Wash Water Grit	65,000 gal 16 cu. yds	Soap
3.	Steam Cleaning	Not applicable	•	
4.	Solvent/Degreaser Use	Safety Kleen (Three Units)	60 gal	Oils and Greases
5.	Spent Acids	Hydrochloric Acid Returns (Unused)	2500 gal.	010400
6.	Waste Slop Oil	Not applicable		
7.	Used Lubricants and Oils	Lube Oil and Crankcase Oil	185 gal	None
8.	Oil Filters	From Trucks and Engines	54 filters	None
9.	Tank Solids and Sludges	Not applicable		
10.	Painting Wastes	Safety Kleen	20 gal	
11.	Sewage	Sanitary sewage commingled with Industrial waste water from truck washing operation	65,000 gal	Soap
12.	Laboratory Wastes	Water Samples Crude Oil Samples Cement Samples	5 gal 5 gal 20 lbs	
13.	Other waste liquids	Off-Spec, out of date chemicals	100 gal	
14.	Other waste solids	Off-Spec, out of date chemicals Used drums	2 drums 100 ct.	

## 7. B. Quality Characteristics

### 1. Truck Wastes

Unused acid is the only significant waste returning to the facility in trucks. The acid returns are neutralized to a pH greater than 2, with sodium bicarbonate or equivalent, while still in the transport. The material is then transferred to a holding tank within the secondary containment of the chemical terminal. This "salt" water is used for makeup water on subsequent acid blends.

## 2. Truck Washing

The external components of the trucks and equipment are washed with water and soap. The primary constituents of the washwater effluent is grit, hydraulic oils, water, etc. The washwater mixture passes through a three bay oil/water/grit separator. The separator is concrete with a chemical resistant liner. The oil is trapped, removed with a belt type oil skimmer and collected in a drum. The drummed oil is then transferred to the Used Oil tank which is within secondary containment. The used oil is removed periodically by a waste oil recycler and taken off-site.

The washrack grit is sampled annually, utilizing a random grab sampling and compositing technique to ensure representative results. The composite sample is subjected to the Toxic Characteristic Leaching Procedure and for Corrosivity, Reactivity and Ignitibility. The results of the most recent test is included as Attachment III. The grit is removed periodically, dried on a designated grit drying bed. The grit is treated in a off-site commercial land treatment unit owned and operated by Enviro-Tech of Farmington, NM. The water travels to the local POTW through the sewer system.

## 3. Steam Cleaning Not Applicable

## 4. Solvent and Degreasers

Three Safety-Kleen brand parts washers, at the facility, are serviced every month, generating sixty gal/month. The parts washers are used for cleaning truck and equipment parts prior to maintenance.

### 5. Spent Acids

Acid returns are brought back to the facility, neutralized and managed as described in 7.B.1

## 6. Waste Slop Oil Not Applicable

### 7. Used Lubricants and Oils

Lube oils, crankcase oils and other used oils generated at the facility are collected in a secondarily contained tank located in the washrack area. The oils are removed by a waste oil recycler and hauled off-site. Management of these oils is as per 40 CFR 270.

#### 8. Oil Filters

Oil filters generated at the facility are "hot-drained" for at least 12 hours, containerized and shipped by Halliburton truck to the TSDF in Duncan, OK. Once in Duncan, the filters, along with others, are shipped to a used oil filter recycler, through Specialty Environmental Services.

## 9. Tank Solids and Sludges Not Applicable

## 10. Painting Wastes

Painting wastes generated at the facility are recycled by use of a Safety-Kleen paint gun cleaner. All waste paint related materials are managed/recycled by Safety-Kleen.

## 11. Sewage

Sewage from bathrooms and kitchens are commingled with washrack water to the local POTW.

## 12. Laboratory Wastes

A small lab used for testing stimulation and completion products is located in the bulk cement plant warehouse. Wastes generated are primarily water with trace amounts of stimulation and completion chemicals, as well as other lab reagents. The waste water enters the sewer to the local POTW.

Oil samples are collected and either added to the used oil tank or shipped by company truck to the Halliburton TSDF in Duncan, OK for further management.

Cement retain samples are stored for a period of time and disposed of in the local landfill via the dumpster.

## 13. Other Liquid Wastes

Out of date or off-spec liquid chemical products are stored in a designated waste storage area located inside the southeast corner of the cement bulk plant warehouse. This storage area meets the requirements of 40 CFR 264 for small quantity generators. If the wastes are hazardous as per 40 CFR 261, they are managed accordingly. If nonhazardous, they are labeled as such, and stored in the same area. All chemical wastes generated at this facility are returned to the Duncan TSDF on company trucks, accompanied with a hazardous waste manifest within 180 days of being deemed waste.

### 14. Other Solid Wastes

Out of date or off-spec solid chemicals, are labeled as either hazardous or nonhazardous, stored in the designated waste storage area and returned to the TSDF in Duncan, OK via company truck. Pallets are returned to the Duncan TSDF for reuse or recycle. Chemical sacks are emptied and placed into dumpsters on site and sent to local landfill as are cardboard and paper products.

Empty drums and pails are stored in a designated empty container storage area. The drums are stored on their sides with bungs in place and tight, positioned with bungs horizontal to the ground. All empty containers, 5 gals in volume or larger, are returned to the Duncan TSDF and then shipped off-site to a metal recycler, drum recycler or plastic recycler as appropriate. The drums are "RCRA empty" prior to storage.

Part 8. A. Summary of Existing Liquid and Solid Waste Collection and Disposal

	Waste Type	Tank(T)/ Drums(D)	Floor Drain(F) Sumps (S)	Offsite Disposal
1.	Truck Wastes	Neutralized Returned Acid	Sump to Tank	Reused in subsequent ac blends
2.	Truck Washing	Only Truck and Equipment Washing	(S)	Wastewater to POTW Grit to Landfill by Truc
3.	Steam Cleaning	Not applicable		
4.	Solvent/Degreaser Use	(D) Safety Kleen		Safety Kleen/truck
5.	Spent Acids	(T) Collected in tank at chemical terminal		Reused in acid blends
6.	Waste Slop Oil	Not applicable		
7.	Waste Lubrication and Motor Oils	(T)		Waste Oil Recovery Co. by Truck
8.	Oil Filters	(D)		Halliburton TSDF in Duncan OK by Co. Truc
9.	Tank Solids and Sludges	Not applicable		Duncan OK by Co. True
10.	Painting Wastes	(D)		Safety Kleen by Truck
11.	Sewage			POTW Sanitary Sewer
12.	Laboratory Wastes			POTW Sanitary Sewer
13.	Other Waste Liquids	Off-Spec, out of date chemicals		Halliburton TSDF in Duncan OK by Co. truc
14.	Other Waste Solids -	<ul><li>(S) Off-Spec, out of date chemicals</li><li>(S) Empty drums</li></ul>		Halliburton TSDF in Duncan OK by Co. truc

## 8. B. Collection and Storage Systems

## 1. Sumps, Lines, Pits

Truck and equipment washing occurs in a washrack with a concrete grit sump. The primary separation of the grit occurs in this sump. The water, oils, greases and suspended solids travel through an unpressurized concrete trough and piping system to an oil water separator prior to entering the local POTW system. The oil water separator is concrete with a chemical resistant coating installed to ensure integrity. The oil water separator is inspected annually for integrity. This inspection is documented utilizing the "Tiered Inspection" program. An example of the tiered inspection documentation is Attachment IV.

Sewer lines are not pressurized and no lift station exists internal to the facility.

## 2. Tankage and Chemical Storage Areas

Acid returns are neutralized on the transport and then released into a concrete, lined sump, pumped to a storage tank, stored for a short while, and reused in subsequent acid blends. The storage tank is within the secondary containment of the chemical terminal. This secondary containment is concrete with a chemical resistant coating. The dimensions of the containment, less the volume taken by two other tanks within the containment, yield a volume greater than 35,000 gallons. The largest tank within the containment is 13,000 gallons. This is in excess of the requirement for the containment to be 1.33 times the capacity of the largest tank within the containment. This containment area is visually inspected each workday for leaks, spills or other releases. The releases are collected and pumped to the acid return tank for reuse.

Used oils are collected in a steel tank that is within steel secondary containment. The volume of the containment is greater than 1.33 times the capacity of the tank.

Containerized chemical products, that become waste, are stored in a designated waste storage area within a covered building. The area is on concrete, secondarily contained and inspected at least weekly. The waste chemicals are stored for no more than 180 days before being shipped off-site to the Duncan, OK TSDF.

Solid chemicals that become waste are stored in the same designated waste storage area as the liquids. Compatibility concerns are recognized and precautions taken. The wastes are stored no longer than 180 days and are shipped off-site to the Duncan, OK TSDF.

Liquid chemical products are stored in a designated storage area that is paved, curbed and inspected at least weekly for spills, leaks, deteriorating containers, missing labels, etc.

All chemicals are received, stored and shipped in DOT approved containers.

Discharge Plan GW-099 Halliburton Services Farmington Facility

# 8. C. Existing Effluent and Solids Disposal

## 1. On-Site Disposal

No on-site disposal of waste materials occurs at this facility. There are no surface impoundments, leach fields or injection wells on this facility.

Drying Beds, or Other Pits

The grit from the washrack is removed periodically and place into a designated drying area. The area is concrete floored and has three sides of concrete with one side made of a removable steel plate to provide access for removal of the grit once dried.

# 2. Off-Site Disposal

Off-site disposal of each waste stream is noted in the Table 8.A

### 9. Proposed Modifications

A new drum storage area is planned for completion during the summer of 1998. The area will be coated concrete with curbs constructed such as to accommodate a roof at a later date.

### 10. Inspection, Maintenance and Reporting

A. Halliburton adheres to a tiered inspection program that causes areas of concern to be inspected on a daily, weekly, monthly or quarterly basis. Corrective actions are generated as a result of the inspections. An example of the tiered inspections is included as Attachment IV.

Below grade sumps with liners or secondary containment are inspected at least annually. These inspections occur by detecting liquids in the interstitial space or by emptying, cleaning and visual inspections of the integrity of the sump. If leaks from these units are discovered or the integrity of the unit is suspect, the New Mexico OCD Rule 116 is followed. A release in excess of 25 barrels will be reported both verbally and written in a timely manner. Releases in excess of 5 barrels but less than 25 barrels will be timely reported in a written report.

- B. No groundwater monitoring occurs at this facility.
- C. Precipitation that is collected within the secondary containment of the chemical terminal, the drum storage area and the liquid gel concentrate area is pumped into the acid return tank and utilized as makeup water for acid blends. Stormwater or precipitation that is not captured leaves the property at one point on the south side of the facility. This facility has a current stormwater pollution prevention plan as per 40 CFR 120. This plan is Attachment V.

# 11. Spill/Leak Prevention and Reporting Procedures

The spill/leak contingency plan is included as Attachment VI. Chemical storage, blending, loading and unloading occurs in contained areas. The containment areas are inspected with spills and leaks cleaned up. All bulk liquid storage tanks are located within secondary containment one and one third the volume of the capacity of the largest tank. Releases to containment are recovered and for reuse. The largest spill potential outside containment would come from a 330 gal portable container.

All effluent from the facility leaves the property at one point. A significant spill could be contained on the property by blocking this exit, allowing time to remediate the spill. Spill kits are strategically located around the facility. The spill kits contain absorbent material, absorbent pads, shovels, and certain PPE and other spill cleanup materials.

Certain liquid and solid chemical products used, stored, blended or loaded at the facility contain constituents listed in WQCC 3103, "Standards for Groundwater" and 1101 TT, definition of "Toxic Pollutants". Each of these chemicals are listed below with the concentration of the constituent, as well as, the storage and handling techniques that greatly reduce potential for a spill, leak or discharge.

<b>Listed Constituent</b>	<b>Product</b>	% in Product	<b>Storage</b>
Fluoride	Ammonium Fluoride	33	Drum Storage area
Radioactivity	Densometers	Survey attached*	In Warehouse
Toluene	Paint Products	varied	Gal cans/warehouse
Ethylbenzene	Losurf-259	1-5	Drum Storage area
Xylenes	Xylenes	95	Drum Storage area
	Losurf-259	4	Drum Storage area
	Losurf-300	2	Drum Storage area
Methylene Chloride	Brake Cleaner Aerosol	Unknown	16oz aerosol cans
Naphthalenes	WS-44	2	Drum Storage
66	Losurf-300	less than 10	Drum Storage
46	Hyflo IV	2	5 gal pail
Chlorides	Potassium Chloride	100	Sacks / warehouse
	HC-2	8.5	Drum Storage
	Hydrochloric acid	35	Secondary Contain.
	XL-1	40	5 gal pails
	Max Seal	0.15	Drum Storage
	Calcium Chloride	100	Sacks / warehouse
Copper	Cat-3	1.9	Drum Storage
Iron	XL-1	40	5 gal pails
Phenols	Super Sand	less than 0.1	Sand Coating / dry
66	Tempered Sand	less than 0.1	Sand Coating / dry

<sup>\*</sup> See Attachment IX

Discharge Plan GW-099 Halliburton Services Farmington Facility

### 12. Site Characteristics

1. Attachment VII. is a 1:100,00@map showing a radius of one mile around the facility. The bodies of water within that radius and the approximate distance from the facility is listed below:

Water Body	<b>Distance</b>	<b>Direction</b>
Animas River	0.6 miles	Southeast
Hood Arroyo	0.85 miles	East
Echo Ditch	0.85 miles	South

- 2. A subsurface investigation was conducted in 1975. The report is included as Attachment VIII.
- 3. The investigation shows the soil types, conductivity and other subsurface information for this site.
- 4. This facility receives much stormwater runon from the north. Adequate stormwater runon diversion are lacking but planned for the future.

# 13. Other Compliance Information

- 1. NMOCD Rule 116 and WQCC Section 1203 has been incorporated into the facility contingency plan.
- 2. A closure plan for this facility is not required.

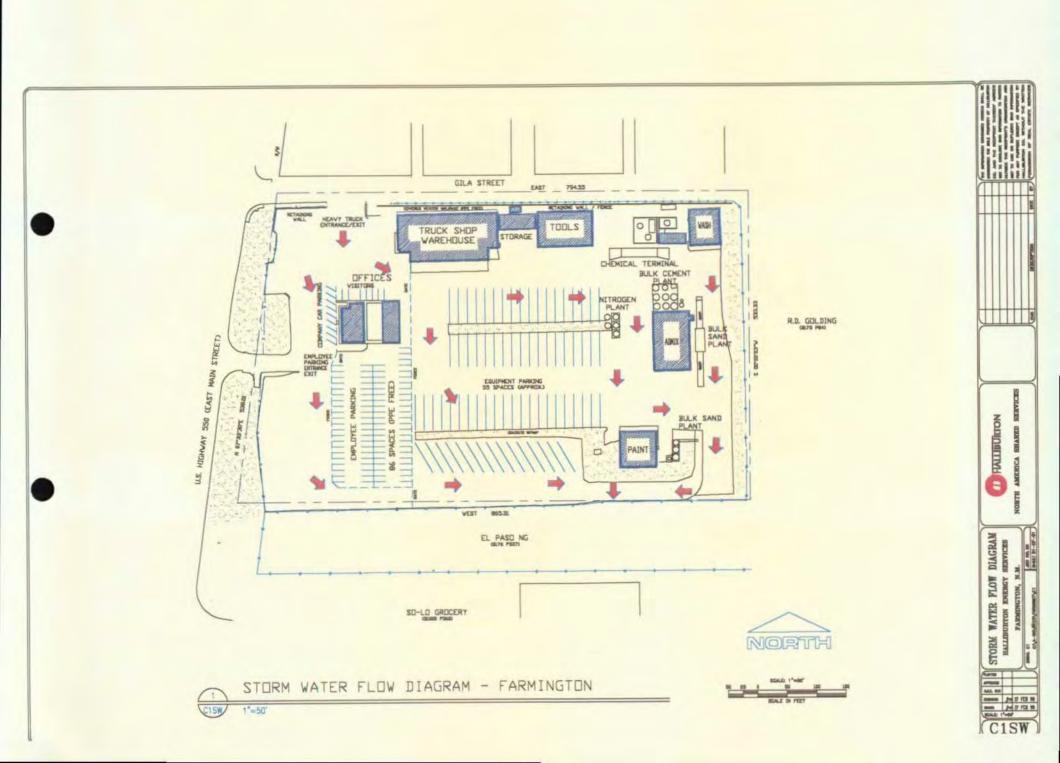
# List of Attachments

I.	Facility	<b>Plot</b>	Plan
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- II. Stock Status Report of Chemical Products on site
- III. Latest TCLP analysis of our washrack grit
- IV. Monthly Facility Assessments (Tiered Inspections)
- V. Stormwater Pollution Prevention Plan (Forthcoming)
- VI. Spill Contingency Plan (Forthcoming)
- VII. 1:100,000 scale map with a one mile radius
- VIII. Subsurface Investigation
- IX. Latest Radioactive survey

# ATTACHMENT I

FACILITY PLOT PLAN
SHOWING LOCATIONS
OF BUILDINGS AND
PROCESS AREAS
AND
DIRECTION OF
STORMWATER FLOW



# ATTACHMENT II

# STOCK STATUS REPORT FOR CHEMICALS ON SITE

# HALLIBURTON ENERGY SERVICES FIELD STOCK STATUS USAGE DATE REPORT

DESCRIPTION F	REPL	USGE			AR-TO-DATE ISSUES TRAF		FSB QTY	PKG QTY	0/0 QTY	SURP Qty	MSO QTY UNIT COST	OH-VALUE	OH-QTY	PART NUMBER
BALL-PERFPAC-7/	*	0398	EΑ	1300			1000	25			. 24	315.90	1300	70.00 <b>458</b>
BALL-PERFPAC-7/	*	0398	ĒΑ	1300			1000	25			. 31	403.00	1300	70.00475
BALL-PERFPAC-7/		0198	EA	75				25	125	75	. 34	25.58	75	70.00493
K-34 (50# BAGS) 4	19 *	0398	LB	2000	3050		500	50			.22	180.00	800	70.15186
K-35 4	!9 *	1295	LB					100		150	.15	23.08	150	70.15187
SODIUM PERSULFA 9	9	0398	EA		1027		OBS				.00	2408.57-	1610-	70.15188
K-33-K-TROL COM 9	9	1197	LB				OBS	50		50	.50	25.10	50	70.1519 <b>4</b>
GBW-3 4	19 ±	0398	LB	50	50		200	50			3.10	682.03	220	70.15209
ECONOLITE-ADDIT 4	19 *	0398	LB	18000	14827		1000	100			2046 .39	2571.48	4538	70.15250
SODIUM PERSULFA 4	19 ±	0398	LB	2915			825	55			1.21	5680.33	4685	70.15257
TLC-80-50# BAG 4	9 *	1094	LB .					50		400	. 58	235.59	400	70.15263
HYG-3 4	9 *	1295	LB				200	50		300	. 69	347.28	500	70.15266
KCL POTASSIUM C S	9 *	0298	LB	6100	4400		500	100			.12	372.00	3050	70.15302
CHEMICAL - HC-2 4	9 *	0398	GAL	1485	1346		880	55			5.38	8408.29	1562	70.15308
NF-1-5 GAL CAN 4	9	1297	GAL		•			5		50	25.57	1278.85	50	70.15311
₩G-11 4	9 *	0198	LB	50			1000	50			1.15	1099.02	950	70.15331
FORMIC ACID-BUL 8	9 *	0398	GAL	440	538	30	110	55	18		5.86	539.23	92	70.15366
FR-5-FRICTION R 4	9	0696	GAL					54		5	11.18	55.90	5	70.15371
FE-1A-BULK 4	9 ★	0398	GAL	1320	1443		660	330	41		4.57	3461.33	757	70.15418
OSR-100 - 50≢ S 4	9 *	1297	LB					50	1		1.49	.00		70.15485
DOC-3-5 GAL CON 4	9 *	1294	GAL				8	5			15.46	.00		70.15494
ISOPROPYL ALCHO S	Ģ	0298	GAL	220	290						3.50	35.00	10	70.15511
METHANOL-METHYL 4	9	0298	GAL							20	1.42	28.40	20	70.15512
DIACEL LUL-LU U 4	9 *	1297	LB					50		300	4.32	1296.60	300	70.15526
HYDROCHLORIC AC 8	9	0398	GAL	55518	61855				89871		.96	5066.69	6290	70.15530
FE-2 CITRIC ACI 49					103		1000	50		3397	. 84	3731.03	4397	70.15538
HALAD 9-50# SAC 49				50	225		300	50	20		3,48	974.48	280	70.15556
AMMONIUM BI-FLU 49	*	0198	LB	200			1400	50			, 85	1197.20	1400	70.15594

# PROGRAM FW180 5-55930 \*\* FARMINGTON, NM

45 ± 0100 16 150 150

# HALLIBURTON ENERGY SERVICES FIELD STOCK STATUS USAGE DATE REPORT

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DESCRIPTION	REPL	MMYY			AR-TO-DATE ISSUES TRAFER		PKG Qty	0\0 \YT@	SURP QTY	MSO QTY UNIT COST	OH-VALUE	OH-QTY	PART NUMBER
HOUCO SUDS	49 ±	0198	GAL			55	55		835	55 7.60	7183.39	890	70.15692
MF-1-HALLIBURTO	49 ±	0298	LB	200	362	1600	200	62		.56	984.08	1750	70.15606
INJECTROL A	δο	0298	GAL	7690	8000	550	54	8310		1.98	4118.40	2080	70.15607
HOWCO SUDS-5 GA	49 *	0398	GAL	90	32	70	5	2	120	7.31	1536.58	210	70.15609
TB-41 FRACTURIN		0995	LB				10		41	.96	39.52	41	70.15627
SCA-130 - 55 GA	49 ÷	1297	GAL				55		30	6.27	188,31	30	70.15657
HUSOL A	49 ±	1297	GAL				55		40	7.10	284.00	40	70.1575 <i>6</i>
O-AIR 1	49 *	1297	LB				50	27	65	.97	63.05	65	70.15764
SAND-OTTAWA-20/	89 *	0198	SCK	30			30	5	10	4.60	45.00	10	70.43151
LOSURF-259	49 *	0298	GAL			55	55	49		9.01	.00		516.00009
FE-2A-CITRIC AC	89	0398	GAL		442	330	330			5,54	1186.90	214	516,00029
HYFLO IV-5 GAL	99	0398	GAL		9	OBS	5			14,43	.00		516.00033
SGA-HT-51 GAL D	49 *	0298	GAL	102		102	51	36	448	19.61	10787.80	550	516.00039
WG 17 50# SACK	49 *	0398	LB		200	1000	200	240	475	3.61	5328,85	1475	516.00041
FERCHEK-50# BAG	49 ±	0198	LB	300	200 .		55		100	4.70	1880.04	400	516,00043
AMMONIUM FLOURI	49 +	1297	GAL				55		34	2,95	100.35	34	516.00047
K-38-POLYBOR-50	49 ±	0398	LB	1400	647	500	50		120	.83	1680.63	2020	516.00053
WS-44-EMULSIFYI	49 *	0398	GAL	110	70		55	220		7.53	828.66	110	516.00081
WG-18	49	0298	LB		1800		50		2200	1,60	3526,72	2200	516.00087
WG-19	49 *	0298	LB	1500	1225	3000	50			1.00	3111.75	3100	516.00107
CHEM-HALLIBURTO	49 ±	1297	SCK			24	24		24	39.06	1875,24	48	516.00114
CHEM-HALLIBURTO	99	1297	GAL			OBS	55		55	26. <b>06</b>	1433.63	55	516,00116
BA-20	47 ±	0298	GAL		59	220	<b>5</b> 5	2	55	4.38	1205,42	275	516.00119
HALA0-322	49 ÷	1297	LB			500	50	33		2.25	1015.11	450	516.00144
GBU-30 BREAKER	49 ÷	0395 !	LB	20	702	200	10	1	236	5.44	2810.67	436	516.00146
LOSURF-300 SURF	49 * (	0398 (	GAL	583	542	159	53		451	5.68	6906.69	1034	516.00157
SALT-MORTON-PUR (	39 ÷ (	0198 1	-B				2400		3040	.04	125.83	3040	516.00158
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HALLIBURTON EMERGY SERVICES FIELD STOCK STATUS USAGE DATE REPORT

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							KE; (	/A I							
DESCRIPTION	REPL	USGE MMYY	U/I	** YE RECPTS	IAR-TO-DAT		GB PI TY QI		0/0 QTY	SURP QTY	DSK YTØ		OH-VALUE	OH-QTY	PART NUMBER
HII-1240	49 *	0997	LB							11		3.71	40.88	11	516.00192
SUPER CBL+100#	49 ±	1297	LB			3	00 10	0	115			4,32	1296,39	300	516.00223
MICROBOND ADDIT	49 ±	0198	L8			10	00 5	i0		1300		. 23	549.82	2300	516,00226
HALAD-344-50‡ S	49 ±	0398	LB	350 <b>0</b>	3528	10	00 5	50	60		217	6.60	4205.83	723	516.00227
SAND-12/20-BROW	89	0298	SCK	3226	2800	50	00	1	9500			5.02	4625.39	920	516.00236
SAND-16/30-BROW	89	0797	SCK			100	00					3.67	.00		516.00237
SAND-20/40-BROW	89	0298	SCK	14746	15044	50	00	2	5552		450	3.62	12127.32	2895	516.00238
SAND-70/140 OR	89	0198	SCK			10	)0					2.90	699.14	241	516.00240
SAND-12/20-WHIT	89	0298	SCK	763	288							7.46	3548.00	475	516.00241
SAND-20/40-WHIT	89	0398	SCK	3013	1500	60	0	1	6987			4.60	6967.77	1513	516.00242
9ENTONITE-BULK	89	0398	SCK	581	644	8	00				26	4.68	2038.39	409	516.00259
CEMENT-STD-BULK	89	0298	SCK	14502	15205	100	00	1	5498		1290	4.04	3809.85	349~	516.00263
CEMENT-CLASS G-	89	0398	SCK	8476	8146	50	0	1	9524		277	4.13	5921.91	1156	516.00270
POZMIX A-BULK	89	0398	LB	639220	592633	1500	00	31	5340		35432	.00	1120.01	92381	516.00286
SILICA FLOUR-SS	89	1297	L8			<b>600</b>	0					.04	332.38	7386	516.00289
MO-67	49 *	0298	GAL			1	.0 5	5		165		1.80	497.26	275	516.00308
WG-22-1000 <b>‡</b> BAG	89 ±	0398	LB	56000		160	0 100	0				.97	<b>39031.3</b> 0	40000	516.00317
SAND-16/30 MESH	49	1297	SCK								1867	5.29	,00	1867-	516.00324
GILSONITE-BULK	89	0398	L8	147120	156465	1009	0				13975	.07	2563.03	20810	516.00337
GS-5-50 GAL DRM	49 *	0298	GAL	200	83	1:	0 5	Ō	13			8.33	1666.94	200	516.00353
CL-23 CROSSLINK	49 ±	0298	GAL	55	31		5	5				9.30	511.80	55	516.00394
CL-24 CROSSLINK	49 *	1297	GAL				2	8		18		35.19	633.42	18	516.00395
CXOL II OXIDANT	89 *	0298	LB	880	1000		4	0	20			.59	238.88	400	516.00400
FE-3A-IRON SEQU	49 *	0897	L9			200	0 5	0				.87	.00		516.00412
BA-40L BUFFER-5	49 ±	1297	GAL			11	0 5	5		385		3.51	1740.52	495	516.00430
SILICALITE-BULK	99	1197 (	LB			4000	0	751	1200			.12	2225.73	18230	516.00443
AQF-2 FOAM AGEN				1040	855	104	0 5	2	45			5.58	7624.30	1365	516,00449
CLAYFX II-55 GA	49 * 1	0398 (	JAE	165	569	4.4	0 5	5	10			6.43	2765.86	430	516.00450

# HALLIBURTON ENERGY SERVICES FIELD STOCK STATUS USAGE DATE REPORT

DESCRIPTION	REPL	USGE		** YE	EAR-TO-DA ISSUES	TE++	FSB QTY	PKG QTY	O/C QTY	SURP QTY	MSO	UNIT COCT	50 GALLE	OU OTV	F. FF
GBW-30 BREAKER-		0298			15	That the	OBS	25	Q; ; f	البرد	االخ				PAPT NUMBER
CLAYFIX II-HAL					10		000	330	/.	(65		.00	104.64-		516.00458
PEN-88 MICROEMU					10		OBS	55 55	60	685		5.39	3 <b>696.16</b>	685	516.00471
SAND-ARIZONA SI		0398		40909	42682			ฉับ	54477	11	_	10.03	110.38	11	516,00473
SAND-ARIZONA SI							15000		21172		7010	2.55	16657.20	478-	516,00477
FR-26LC-BULK		0398		1567	644		100		1660		100	1.73	1442.73	730	516.00475
	89	0398		2310	1928		1200		990			9.16	3297 <b>.9</b> 3	360	516.00481
CLA-STA XP-CLAY				55	25		110	55	4			13.30	1409.90	106	516.00490
BE-5 BIOCIDE-36							36	36				8.17	.00		516,00499
BA-50-BORIC ACI		0298		500	850		10					.93	93.40-	100-	516.00499
#ALAD 413- 50#					27		250			250		8.06	4031.26	500	516.00512
MICROBOND M-50#							500	50				.34	.00		516.00513
0-AIR 3- 5 GAL	49 *	1297	GAL					5		5		34.80	174.03	5	516.00517
HAI-85M CORROSI	49 *	0298	GAL					54		300		19.54	5862.01	300	516.00524
SCR-100 SYNTHET	99 *	0198	LB							725		5,56	4036.48	725	514.00535
SAND-SUPER LC-R	99	0997	LB						200000			.12	.00		516.0055:
SUPERSET-W/ACTI	99	0298	GAL		17					645		9,22	5947,55	645	516.00553
HR-25-50# BAGS	49	1297	LB							100		7.41	741.02	100	514.00558
LGC-8 USING WG-	89	0398	GAL		9021		5000					4.66	14239.05	3051	516.00567
MSA II INHIBITO	49 *	0298	GAL				55	55				16.53	859.93	52	516.00572
MICRO MATRIX CM	99 ±	1297	SCK				50		26			19.97	679.09	34	516.00611
GEL-STA L STABI	89	1297	GAL					55		215		7.58	1630.22	215	516.00627
MO-75 OIL GELLI	49 *	1297	GAL					55		55		16.58	912.34	55	516.00652
MO-76 DIL GEL A	49 *	1297	GAL					55		55		7.27	399.91	55	516.00653
OPTIFLO-E RETAR	<b>4</b> 9	0398	LB		37		50	50				15.00	270.00	18	516.00654
CL-29 CROSSLINK	49 <b>*</b>	1295	GAL					55		25		12,29	307.30	25	516.00710
CHEM-SGA-II ACI	45 *	0298	GAL	990	990			55		105			11525.23	1095	516.00731
SNO-TEMPERED SU	79	0398	LB	620320	824160			,	200000		122600	.12		122600-	516,00762
BE-6 BACTERICID	49 * :	0398	LB	768	792		300	48	261			18.96	3793.07	200	516,00771
								-				10110	G772.W7	200	J191VV//1

PROGRAM FU180 5-55930 \*\* FARMINGTON, NM

# HALLIBURTON EMERGY SERVICES FIELD STOCK STATUS USAGE DATE REPORT

DESCRIPTION	REPL	USGE MMYY	U/I		EAR-TO-DAT		FSB QTY	PKG QTY	0/0 QTY	SURP QTY	MSO YTQ	UNIT COST	OH-VALUE	OH-QTY	PART NUMBER
OPTIFLO-III BRK	49 *	0398	LB	250	185		200	50				4.90	1225.23	250	516.00772
CHEMICAL VERSAS	99 *	0398	LB	550	1093		1000	50				1,34	1407.22	1043	516.00789
CAT-3 ACT-55 GA	49 *	0298	GAL	490	408		110	55				5.22	1725.55	330	516.00792
CAT-3 ACTIVATOR	4° *	0298	GAL	160						10		7.60	1293.31	170	516.00793
BF-1 BFG AGENT	49 +	0298	GAL	110	110							11.34	1247.77	110	516.00809
XL-1-ACID CRSLN	49 +	* 0198	GAL	. 220	225							3.44	741.53	215	516,00810
SAND-16/30 MESH	89	0398	SCK	( 4087	3917		10000		25913			2.09	9276.45	4432	516.00818
ANHIB II INHIBI	49	* 0298	GAL	-	20		15	5		30	5	14.15	<b>707</b> .70	45	516.00854
CL-28M XLINKER-	49	* 0697	' GAL	-						385		5.07	2338.78	385	516.00855
MICRO FLY ASH-5	49	* 0198	3 LB	350	)		2500			1250		.21	812.59	3750	516,00860
HAI-81M-INHIBI	79	<b>* 03</b> 98	3 GAI	L 44	0 514		220	55	51	8		12.00	8018.93	668	516.00883
BE-3S SOLID BI	3 99	1293	7 LB							40		11.50	460.00	) 4(	516.00895
CL-31 CROSSLIN	K 99	* 1291	7 GA	L			110	55	18	860		5.68	5516.48	3 97 <b>(</b>	516.00896
PERM A ADDITIV	E 99	129	7 GA	L						70		15.07	1055.49	7 70	516.00901
PERM C ADDITIV	E <b>9</b> 9	* 119	7 LB							108		20.71	2237.14	4 109	516,00903
MUSOL E SOLVEN	T 89	029	e ga	L 22	0 100							5.1	1192.0	2 19	5 516.00906
SSO-21H WINTER	- 99	* 039	8 GA	iL 66	0 1276	ŧ	880	55		211		5,70	6442.9	0 109	1 516.00907
OPTIFLO HTE BR	K 89	* 039	8 LE	}	145	5	100	50		180		14.8	7 4164.6	0 28	0 516,00909
VICON NF BRKR-	5 49	* 039	8 GA	AL 154	1383	2	330	55	12			4.5	4 4246.6	5 93	5 516.00954
VICON NE BRKR-	H 49	* 029	98 GA	XL 33	30			110				3.7	5 112.5	0 3	0 516,00955
PROPURAP PROP	F 99	* 109	7 LI	3						690		2.6	7 1843.1	.4 69	0 516,00969
MAX SEAL FL LO	S 99	* 129	76 LI	8						55		. 6	0 33.0	0 5	516,00969
MORFLO III SUF	(F 99	÷ 099	77 G/	AL						55		9.1	7 504.8	.8 S	5 516.01010
HYFLO IV M SU	₹F 99	± 039	98 G	AL :	25		25	5				8.4	18 212.1	14 3	516.01039
HORFLO III SUI	₹ 99	+ 039	28 G	AL 1	65 19	0	80	5				9.8	35 778.7	78 7	79 516.01066
∮9C-2 CROSSLIN	Œ 49	* 039	78 G(	AL 1	65 72	4	990	55	i	٠		5.8	37 5 <b>545</b>	83 9	44 = £16.01090
BC-200 CRSSLNI	IR 89	* 019	78 Gi	AL			660	330	)			S.,	79 .	00	516,01162
SANDWECGE - 33	90 99	* 039	78 G	AL 21	00 239	5	1320	300	159	Ç ,		11.	13 24852.	18 22	31 516,01167

03/09/98 PAGE 319

PROGRAM FW180 5-55930 \*\* FARMINGTON, NM

# HALLIBURTON ENERGY SERVICES FIELD STOCK STATUS USAGE DATE REPORT

DESCRIPTION	REP	USGE L MMYY				ATE** TRNFERS	FSB QTY	PKG QTY	0/0 QTY	SURP QTY	MSO QTY	UNIT COST	OH-VALUE	OH-QTY	PART NUMBER	
BC-200 CROSSLNK	89	* 0398	GAL	1980	1041		990	330	51			7.77	12671.04	1630	516.01173	
FLOCELE- 3/8 -	89	<b>*</b> 0398	3 LB	9000	7530		3000	1000	642		701	.30	724.02	1657	890.50071	
HR-5-50≢ SACK	49	<b>*</b> 1290	7 LB				•	50		625		1.20	750.15	625	890.50077	
CAL-SEAL-100≇ B	89	* 019	B SCK				120	40	14			8.28	994.12	120	890.50131	
CALCIUM CHLORID	89	* 039	3 SCK	350	308		105	35	8		6	14.33	1792.30	119	890.50812	
FDP-F520-92- 55		* 129	4 GAL							32		6.55	209.84	32	999.99228	
				ua ua	REHOUSE	INVENTORY	TOTALS:		TOTAL	PARTS			146			
									ESTIM ESTIM ESTIM	ATE ON O ATE SURF ATE CURF ATE MSO ATE MSO AD VALUE	PLUS RENT F VALUE	84, SB 417, 56,	363.39 567.87 376.80 118.67 003.57			

# ATTACHMENT III

# TCLP ANALYSIS OF WASHRACK GRIT



# TOXICHY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Regulatory

Halliburton	Project#:	92132
Wash Bay Composite	Date Reported:	01-06-98
C728	Date Sampled:	12-23-97
5698	Date Received:	12-23-97
Solid	Date Analyzed:	01-06-98
Cool	Date Extracted:	12-23-97
Cool & Intact	Analysis Needed:	TCLP metals
	Wash Bay Composite C728 5898 Solid Cool	Wash Bay Composite Date Reported: C728 Date Sampled: 5898 Date Received: Solid Date Analyzed: Cool Date Extracted:

Det.

	Concentration	Limit	Level
Parameter	(mg/L)	(mg/L)	(mg/L)
Arsenic	0.015	0.0001	5.00
Barlum	1.62	0.001	100
Cadmium	0.001	0.0001	1.00
Chromium	0.006	0,0001	5.00
Lead	0.051	0,0001	5.00
Mercury	ND	0.0001	0.200
Selenium	ND	0.0001	1.00
Silver	ND	0.0001	5.0

ND - Parameter not detected at the stated detection limit.

References:

Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA,

July 1992.

Methods 3010, 3020, Acid Digestion of Aqueous Samples and Extracts for Total

Metals, SW-846, USEPA, July 1992.

Methods 7060, 7080, 7131, 7191, 7470, 7421, 7740, 7761 Analysis of Metals by

GFAA and Cold Vapor Techniques, SW-846, USEPA.

Note:

Regulatory Limits based on 40 CFR part 261 subpart C

section 261.24, July 1, 1992.

Comments:

Halliburton, East Main St., Farmington, NM.

Analyst

Review

tacy W Sendler



January 7, 1998

Mr. Rick Greenacre
Halliburton Energy Services, Inc.
4109 East Main Street
Farmington, New Mexico 87401

Project No.: 92132

Dear Mr. Greenacre,

Enclosed are the analytical results for the sample collected from the wash bay located at the Halliburton facility on East Main St. in Farmington, New Mexico. One composite sample of wash bay solids was collected by Envirotech personnel on December 23, 1997, and delivered to the Envirotech laboratory on December 23, 1997 for Hazardous Waste Characterization analysis (Volatiles, Semi-Volatiles, Trace Metals, Corrosivity, Ignitability, and Reactivity).

The sample was documented on Envirotech Chain of Custody No. 5698 and assigne I Laboratory No. C728 for tracking purposes. The sample was analyzed 12/23/97 through 01/06/98 using USEPA or equivalent methods.

Results of the analysis indicate that the material contained in the sample from the referenced location is not a characteristic hazardous waste as defined by 40 CFR Section 261, Subpart C for the noted compounds.

Should you have any questions or require additional information, please do not hesitate to contact us at (505) 632-0615.

Respectfully submitted, Envirot 1ch, Inc.

Stacy W Sandler

Environmental Scientist/Laboratory Manager

enc.

SWS/sws

92132/tclp1298.lb3





**WASTE ANALYSIS** 

Client:	Halliburton	Project#:	92132
Sample ID:	Wash Bay Composite	Data Reported:	12-29-97
Lab ID#:	C728	Date Sampled:	12-23-97
Sample Matrix:	Soild	Date Received:	12-23-97
Preservative:	Cool	Date Analyzed:	12-23-97
Condition:	Cool & Intact	Chain of Custody:	5698

**Parameter** 

Result

IGNITABILITY:

Negative

CORROSIVITY:

Negative

8.52

**REACTIVITY:** 

Negative

RCRA Hazardous Waste Criteria

**Parameter** 

Hazardous Waste Criterion

IGNITABILITY:

Characteristic of Ignitability as defined by 40 CFR, Subpart C, Sec. 261.21.

(i.e. Sample ignition upon direct contact with flame or flash point < 60° C.)

CORROSIVITY:

Characteristic of Corrosivity as defined by 40 CFR, Subpart C, Sec. 261.22.

(i.e. pH less than or equal to 2.0 or pH greater than or equal to 12.5)

REACTIVITY:

Characteristic of Reactivity as defined by 40 CFR, Subpart C, Sec. 261.23. (i.e. Violent reaction with water, strong base, strong acid, or the generation of Sulfide or Cyclide generated STR with pH between 2.0 and 13.5)

of Sulfide or Cyanide gases at STP with pH between 2.0 and 12.5)

Reference:

40 CFR part 261 Subpart C sections 261.21 - 261.23, July 1, 1992.

Comments:

Hallburton, East Main St., Farmington, NM.

Analyst

Stacy W Lendler

L. Clier



# FTHODS 8010/8020 AROMATIC / HALOGENATED **VOLATILE ORGANICS**

Client:	Halliburton	Project #:	92132
Sample ID:	Wash Bay Composite	Date Reported:	01-02-98
Laboratory Number:	C728	Date Sampled:	12-23-97
Chain of Custody:	5698	Date Received:	12-23-97
Sample Matrix:	Solid	Date Extracted:	12-23-97
Preservative:	Cool	Date Analyzed:	12-31-97
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limits (mg/L)
Vinyl Chloride	ND	0.0001	0.2
1,1-Dichloroethene	ND	0.0001	0.7
2-Butanone (MEK)	ND	0.0001	200
Chloroform	ND	0.0001	6.0
Carbon Tetrachioride	ND	0.0001	0.5
Benzene	ND	0.0001	0.5
1,2-Dichioroethane	ND	0.0001	0.5
Trichloroethene	ND	0.0003	0.5
Tetrachloroethene	ND	0.0005	0.7
Chlorobenzene	ND	0.0003	100
1,4-Dichlorobenzene	ND	0.0002	7.5

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery	
	Trifluorotoluene	98%	
	Bromofluorobenzene	100%	

References:

Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.

Method 5030, Purge-and-Trap, SW-846, USEPA, July 1992.

Method 8010, Halogenated Volatile Organic, SW-846, USEPA, Sept. 1994. Method 8020, Aromatic Volatile Organics, SW-846, USEPA, Sept. 1994.

Note:

Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments:

Halliburton, East Main St., Farmington, NM.

Stacy W Sender





Client:	Halliburton	Project #:	92132
Sample ID:	Wash Bay Composite	Date Reported:	01-02-98
Laboratory Number:	C728	Date Sampled:	12-23-97
Chain of Custody:	5698	Date Received:	12 <b>-23</b> -97
Sample Matrix:	Solid	Date Extracted:	12-23-97
Preservative:	Cool	Date Analyzed:	01-02-98
Condition:	Cool & Intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Detection Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresoi	ND	0.020	200
p,m-Cresol	ND	0.040	200
2,4,6-Trichiorophenol	ND	0.020	2.0
2,4,5-Trichlorophenol	ND	0.020	400
Pentachlorophenol	ND	0.020	100

ND - Parameter not detected at the stated detection limit.

Surrogate Recoveries:	Parameter	Percent Recovery
	2-Fluorophenol	100%
	2,4,6-Tribromophenol	98%

References:

Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid

Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid

Waste, SW-846, USEPA, July 1992,

Method 8040, Phenois, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 19

Note:

Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1, 1992.

Comments:

Halliburton, East Main St., FarmIngton, NM.

Analyst

Review

Stacy W Sendler



# Nitroaromatics and Cyclic Ketones TCLP Base/Neutral Organics

Client: Sample ID: Laboratory Number: Chain of Custody: Sample Matrix: Preservative:	Halliburton Wash Bay Composite C728 5698 Solid Cool	Project #: Date Reported: Date Sampled: Date Received: Date Extracted: Date Analyzed:	92132 01-02-98 12-23-97 12-23-97 12-23-97 12-31-97
Preservative: Condition:	Cool and intact	Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	0.189	0.020	5.0
Hexachloroethane	ND	0.020	3.0
Nitrobenzene	0.047	0.020	2.0
Hexachlorobutadiene	ND	0.020	0.5
2,4-Dinitrotoluene	0.030	0.020	0.13
HexachloroBenzene	ND	0.020	0.13

ND - Parameter not detected at the stated detection limit.

QA/QC Acceptance Criteria	Parameter	Percent Recovery
COT CO ACCEPTATION OF TREAT		

2-fluorobiphenyl

98%

References:

Method 1311, Toxicity Characteristic Leaching Procedure, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, SW-846, USEPA, July 1992.

Method 8090, Nitroaromatics and Cyclic Ketones, SW-846, USEPA, Sept. 1986.

Note:

Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992.

Comments:

Halliburton, East Main St., Farmington, NM.

Alexant: Chiecan

Review

3796 U.S. Highway 64-3014 • Farmington, NM 87401 • Tel 505 • 632 • 0615 • Fax 505 • 632 • 1865

Stacy W Sender

# ATTACHMENT IV

# FACILITY ASSESSMENTS (EXAMPLE)

# MONTHLY FACEITY ASSESMENT RESPONSIBILITIES

Fra 1998	5		
WORK AREA	SUPERVISOR	RESPONSIBLE PERSON:	
Service Center Bldgs	G. Freidline	Melissa Spencer	
Laboratory	B. Petersen	Teresa White	
Office Trailer	G. Freidline	Melissa Spencer	
Warehouse	G, Przekurat	Ray Cartwright	
Oil Storage	E. Shannon	Jim Robinson	
Cement Shop	R. Emde	Randy Snyder	
Wash Bays	E. Shannon	Jim Robinson	
N <sup>2</sup> Shop	T. Colins	Pat Kemper	
4 Pool Shop	C. Lasster	Rick Greenaker	
Cement Head Shop	R. Emde	Randy Snyder	
Bulk Piant	G. Przekurat	Gene Roberts	
Tech Room/Coiled Tubing	B. Petersen	Max Pedigo	
Frac Shop	T. Colins	Noel Hermanson	
Painting/Blasting Shop	E. Shannon	Jim Robinson	
Chemical Dock/Warehouse	G. Przekurat	Richard Nye	
Mechanic Shop	E. Shannon	Jim Robinson	
Logging Shop	S. Hash	Mike Nix	
LGC Plant	G. Przekurat	Gary Dobbs	
Sand Plant	G. Przekurat	Gary Dobbs	
Fuel Island	N/A	N/A	
<b>Yard</b>	E. Shannon	Brian Higgins	

Enisain ara asso bathailigit

# **ROCKY MOUNTIAN TIERED INPSECTION PROGRAM CORRECTIVE ACTION PLAN**

WORK AREA:	Farmin	aton	MCL
			,

		n	-	_	$\boldsymbol{\Gamma} \wedge$	$\Box$	
Ш	NS	r	Г.	C.	טו	ĸ	١

### INSTRUCTIONS:

The person performing the monthly inspection should note date, facility and deficiency in the left column of this form and then forward this form and the work area inspection form to his/her work area responsible person. The Responsible person, Shared Service Coordinator, HSE team and PSL management will develop a corrective action plan for each issue. The work area responsible person and inspector will initial and date each corrective action as it is completed. A copy of the corrective action form should be filed locally with the completed inspection form. The Shared Services Coordinator will maintain a master rolling corrective action plan for each operation center to be updated monthly and E-mailed to the NWA Shared Services Manager and HSE Coordinators quarterly.

The state of the s

		HERMANIELENGON	PARTITION CATE
	NODE Tant Cill liquid chanicals secondarily contained not enought room	Als	DIA
02-09-98	contained not enought room	Hary Poble	Discussed will blangs
Semion Cos-		DES Tim Robinson	Q3-30-42
B2-09-98	Extragrant + hours hours Show 1 + 910 Extragrant + hours hours hold need hour grinding wheel, and wine brush hed need Tabel for our scrap metal H20 can	mile nex	O2-25-98
	Tabel for sun scin metal H20 can Cement mix nuature Circ compressor/copture vessel: bottom tank Crain, drains but on to shop floor	ju h	
02-13-98	Crain, and is but on to shon from House Kroping-mylineds to be white up Spill Kits-pine in trant of the trae rearn meets to be tilled.	Jem Robanson	U5-30-48
	We need trash cans in lawer and		02-20-98
	Prestrable to public - mointain moisi	3	63-32-48,
	light bulles that need to be changed		
	#8-21ights, #10-1 light, Front Isla has 2 lights, back island-1 light	nd Brain	03-26-48



# **ROCKY MOUNTIAN TIERED INPSECTION PROGRAM CORRECTIVE ACTION PLAN**

WORK AREA: Farmin	Ċ.	tem	ma.
	<del></del>		

LNI	c		<u> </u>	$\sim$	ГО	<b>D</b> .
111	<b>3</b>	_	_	<b>.</b>	ı	R.

## INSTRUCTIONS:

The person performing the monthly inspection should note date, facility and deficiency in the felt column of this form and then forward this form and the work area inspection form to his/her work area responsible person. The Responsible person, Shared Service Coordinator, HSE team and PSL management will develop a corrective action plan for each issue. The work area responsible person and inspector will initial and date each corrective action as it is completed. A copy of the corrective action form should be filed locally with the completed inspection form. The Shared Services Coordinator will maintain a master rolling corrective action plan for each operation center to be updated monthly and E-mailed to the NWA Shared Services Manager and HSE Coordinators quarterly.

			PEMPLETICATION OF THE STATE OF
Workrowse	Date make designated aren for		STATES OF THE STATE OF THE STAT
		Dary Dubla	Decused withours but not complete
02-09-98		11 11	• •
02-09-98	track can in washbay Emptha	Nick Greenaker	02-09-98
	Fire extinguishers needenew sigh, need to replace one by book door	Rick Greenaker Ordered them	02-69-98
02-09-98 Tool shop	Open line drains on Floor of wash boy	make next	
11 Jay	NONE	NA	NIA
02-14-98 Service conter 8160	House keeping - well devidors in hallupy need to be moved, ejectrical commutar cords need to be tire up. Printer re-Heuse Majing - Chutter of works in vaccour office, ejetrical cords, commuter cords need to be tirdup, ellerning chriming	"Man, Trudine & Ton Home	09-17-48
02-14-98 Office timile	House Maising - Chutter of worlds in vaccount office, Eletrical cords, computercords of the betind of 4110 kning chaming	t vivigion	02-16-98 ce
() 2.09- <b>9</b> 8	このひた	NA	DIA
02-13-98 Fre Room	DONE	NIA	Ala
02-13-98 Damp	NONE	NIA	NA
02-12-98 Sand Drank	NONE	N/A-	ALA
02-12-98	No Fire extingener, Do not store partials in plant	Richard Mye	03-01-98

# WAREHOUSE HSE INSPECTION

Facility Location: FARMAGEN Time: //	00			
Inspection for the week of <u>FEB</u> by: <u>WR</u>	CAR	twe	1612t	
Objective: Ensure the Health & Safety of employees and positive in Environment.  Pollution prevention and waste minimization are essential to the such materials warehouse. Conduct weekly inspections of the warehouse empty drum storage area, and hazardous waste storage area. Note corrective actions as required. File original in environmental file route.	cessful an and imme yes or no	d cost of ediate a	effective operation of the area, covered drum storage area, th line item and comment on	
ttem	Yes	No	Corrective Action	
House keeping guidelines being followed. 1	V			† !
Fire extinguishers properly maintained. 1	~			!
Spill kits properly maintained. 1	NA			
Personnel Protective Equipment (PPE) guidelines followed. 1	1			İ
Proper waste management guidelines followed. 1	V			
Flammable Cabinet properly maintained. 1	V			
Equipment and hand tools properly maintained. 1	/			
All containerized waste properly labeled. <sup>2</sup>	N	IA		
Hazardous waste storage area inspected weekly. <sup>2</sup>	V			
Hazardous waste storage area inventory up-to-date.2	V			
Hazardous waste storage area properly designated. <sup>2</sup>		1	NEED to MAKE DESIGNATE	D ARE
Full or partial containers stored with bungs and lids in place.	1	A		
All partials easily identified.	N	1A		
All product storage containers have product labels.	1			
Empty chemical containers stored in designated area.	N	2		
All empty containers have product labels.	N	0		
Empty drums stored horizontal with bungs in place.	N.	4		
Empty storage area properly designated. <sup>2</sup>	M	4		
All liquid chemicals secondarily contained.	N	4		
Air compressor equipped with condensate capture vessel.	N	A		İ
Air compressor condensate vessel properly maintained.	N			

Refer to inspection guidelines.

<sup>&</sup>lt;sup>2</sup> Refer to Environmental Compliance Waste Storage and Transportation manual.

# WAREHOUSE ENVIRONMENTAL INSPECTION

Inspection for the week of Feb. by: LOR			<u> </u>
Objective: Pollution Prevention/Waste Minimization			3
Pollution prevention and waste minimization are essential to the succenterals warehouse. Conduct weekly inspections of the warehouse empty drum storage area, and hazardous waste storage area. Note corrective actions as required. File original in environmental file route.	and imm	ediate a	area, covered drum storage area, ch line item and comment on
	Yes	No	Corrective Action
House keeping guidelines being followed. 1			
Fire extinguishers properly maintained. 1			
Spill kits properly maintained. 1	NA		
Personnel Protective Equipment (PPE) guidelines followed. 1	V		
Proper waste management guidelines followed. 1	V		
Flammable Cabinet properly maintained. 1	V		
Equipment and hand tools properly maintained. 1	V		
All containerized waste properly labeled.2	N	A	
Hazardous waste storage area inspected weekly. <sup>2</sup>		V	NEED to MAKE ADESIGNATED
Hazardous waste storage area inventory up-to-date.2	^	19	
Hazardous waste storage area properly designated.2		V	SERABOUE
All containers are leak free.	N	A	
Full or partial containers stored with bungs and lids in place.	N	4	
All partials easily identified.	N	ρ	
All product storage containers have product labels.	N	A	,
Empty chemical containers stored in designated area.	N,	0	
All empty containers have product labels.	N	A	
mpty drums stored horizontal with bungs in place.	N	4	·
All liquid chemicals secondarily contained.	N	A	
Air compressor equipped with condensate capture vessel.	^	А	
Air compressor condensate vessel properly maintained.	1 ~	A	

# WAREHOUSE ENVIRONMENTAL INSPECTION

Refer to inspection guidelines.
 Refer to <u>Environmental Compliance Waste Storage and Transportation</u> manual.

# LABORATORY

Facility Location: ARBIRTOLY Time: Inspection for the week of 2-14-98 by:	4:00g	e tehi	Te
	سيميد والأساسي		
Objective: Ensure the Health & Safety of employees and pure Environment Pollution prevention and waste minimization are essential to the succession.  Conduct weekly inspections of the warehouse empty drum storage area, and hazardous waste storage area. Note corrective actions as required. File original in environmental file route.	essful and and imme yes or no	d cost el diate ar for each	ffective operation of the ea, covered drum storage area, this line item and comment on
ttem	Yes	No	Corrective Action
House keeping guidelines being followed. 1	1/		
Fire extinguishers properly maintained. 1	1		
Spill kits properly maintained: 1			
Personnel Protective Equipment (PPE) guidelines followed. 1			
Proper waste management guidelines followed. 1			
Flammable Cabinet properly maintained, 1		٠	
Equipment and hand tools properly maintained. 1			
All containerized waste properly labeled.2			
All containers are leak free.	/		
Full or partial containers stored with bungs and lids in place.	NA		
All partials easily identified.	NA		
All product storage containers have product labels.	2/		
Empty chemical containers stored in designated area.	/		
All empty containers have product labels.			
Empty drums stored horizontal with bungs in place.	V		
All liquid chemicals secondarily contained.	MA		
Air compressor equipped with condensate capture vessel.	MA		
Air compressor condensate vessel properly maintained.	WA		
Area clean and free of chemical spills.	11/		

<sup>&</sup>lt;sup>1</sup> Refer to inspection guidelines.

<sup>&</sup>lt;sup>2</sup> Refer to Environmental Compliance Waste Storage and Transportation manual.

# **TOOL SHOP**

Facility Location: HRMWATON Time: Conspection for the week of FGD9,1998 by: F	151	uer	Res	
				$\dashv$
Objective: Ensure the Health & Safety of employees and pu	iblic wh	ile pro	tecting the	
Environment  Pollution prevention and waste minimization are essential to the succ	essful an	d cost e	effective operation of the	1
Conduct weekly inspections of the warehouse	and imm	ediate a	rea, covered drum storage area	ı.
empty drum storage area, and hazardous waste storage area. Note corrective actions as required. File original in environmental file route				
Item	Yes	No	Corrective Action	1 L
House keeping guidelines being followed. 1	28		TRUSH OAU IN WASA	17
Fire extinguishers properly maintained. 1		<b>/</b> ;	NEED NEW SILK COURT	
Spill kits properly maintained. <sup>1</sup>			NEED TO REPEACE I BY	Dec
Personnel Protective Equipment (PPE) guidelines followed. 1	/			7
Proper waste management guidelines followed. 1	/			]/
Flammable Cabinet properly maintained. 1				$\int_{0R}$
Equipment and hand tools properly maintained. 1	/			Ų"
All containerized waste properly labeled.2			NA	$\int$
All containers are leak free.				
Full or partial containers stored with bungs and lids in place.				
All partials easily identified.				
All product storage containers have product labels.				
Empty chemical containers stored in designated area.			NA	
All empty containers have product labels.				]
Empty drums stored horizontal with bungs in place.			NA	]
All liquid chemicals secondarily contained.				
Air compressor equipped with condensate capture vessel.		/	OF WASH BAY	7
Air compressor condensate vessel properly maintained.		1		
Area clean and free of chemical spills.	/			1

Refer to inspection guidelines.
Refer to Environmental Compliance Waste Storage and Transportation manual.

# SERVICE CENTER BLDGS.

Facility Location: Factive for un Time: 3'45om Inspection for the week of Frb 1998 by: MELISSA SOEMER						
Objective: Ensure the Health & Safety of employees and present to the succession of the warehouse empty drum storage area, and hazardous waste storage area. Note corrective actions as required. File original in environmental file rout	essful ar and imm yes or no	nd cost e ediate a o for eac	ffective operation of the rea, covered drum storage area, h line item and comment on			
ltem	Yes	No	Corrective Action			
House keeping guidelines being followed. 1		1	well devices in hell	1		
Fire extinguishers properly maintained. 1	1		3	1		
Spill kits properly maintained. 1	Alu					
Personnel Protective Equipment (PPE) guidelines followed. 1	1			1		
Proper waste management guidelines followed. 1				1		
Flammable Cabinet properly maintained. 1	NA			r-		
Equipment and hand tools properly maintained. 1	NA			VE CY		
All-containerized waste properly labeled. <sup>2</sup>	AIG					
All containers are leak free.	1			399		
Eull or partial containers stored with bungs and tids in place.	NIA			6		
All partials easily identified.	NIA			ST.		
All product storage containers have product labels.				-		
Empty-chemical containers stored in designated area.	AIG			[		
All empty containers have product labels.	AG			1365		
Empty drums stored honzontal with bungs in place.	NIA			1 .		
All liquid chemicals secondarily contained.	NA			3000		
Air compressor equipped with condensate capture vessel.	AIU			ľ		
Air compressor condensate vessel properly maintained.	ماما			VEERS		
Area clean and free of chemical spills.				6		
				C		

<sup>&</sup>lt;sup>1</sup> Refer to inspection guidelines.

<sup>&</sup>lt;sup>2</sup> Refer to Environmental Compliance Waste Storage and Transportation manual.

# **LGC PLANT**

Facility Location: FAIMington Time: 1	300 p	m	
Facility Location: <u>FAMington</u> Time: / Inspection for the week of <u>F-6</u> by: <u>G-8</u>	n B	355	
עונברט			
Objective: Ensure the Health & Safety of employees and portion of the Environment			
Pollution prevention and waste minimization are essential to the success. Conduct weekly inspections of the warehouse			•
empty drum storage area, and hazardous waste storage area. Note corrective actions as required. File original in environmental file rout	yes or no	for each	line item and comment on
ltem	Yes	No	Corrective Action
House keeping guidelines being followed. 1			
Fire extinguishers properly maintained. 1			
Spill kits properly maintained. <sup>1</sup>	1		
Personnel Protective Equipment (PPE) guidelines followed. 1	1		
Proper waste management guidelines followed. 1	1		
Flammable Cabinet properly maintained. 1			
Equipment and hand tools properly maintained. 1	1/		
All containerized waste properly labeled. <sup>2</sup>	<u></u>		
All containers are leak free.	~		
Full or partial containers stored with bungs and lids in place.			
All partials easily identified.	1		
All product storage containers have product labels.	1		
Empty chemical containers stored in designated area.	1		
All empty containers have product labels.	<u></u>		
Empty drums stored horizontal with bungs in place.			
All liquid chemicals secondarily contained.			
Air compressor equipped with condensate capture vessel. N	XO		
Air compressor condensate vessel properly maintained. N//	7		
Area clean and free of chemical spills.			

<sup>1</sup> Refer to inspection guidelines.

<sup>&</sup>lt;sup>2</sup> Refer to Environmental Compliance Waste Storage and Transportation manual.

# SAND PLANT

Facility Location: FArming to Time: 1330 Pm lnspection for the week of Feb by: 6Ary Dob35					
(ποητή	- 				
Objective: Ensure the Health & Safety of employees and pu Environment Pollution prevention and waste minimization are essential to the succe.  Conduct weekly inspections of the warehouse a	essful an	d cost eff	ective operation of the		
empty drum storage area, and hazardous waste storage area. Note y corrective actions as required. File original in environmental file route	es or no	for each	line item and comment on		
<u>item</u>	Yes	No	Corrective Action		
House keeping guidelines being followed. 1					
Fire extinguishers properly maintained. 1					
Spill kits properly maintained. 1					
Personnel Protective Equipment (PPE) guidelines followed. 1					
Proper waste management guidelines followed. 1					
Flammable Cabinet properly maintained. 1					
Equipment and hand tools properly maintained. 1					
All containerized waste properly labeled. <sup>2</sup>					
All containers are leak free.					
Full or partial containers stored with bungs and lids in place.	P				
All partials easily identified.					
All product storage containers have product labels.					
Empty chemical containers stored in designated area. N/A					
All empty containers have product labels.					
Empty drums stored horizontal with bungs in place. MA					
All liquid chemicals secondarily contained.					
Air compressor equipped with condensate capture vessel. M/	A				
Air compressor condensate vessel properly maintained. N	4				
Area clean and free of chemical spills.					

Refer to inspection guidelines.
 Refer to Environmental Compliance Waste Storage and Transportation manual.

# **NITROGEN SHOP**

Page 1

English Landing Factor III	79 <i>3</i> 2		
Inspection for the week of Feb. 7 1998 by: Far	t Ken	pec	
Objective: Ensure the Health & Safety of employees and pu Environment	blic wh	ile prot	ecting the
Pollution prevention and waste minimization are essential to the succ			
	revention and waste minimization are essential to the successful and cost effective operation of the		
tem	Yes	No	Corrective Action
House keeping guidelines being followed. 1	/		
Fire extinguishers properly maintained. 1	/		
Spill kits properly maintained. 1			MA
Personnel Protective Equipment (PPE) guidelines followed. 1	1		,
Proper waste management guidelines followed. 1	1		
Flammable Cabinet properly maintained. 1			MA
Equipment and hand tools properly maintained. 1	/		1
All containerized waste properly labeled. <sup>2</sup>			NA
All containers are leak free.			NA
Full or partial containers stored with bungs and lids in place.			NA
All partials easily identified.			NA
All product storage containers have product labels.	1		
Empty chemical containers stored in designated area.			NA
All empty containers have product labels.			MA
Empty drums stored horizontal with bungs in place.			N/A
All liquid chemicals secondarily contained.			N/A
Air compressor equipped with condensate capture vessel.			NA
Air compressor condensate vessel properly maintained.			NA
Area clean and free of chemical spills.	V		

<sup>&</sup>lt;sup>1</sup> Refer to inspection guidelines.

<sup>&</sup>lt;sup>2</sup> Refer to Environmental Compliance Waste Storage and Transportation manual.

# **FRAC SHOP**

Page 1

Facility Location: Farmington w.m. Time: 15:00 Inspection for the week of 2-13-98 by: Moel Hermanson					
Objective: Ensure the Health & Safety of employees and public while protecting the Environment  Pollution prevention and waste minimization are essential to the successful and cost effective operation of the   Frac Koon					
tem	Yes	No	Corrective Action		
House keeping guidelines being followed. 1	8				
Fire extinguishers properly maintained. 1	X				
Spill kits properly maintained. 1	NA		,		
Personnel Protective Equipment (PPE) guidelines foilowed. 1	X				
Proper waste management guidelines followed. 1	*				
Flammable Cabinet properly maintained. 1	Ř				
Equipment and hand tools properly maintained. 1	X				
All containerized waste properly labeled. <sup>2</sup>	X				
All containers are leak free.	×				
Full or partial containers stored with bungs and lids in place.	MA				
All partials easily identified.	NA				
All product storage containers have product labels.	NA				
Empty chemical containers stored in designated area.	WA				
All empty containers have product labels.	W/x				
Empty drums stored horizontal with bungs in place.	NA				
All liquid chemicals secondarily contained.	N/K				
Air compressor equipped with condensate capture vessel.	N/IS				
Air compressor condensate vessel properly maintained.	N/A				
Area clean and free of chemical spills.	X				

<sup>&</sup>lt;sup>1</sup> Refer to inspection guidelines.

<sup>&</sup>lt;sup>2</sup> Refer to Environmental Compliance Waste Storage and Transportation manual.

# **TECH ROOM**

Facility Location: Mala SV Mala / Time: 11:30			
Facility Location: Main St Yadd Time:	MAX	Per	I go
Objective: Ensure the Health & Safety of employees and put Environment  Pollution prevention and waste minimization are essential to the succession.  Conduct weekly inspections of the warehouse	cessful an	id cost effe ediate are	fective operation of the ear, covered drum storage area,
empty drum storage area, and hazardous waste storage area. Note corrective actions as required. File original in environmental file rout			
Item .	Yes	No	Corrective Action
House keeping guidelines being followed. 1	V		
Fire extinguishers properly maintained. 1	V		
Spill kits properly maintained, 1	NA		
Personnel Protective Equipment (PPE) guidelines followed. 1			
Proper waste management guidelines followed. 1			
Flammable Cabinet properly maintained. 1	V		
Equipment and hand tools properly maintained. 1	10		
All containerized waste properly labeled.2	MA		
All containers are leak free.	NA		
Full or partial containers stored with bungs and lids in place.	NA	<u> </u>	
All partials easily identified.	NA		
All product storage containers have product labels.	N/A		
Empty chemical containers stored in designated area.	NA		
All empty containers have product labels.	V/A		
Empty drums stored horizontal with bungs in place.	NA		
All fiquid chemicals secondarily contained.	NA		
Air compressor equipped with condensate capture vessel.	N/a		
Air compressor condensate vessel properly maintained.	NA		
Area clean and free of chemical enitle			

<sup>&</sup>lt;sup>1</sup> Refer to inspection guidelines.

Refer to Environmental Compliance Waste Storage and Transportation manual.

# **OFFICE TRAILER**

Page 1

Facility Location: Farmington, Livy Time: 1998 by: MEI	3:45	200 2008 4	2320
by the	(2)a+	LACK CONTRACT	
Objective: Ensure the Health & Safety of employees and pu	ublic wh	ile pro	tecting the
Pollution prevention and waste minimization are essential to the succ	essful an	d cost e	effective operation of the
. Conduct weekly inspections of the warehouse empty drum storage area, and hazardous waste storage area. Note corrective actions as required. File original in environmental file rout	yes or no	for eac	h line item and comment on
Item	Yes	No	Corrective Action
House keeping guidelines being followed. 1			Contact of roxes in
Fire extinguishers properly maintained. 1			cors researched the property
Spill kits properly maintained. 1	Alu		
Personnel Protective Equipment (PPE) guidelines followed. 1	1		
Proper waste management guidelines followed. 1			
Flammable Cabinet preperly maintained. 1	Ala		
Equipment and hand tools properly maintained: 1	Alu		
All containerized waste properly labeled.2	NIA		
All containers are leak free.	SA		
Full or partial containers stored with bungs and lids in place.	NIA		
All-partials easily identified.	AU		
All product storage containers have product labels.	NA		
Empty chemical containers stored in designated area.	NIA		·
All empty containers have product labels.	NIA		
Empty drums stored horizontal with bungs in place:	AG		
All-liquid chemicals secondarily contained.	NA		
Air compressor equipped with condensate capture vessel.	NA		
Air compressor condensate vessel properly maintained.		Α	
Area clean and free of chemical spills.	1		

Refer to inspection guidelines.
Refer to Environmental Compliance Waste Storage and Transportation manual.

#### CHEMICAL / LGC TERMINAL ENVIRONMENTAL INSPECTION

ltem	Yes	No	Corrective Action
Air compressor equipped with condensate capture vessel. M	14		
Air compressor condensate vessel properly maintained.	7		·
Waste management documents placed in facility files.			
All electric equipment grounded.			
Lighting in working condition.			
Equipment guards in place. (compressors, motors, etc.)	1		
Air compressor equipped with condensate capture vessel. ///	2		
Condensate capture vessel properly maintained. MA			
Equipment free of leaks and drips.	/		

<sup>\*</sup> Refer to inspection guidelines.

<sup>&</sup>lt;sup>2</sup> Refer to Environmental Compliance Waste Storage and Transportation manual.

#### CHEMICAL / LGC TERMINAL ENVIRONMENTAL INSPECTION

Facility Location: FARming in Time: 1300 Pm								
Inspection for the week of Feb. Name (print): 5-Ary Do 355								
Objective: Ensure the Health & Safety of employees and public while protecting the Environment Pollution prevention and waste minimization are essential to the successful and cost effective operation of the Chemical and LGC loading facilities. Conduct weekly inspections of the loading docks, secondary containment, and chemical storage areas. Note yes or no for each line item and comment on corrective actions as required. File original in environmental file routed through facility coordinator.								
ltem	Yes	No	Corrective Action					
House keeping guidelines being followed. 1								
Fire extinguishers properly maintained. 1			NO FIREX tinguisms					
Spill kits properly maintained. 1	V		·					
Personnel Protective Equipment (PPE) guidelines followed. 1								
Proper waste management guidelines followed. 1								
Flammable Cabinet properly maintained. 1								
Equipment and hand tools properly maintained. 1	/							
All containerized waste properly labeled. <sup>2</sup>	/							
Employee right to know station accessible and up-to-date.	/							
Area clean and free of chemical spills.								
Evidence of acid fume release. (odor and/or corrosion)								
Storm/waste water present in any secondary containment.		/						
Evidence of waste chemicals in secondary containment.		/						
Acid returns neutralized on trucks.								
Acid returns pH and volume documented prior to discharge.	SA.							
Vendor off loading procedure in place and followed.		<u> </u>						
Full or partial containers stored with bungs and lids in place.	1							
All partials easily identified.		/	PACTUS IN PLANT					
All empty containers have product labels.								
Empty drums stored horizontal with bungs in place.								
All liquid chemicals secondarily contained.	/							

<sup>&</sup>lt;sup>1</sup> Refer to inspection guidelines.

<sup>&</sup>lt;sup>2</sup> Refer to Environmental Compliance Waste Storage and Transportation manual.

#### FACILITY YARD / PARKING AREA HSE INSPECTION

Facility Location: Hallowing 4/01 Emain. Time: 12	<u> </u>	<del></del>		
Inspection for the week of 2/13/98 by: Drim	Hoyn			
Objective: Ensure the Health & Safety of employees and perceived property of employees and perceived property of the facility. Conduct monthly inspections of the facility yard and participant on corrective actions as required. File original in environment on document corrective action.	the suc	cessful as. No	and cost effective operation of te yes or no for each line item and	
Item	Yes	No	Corrective Action	
House keeping guidelines being followed. 1	X		put by the muc.	
Fire extinguishers properly maintained. 1	X			
Spill kits properly maintained. 1	X		be fill the ont in from	4
Personnel Protective Equipment (PPE) guidelines followed. 1			Na	rich room
Proper waste management guidelines followed. 1	X			
Flammable Cabinet properly maintained. 1			Na	
Equipment and hand tools properly maintained. 1	<u> </u>		Na	
Equipment property stored and parked.	X			
Spills and drips addressed immediately.		义	52985 Anutrees	]
Trash and debri present in yard / parking area.	X		part of the yord, Em/ Perking.	<u> </u>
Scrap iron covered and stored neatly and off the ground.	义		· ·	<u> </u>
Trash bins have regulated waste. (buckets, liquids, etc.)	X			
Empty containers not in designated area.	X			
Warning signs properly posted and in good condition.	X			}
Facility looks presentable to public.		X	Clean hefor they are not in	front
Facility lighting in good condition.		X	3-2, 5-1, 8-2, 10-1, -	
				ŧ
1 Refer to inspection guidelines on back of this form.			Front Ilson - 2, Back Ilson	2-1

## 15x 24ry

#### **LOGGING SHOP**

Facility Location: FARMINGTON Time: /	1:00		
Facility Location: FARMINGTON Time: / Inspection for the week of 2-9-98 by:	00	11.	to ny
Objective: Ensure the Health & Safety of employees and put Environment Pollution prevention and waste minimization are essential to the succession.  Conduct weekly inspections of the warehouse a empty drum storage area, and hazardous waste storage area. Note y	essful and and imme	d cost e	ffective operation of the rea, covered drum storage area,
corrective actions as required. File original in environmental file route			
item	Yes	No	Corrective Action
House keeping guidelines being followed. 1			
Fire extinguishers properly maintained. 1			
Spill kits properly maintained, <sup>1</sup>	V.		
Personnel Protective Equipment (PPE) guidelines followed. 1			
Proper waste management guidelines followed. 1	/		
Flammable Cabinet properly maintained. 1			I BPER HAR SHOP THEOS NEW GI'NDING Wh-s
Equipment and hand tools properly maintained. 1		J	phoeds hew grinding whas
All containerized waste properly labeled.2			
All containers are leak free.	<b>V</b>		
Full or partial containers stored with bungs and lids in place.	V		
All partials easily identified.			
All product storage containers have product labels.	V		
Empty chemical containers stored in designated area.	NA		
All empty containers have product labels.		1	HZO CAN CEMENT MIGHT WHEET
Empty drums stored horizontal with bungs in place.	NYA		
All liquid chemicals secondarily contained.	NA		
Air compressor equipped with condensate capture vessel.	-		Bottom TANK Drain Wars Out on to Shen Floor
Air compressor condensate vessel properly maintained.	1		
Area clean and free of chemical spills.	A/A		

<sup>&</sup>lt;sup>1</sup> Refer to inspection guidelines.

<sup>&</sup>lt;sup>2</sup> Refer to <u>Environmental Compliance Waste Storage and Transportation</u> manual.

#### CHEMICAL DOCK/WAREHOUSE

Page 1

Facility Lagation: Top and 2	00 P M		
Facility Location: Factoring to Time: 3:  Inspection for the week of FEB by: Rich	7000	NYF	
The company of the co			
Objective: Ensure the Health & Safety of employees and pu	blic whi	ile nmi	ection the
Environment	PHIC ALL	as hig	~amia me
Pollution prevention and waste minimization are essential to the succ			
Conduct weekly inspections of the warehouse a empty drum storage area, and hazardous waste storage area. Note y			
corrective actions as required. File original in environmental file route	ed throug	h facility	y coordinator.
Item	Yes	No	Corrective Action
House keeping guidelines being followed. 1		/	Full time Job to keep
Fire extinguishers properly maintained. 1			I Think we should have a class e Extravuisher
Spill kits properly maintained. <sup>1</sup>		~	NEED Shove I + Rubba Gloves
Personnel Protective Equipment (PPE) guidelines followed. 1	-		
Proper waste management guidelines followed. 1	-		
Flammable Cabinet properly maintained. 1			
Equipment and hand tools properly maintained. 1	N	A	
All containerized waste properly labeled.2	_		
All containers are leak free.	<u></u>	ļ	
Full or partial containers stored with bungs and lids in place.		<b></b>	
All partials easily identified.	~		
All product storage containers have product labels.	~		
Empty chemical containers stored in designated area.			19.4
All empty containers have product labels.	1	<u> </u>	
Empty drums stored horizontal with bungs in place.	<u> </u>	/	
All liquid chemicals secondarily contained.		<u> </u>	
Air compressor equipped with condensate capture vessel.	N	A	
Air compressor condensate vessel properly maintained.	N	A	
Area clean and free of chemical spills.			

<sup>&</sup>lt;sup>1</sup> Refer to inspection guidelines.

<sup>&</sup>lt;sup>2</sup> Refer to Environmental Compliance Waste Storage and Transportation manual.

#### **BULK MATERIALS PLANT HSE INSPECTION**

Facility Location: Farminerow No Time: 090 Inspection for the week of Fee. by: Gene	20		
Inspection for the week of Fee. by: Gene	Rusi	C. T.	<u> </u>
Objective: Ensure the Health & Safety of employees and public Environment Pollution prevention and waste minimization are essential to the success bulk materials plant. Conduct monthly inspections of the plant and immeror each line item and comment on corrective actions as required. File of facility coordinator. Verify and document corrective action.	sful and e	cost ef	fective operation of the noted below. Note yes or no
item	Yes	No	Corrective Action
House keeping guidelines being followed. 1	1		
Fire extinguishers properly maintained. 1	1		
Spill kits properly maintained. 1			
Personnel Protective Equipment (PPE) guidelines followed. 1	1		
Proper waste management guidelines followed. 1			
Flammable Cabinet properly maintained. 1 DIA		\	DO NOT HAVE WA
Equipment and hand tools properly maintained. 1			
All tanks and piping are adequate and leak free.			
Dust collector maintenance procedures in place and followed. 2			
Regular inspections completed and documented <sup>2</sup>			
Area free of loose cement / additives.	<u>\</u>		
Waste cement and samples properly managed.	1		
All liquid chemicals secondarily contained.		/2	NOT GOUGHT ROO
Plant operating procedures current and followed. 2	1		·
Vendor off loading procedure in place and followed. 2	1		
Air compressor dump piped to condensate vessel.			DWE HICK PACES.
Air compressor condensate vessel checked for fluid level.	1		
Evidence of recent cement or additive dust release.	\		
Empty chemical containers stored in designated area.	6		
All partials easily identified.	6		

<sup>1</sup> Refer to inspection guidelines on back of this form.

<sup>&</sup>lt;sup>2</sup> Refer to <u>Bulk Materials Maintenance Manual</u>.

## ATTACHMENT V

# STORMWATER POLLUTION PREVENTION PLAN (FORTHCOMING)

## STORM WATER POLLUTION PREVENTION PLAN HALLIBURTON ENERGY SERVICES 4109 East Main Street Farmington, New Mexico

#### INTRODUCTION

The purpose of the Plan is to protect water quality by reducing the amount of pollutants in storm water runoff. These pollutants come from two sources: 1) our outdoor activities, and 2) atmospheric deposition over which we have no control. The Plan covers the entire facility.

#### 1.1 Purpose of the SWPPP

Company Policy requires us to prepare a Storm Water Pollution Prevention Plan (SWPPP). It describes the measures that we will take to protect stormwater quality. This plan is to be kept on the premises.

#### 1.2 BMP Implementation Committee

The Policy requires that the SWPPP identify personnel to oversee the implementation of any measures to reduce pollution, called Best Management Practices (BMP), and to modify the SWPPP as necessary over time. We have formed a team, which participated in the preparation of this plan and will oversee its implementation.

#### 1.3 Implementation Schedule

All of the recommendations of BMPs made by the team (that do not involve the expenditures of capital funds) are to be implemented by the end of April 1998.

#### 1.4 Protocol on Public Access to the SWPPP

Although this is a Company plan, meant for the use by our employees, it is a public document. Representatives of Government who visit the Facility are allowed direct access to the plan when on site. Any request for a copy of the plan is to be forwarded to the Area Health, Safety and Environment Manager.

#### Business Definition Farmington District

The Farmington District facility is located at 4109 E. Main Farmington N. M. 87402. The Primary services provided are hydraulic fracturing, cementing, and acidizing oil and gas wells.

Maintenance of trucks and loading of bulk materials occur at the facility. Truck maintenance is performed in an enclosed shop that is self-contained. Trucks are washed in enclosed structure, water from the wash rack discharge to the sewer. Solids are tested annually and disposed of at a certified solid waste land farm.

A complete list of commonly used chemicals stored at the facility is attached. Loading and unloading of all bulk liquids is done in contained areas. Dry bulk materials stored at the facility include cement, gel, silica flour, gilsonite and sand. Dust collectors are used to control emissions from the bulk plant.

Sacked dry chemicals are stored in either a covered area, or in an enclosed building. Drummed liquid chemicals may either be stored in an enclosed building, covered area, or in the open. All liquid chemicals are stored within secondary containment. All chemicals are stored on cement or paved surfaces.

The facility was not built to contain stormwater runoff or to divert stormwater runon.

## Site Assessment Halliburton Services- Farmington District

#### Material Inventory:

A variety of materials are stored in several different forms, the majority of, which are stored in covered or contained areas.

#### Chemical Terminal:

HCL acid is stored, in a concentrated form, in a sealed tank. This tank is inside a coated concrete containment structure. Connections for loading of the HCL acid tank are also inside the structure. Any spills occurring inside the structure are immediately recovered and reused. An inspection of the facility found no leaks.

Additional additives are stored in the acid additive drum storage area. Additives are either stored in closed drums or in large bulk portable containers. There is minimal exposure of these drummed chemicals to storm water because the chemicals are stored and handled within secondary containment. Any stormwater that is captured in the containment is recovered and reused for acid blending.

Acid is loaded into Halliburton transports overhead through a hatch on the top of the transport. The transport is situated on a coated concrete, contained loading bay during this process. The loading bay is equipped with a retaining pit and concrete berm to contain any spill. Any spills are immediately recovered and reused.

#### LGC Terminal:

LGC is a concentrated polymer solution containing gel and diesel. LGC is stored at the terminal in sealed tanks. All tanks are located within concrete containment. All mixing and loading of the LGC occurs on the cement structure. Any spills occurring inside the structure are immediately cleaned and properly disposed. An inspection of the facility found no leaks.

#### Cement Bulk and Sand Bulk Storage and Admix Building:

Bulk cement, bulk sand, proppants and cement additives are stored in a series of fully enclosed storage vessels. Sacked cement additives are stored in the cement materials warehouse. Any spills occurring inside the warehouse are immediately cleaned and properly disposed of.

Mixing and transfer of materials from the plant to a bulk truck is done pneumatically. A dust collection system is used to control emissions from the facility while handling the bulk additives.

#### Maintenance Shop:

Truck maintenance is performed in enclosed shops. The main truck shop is equipped with a concrete foundation that is self-contained. Any spills are cleaned up using an absorbent and properly disposed.

Trucks are serviced in the main shop. All used oil is discarded in a Used Oil tank. The used oil tank is located in the wash rack within secondary containment. Used oil filters are drained at least 12 hour and placed in sealed drum and shipped back to our Duncan OK TSDF for reclamation.

#### Grease Shop:

Trucks are lubricated in this shop. Lubricants are stored in sealed bulk storage tanks and sealed drums in s self contained, concrete floored, covered shop. Any spills occurring inside the grease shop are immediately cleaned and properly disposed.

#### Wash Rack:

Truck washing is performed in an enclosed structure. Each wash bay is equipped with a floor drain, which separates solids and skims oil. These drain to a three-stage separation facility that empties to city sewer.

#### Drum Storage Area:

Chemicals are stored in sealed portable containers or drums. This area is paved and curbed with asphalt. Inspections of this area are performed daily with any spills detected immediately cleaned and properly disposed.

#### Miscellaneous:

In addition to the previously described management practices the following are also in effect: Trash containers are conveniently located throughout the facility and regularly emptied by a waste handling service. Paved surfaces are inspected and cleaned as required. Used drums, sacks, pallets, etc. are properly discarded. Reusable drums are returned. Non-use areas are cleaned of weed and debris as needed. Management maintains a good housekeeping policy.

#### Past Spills, and Leaks:

There have been no significant spills at this facility in the past three years.

#### Non-Storm Water Discharges:

There is significant stormwater runon onto our property from the city street system and leaves our property to the south. There is no system set up at the present time to contain the water runoff.

POLLUTION PREVENTION TEAM 1	Worksheet#1
	Completed by: TERESA WHITE
MEMBERSHIP ROSTER	Title: Health, Safety & Environmental Team Leader
	Date: 03/18/98
Facility Information:	
4109 East Main St	
Physical Address (actual physical location):	The second second second second second second second second second second second second second second second se
Same as above	
Mailing Address (P.O. Box, Rural Route and Box, or Street Farmington, New Mexico 87402	et Address)
City	State Zip
Team Leader: TERESA WHITE	The state of the s
	Title: LAB TECHINCIAN
Phone: (505) 324-3500	
Bosponsibilities: TO DROVIDE THE LEADERSHIP TO E	NOUDE THE DEVELOPMENT & MADEENTATION
Responsibilities: TO PROVIDE THE LEADERSHIP TO E	AN. LEAD ONGOING COMPLIANCE, REVIEW & UPDATE
OF THE PLAN.	AN ELAD CHOCKE COME LIANCE, KEVIEW & OFDATE
Members:	
1. James Robinson	Title: MECHANIC
	600D EXAMPLES FOR THE STORMWATER POLLUTION 600D EXAMPLES FOR THE ONGOING COMPLIANCE
AND PLAN REVIEW.	GOOD EXAMPLES FOR THE ONGOING COMPLIANCE
7.00 F D WYNE VIEW.	
2. Rick Greenacker	Title: Tool repair tech
	T & IMPLEMENTATION OF THE STORMWATER POLLUTION
	GOOD EXAMPLES FOR THE ONGOING COMPLIANCE
AND PLAN REVIEW.	
3. BUDDY PETERSON	Title: Operations Engineer
	T & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET	GOOD EXAMPLES FOR THE ONGOING COMPLIANCE
AND PLAN REVIEW.	
4 Dela Kalajah	Title: Team Lander Office delice
4. Dale Kalcich  Responsibilities: TO ASSIST IN DEVELOPMENT	Title: <u>Team Leader Stimulation</u> T & IMPLEMENTATION OF THE STORMWATER POLLUTION
	GOOD EXAMPLES FOR ONGOING COMPLIANCE
AND PLAN REVIEW.	COOD EARTH LEG FOR ORGANIC COMM LIGHTOL
5. Gary Dobbs	Title: <u>Material Specialist</u>
	T & IMPLEMENTATION OF THE STORMWATER POLLUTION
	GOOD EXAMPLES FOR ONGOING COMPLIANCE
AND PLAN REVIEW.	
6. Ray Cartwright	Title: Material Specialist _
•	T & IMPLEMENTATION OF THE STORMWATER POLLUTION
PREVENTION PLAN. PROVIDE LEADERSHIP & SET	GOOD EXAMPLES FOR ONGOING COMPLIANCE
AND PLAN REVIEW.	

MATERIA		

Worksheet #3

Completed by: TERESA WHITE

Title: Health, Safety & Environmental Team Leader

Date: 03/18/98

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Physical Address (actual physical location):

4109 East Main St

Mailing Address (P.O. Box, Rural Route and Box, or Street Address)

Farmington, New Mexico 87402

City

State

Zip

Instructions: List all materials used, stored, or produced on-site. Assess and evaluate these materials for their potential to contribute pollutants to storm water runoff. Also complete Worksheet 3a if the material has been exposed during the past three years.

			Quantity (Units)					gnificant or Leak
Material	Purpose/Location				Quantity Exposed in Last 3 Years	Likelihood of contact with storm water?  If yes, describe reason.		
		Used	Produced	Stored			Yes	No
Chemical/liquid	drum storage	X		2500 gals		Curbed and contained		×
Chemical/solid	add mixtures	х		25000 lbs.		In covered warehouse		×
Cement	bulk plant	х		variable		Loaded outside		x
Sand	bulk plant	x		variable		Loaded outside		×
Iron Storage	east fence	X		variable		Most is painted		×
Wash rack Grit	east of wash		×		Same	Exposed		×
Excess Cement Storage	south east corner	×		1380 cft		Some spillage		×

#### DESCRIPTION OF EXPOSED SIGNIFICANT MATERIAL

Worksheet #3a

Completed by: Teresa White

Title: Health, Safety & Environmental Team Leader

Loading & unloading Pneumatically done. Proper handling procedures

Date: 3/18/98

Facility Information:

Excess Cement

Storage

Physical Address (actual physical location):

4109 East Main St

Small amount of

spilled material

Mailing Address (P.O. Box, Rural Route and Box, or Street Address)

residual

amounts

South East Corner

Farmington, New Mexico 87402

	· ( ) ( )	ity		State	Zip
Instructions:	Based on your materi	al inventory,	describe the significant n	naterials that were exposed to sto	orm water during the past three years and/or are currently exposed.
Description of Exposed Significant Material	Period of Exposure	Quantity Exposed (Units)	Location (as indicated on the site map)	Method of Storage or Disposal (e.g., pile, drum, tank)	Description of Material Management Practice (e.g., pile covered, drum sealed)
Chemicals, Liquid	continual	2500 Gallons	Drum Storage Area	Drums on Pallets or Hal Tanks	Secondary containment, sealed containers, proper handling procedures
Chemicals, Dry	Briefly while loading	+25,000	Chemical Warehouse	Pallets	Stored inside warehouse, loaded and unloaded outside

and unloading pounds Cement None bulk In Northeast Corner Sealed Storage Tanks Loading & Unloading Pneumatically done, Dust Collection system to control emissions Loading & Unloading Pneumatically done. Dust Collection system to control Sand None bulk East Center Sealed Storage Tanks emissions Iron Storage continual Various East Center Stacked on Pallets Keep Painted, Minimize storage time Wash Rack Grit continual 25 cubic Northeast Corner near Stored in concrete walled Kept in concrete storage until hauled to Land Farm vards wash bays

Sealed storage vessels

#### Worksheet #5 NON-STORM WATER DISCHARGE Completed by: TERESA WHITE ASSESSMENT AND CERTIFICATION Title: Health, Safety & Environmental Team Leader Date: 3/18/1998 Location: Pumping Service Facility City Farmington ST New Mexico ZIP 87402 Outfall Directly Observed During the Test Method Used to Describe Results from Test Name of Person Who Test or (Identify as Indicated on the Site Map Test or Evaluate for the Presence of Identify Potential Conducted the Test or Evaluation Discharge Non-Storm Water Discharge Significant Sources Evaluation 10/15/94 located on the map as drainage area rain event n/a oil and dirt Gary Morris CERTIFICATION Jim Hanev certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment of knowing violations. Jim Hanev **Shared Services Supervisor** B. Area Code & Telephone # (505) 324-3500

D

**Date Signed** 

NOTE: This worksheet MUST be signed by the Shared Services Supervisor.

Signature

	CHARGE ASSESSMENT AND FAILURE TIFY NOTIFICATION	Worksheet #6 Completed by: TERESA WHITE Title: Health, Safety & Environmental Team Leader Date: 3/18/1998					
Location: 4109 East Main St Facilit	y	City Farr	mington ST <u>New Mexico</u> ZIP <u>87402</u>				
form to certif	y the accuracy of the included information	on.	w with the appropriate information and sign this es of non-storm water pollution from listed outfalls,				
and state the	reason(s) why certification is not possib	le. Use the ke	y from your site map to identify each outfall.				
Important Notice: A copy this pe	of this notification must be signed and	submitted to th	ne Director within 180 days of the effective date				
Identify Outfall Not Tested/Evaluated	Description of Why Certification is	Infeasible	Description of Potential Sources of Non-Storm Water Pollution				
NOT APPLICABLE							
	CERTIFI	CATION					
with a system designed to inquiry of the person or perinformation submitted is, to penalties for submitting fa	ensure that qualified personnel properly rsons who manage the system or those to the best of my knowledge and belief,	gather and eva persons directl true, accurate, of fine and imp	red under my direction or supervision in accordance aluate the information submitted. Based on my y responsible for gathering the information, the and complete. I am aware that there are significant prisonment for knowing violations, and that such (date permit was issued), the effective date of this				
	ed Services Supervisor		B. Area Code & Telephone # (505) 324-3500				
C. Signature			D. Date Signed				

#### POLLUTANT SOURCE IDENTIFICATION (Section 2.2.6)

Worksheet #7

Completed by: TERESA WHITE

Title: Health, Safety & Environmental Team Leader

Date: 3/18/1998

Location: 4109 EAST MAIN STREET City FARMINGTON ST NM ZIP 87402

Instructions: List all identified storm water pollutant sources and describe existing management practices that address those sources. In the third column, list BMP options that can be

	incorporated into the plan to address remaining sources of pollutants.									
	Storm Water Pollutant Sources	Existing Management Practices	Description of New BMP Option							
1.	Wash Bays	The wash bays are covered and enclosed on three sides. Mud and Grit removed periodically and area cleaned. Some overspray travels out of bays.	Good Housekeeping, and Inspections.  Overspray controlled							
2.	Parking Areas	Oil and Grease on Parking areas. The area is inspected and cleaned at least monthly.	Regular Inspections, Preventative maintenance equipment, designated parking areas; cleanup weekly							
3.	Chemical Storage Area	Curbed, stormwater recovered and reused	Good Housekeeping; Inspections; Spill Prevention and response; Proper practices and procedures							
4.	Chemical Terminal	All activities at Chemical Terminal is within secondary containment. All stormwater collected and reused.	Preventative Maintenance and Inspections Good housekeeping; Improve Loading and Unloading Procedures							
5.	LGC Plant	All acitivities at LGC plant is within secondary containment. Stormwater collected and reused	Weekly inspections; In containment; Proper practices and procedures							
6.	Washrack Grit Drying Slab	Removed offsite periodically	New slab that drains to washbay sumps							
7.	Lubrication Bays	Clean up spills/leaks with absorbents	Good Housekeeping; Preventative maintenance Inspections and proper work procedures							
8.	Bulk Cement Storage	Sweep up after loading & unloading	Preventive maintenance ; Good Housekeeping							
9.	Bulk Sand Storage	Sweep up after loading & unloading	Preventive maintenance ; Good Housekeeping							
10.	Empty Container Storage	Stored within secondary containment. Storwater allowed to dry	Cover with roof							

#### BMP IDENTIFICATION (Section 2.3.1)

Worksheet #7a

Completed by: TERESA WHITE

Title: Health, Safety & Environmental Team Leader
Date: 3/18/1998

Location: 4109 East Main St Facility City Farmington ST New Mexico ZIP 87402

Best Management Practices	Brief Description of Activities
GOOD HOUSEKEEPING	MATERIALS STORED PROPERLY. KEEP WORK AREAS ORGINIZED. ADDRESS SPILLS PROPERLY. PROVIDE COMPLETE MAINTENANCE AS NEEDED. CREATE & IMPLEMENT A "CLEAN " STANDARD. PERIODIC EMPLOYEE AWARNESS TRAINING.
PROPER WORK PROCEDURES AND PRACTICES	DEVELOP AND DOCUMENT PROPER WORK PRACTICES AND PROCEDURES TO MINIMINCIDENTS.
PREVENTATIVE MAINTENANCE	COMPLETE PROPER PRE/POST TRIP INSPECTION RECORDING ANY DEFICIENCIES. IDENTIFY, SCHEDULE, RESPOND TO ANY DEFICIENCIES, IMPLEMENT ACCOUNTABILTY FOR EQUIPMENT AND WORK AREAS.
TIERED INSPECTIONS	COMPLETE DAILY, WEEKLY AND MONTHLY FACILTY SELF AUIDIT. FOLLOW UP BY COMPLETING ACTION ITEMS IN A TIMELY MANNER. PRE / POST TRIP INSPECTIONS COMPLETED AND CORRECTIVE ACTION COMPLETED.
SPILL PREVENTION AND RESPONSE	MAINTAIN A TRAINED SPILL REPONSE TEAM. AWARNESS TRAINING FOR ALL EMPLOYEES. FOLLOW PROPER MAINTENANCE PROCEDURES. GOOD HOUSEKEEPING. ADHERE TO INCIDENT REPORTING AND FOLLOW UP PROGRAM. SPILL KITS USED AND MAINTAINED.
SEDIMENT AND EROSION CONTROL	PAVING AND GRAVELING CERTAIN AREAS TO MINIMIZE EROSION.
STORMWATER RUNOFF MANAGEMENT	ENGINEERING CONTROLS. GOOD HOUSEKEEPING. SPILL PREVENTION AND RESPONSE. DIVERSION STRUCTURES TO CONTROL RUNON AND DIRECT RUNOFF.
RISK MANAGEMENT AND EVALUATION	USE RISK MANAGEMENT TECHNIQUES TO IDENTIFY AND CORRECT POTENTIAL ENVIRONMENTAL RISKS IN EVERYDAY ACTIVITIES.
QUARTERLY STORMWATER MONITORING	SAMPLE STORMWATER QUARTERLY TO EVALUATE RUNOFF QUALITY

## IMPLEMENTATION (Section 2.4.1)

Worksheet #8

Completed by: TERESA WHITE

Title: Health, Safety & Environmental Team Leader

Date: 3/18/1998

Location:4109 East Main Facility City Farmington ST New I

ST New Mexico ZIP 87402

Description of Action Required for Implementation			
	Scheduled Completion Date	Person Responsible for Action	Description of Activities
PSL, /Department Define	On going	Team Leader/ PSL	Identify problems with tiered
Minimum expectations		Coord/ Shared Services	inspections, define Corrective Actions
		<u> </u>	and assign responsible person
Provide resources & implement.	On going	Team Leader / Psl	
1		Coord /Shared Services	
Follow up.	Ongoing		
	<del></del>	Team & MBU leader	
		Team leader/ PSL Coord	·
7.000			
Implement Daily, Weekly	Ongoing	HSE Team	
	J 55		
	Ongoing	Team Leader /MBU	
Tro /r ost rrip mapaginana	0505		
			·
Review Awareness Training	At Team/ Bus	Team Leader/HSE Team	
Heview Awareness Truming.			·
Procedures Followed			
Procedures rollowed:	Ongoing	7 iii Emproyeesi	
Maintain Paying	Ongoing	Shared Service	Continue protect & gravel areas of
Waliitaiii Faving	Oligonig		exposed soil
		- Cupervisor	ONPOSSO SOM
	<u> </u>		
See Good Housekeeping.	Ongoing	All Personal	
		·	
CCC Inspections.			
Assign Parking Areas For	Ongoing	HSE Team /PSL Coord	
	33		
	1	Minimum expectations  Provide resources & implement. On going  Follow up. Ongoing  Employee Awareness Training Ongoing  Accountability Ongoing  Implement Daily, Weekly, &Monthly Inspections  Pre /Post Trip Inspections Ongoing  Review Awareness Training. At Team/ Bus Review Mtg.  Procedures Followed. Ongoing  Maintain Paving Ongoing  See Good Housekeeping. Ongoing  See Inspections.	Minimum expectations  Coord/ Shared Services  Provide resources & implement.  On going  Team Leader / Psl Coord /Shared Services  Follow up.  Employee Awareness Training  Ongoing  Implement Daily, Weekly, &Monthly Inspections  Pre /Post Trip Inspections  Pre /Post Trip Inspections  Review Awareness Training.  At Team/ Bus Review Mtg.  Review Awareness Training.  At Team/ Bus Review Mtg.  Team Leader/HSE Team environmental Coord  All Employees.  Maintain Paving  Ongoing  See Good Housekeeping.  See Inspections.  Assign Parking Areas For  Ongoing  HSE Team /PSL Coord

### EMPLOYEE TRAINING (Section 2.4.2)

Worksheet #9

Completed by: TERESA WHITE

Title: Health, Safety & Environmental Team Leader

Date: 3/18/1998

Location: 4109 East Main St Facility City Farmington ST New Mexico ZIP 87402

Instructions: Develop a schedule for implementing each BMP. Provide a brief description, the steps necessary for implementation (i.e., any construction or design), the schedule for completing those steps (list dates), and those responsible for implementation.

implementation	7/11.		
Training Topic	Brief Description of Training Program/Materials (e.g., film, newsletter, course)	Schedule for Training (list dates)	Attendees
Spill Prevention and Response	Facility specific spill contingency plan and Hazwoper training	June 1998 and annual refresher	Selected Spill Response Team
Good Housekeeping	Tiered Inspection Program and Corrective Actions	April 1998 and annually thereafter	All Employees.
Material Management Practices	Material Management Training.	Ongoing	Materials Personnel
Other Topics	Environmental Awareness Training. Stormwater Pollution Prevention Training Waste Storage and Transportation Cement/Sand Plant Environmental Mgmt. Chemical Terminal Environmental Mgmt. Maintenance Shop Environmental Mgmt.	Ongoing Annually Annually Annually Annually Annually	All Employees All Employees Materials Personnel Bulk Plant Personnel Chemical Terminal Pers. Maintenance Personnel

Worksheet #3a

Completed by: Teresa White

DESCRIPTION OF Title: Health, Safety & Environmental Team Leader Date: 3/18/98

**EXPOSED** 

**SIGNIFICANT** MATERIAL

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Physical Address (actual physical location):

4109 East Main St

Mailing Address (P.O. Box, Rural Route and Box, or Street Address)

Farmington, New Mexico 87402

City	State Z	ip			
Instructions: Based of Description of Exposed	on your material invento Period of	ry, describe the sig Quantity	gnificant materials that w Location	ere exposed to storm water during t Method of Storage or Disposal	he past three years and/or are currently exposed.
Significant Material	Exposure	Exposed (Units)	(as indicated on the site map)	(e.g., pile, drum, tank)	Description of Material Management Practice (e.g., pile covered, drum sealed)
Chemicals, Liquid	continual	2500 Gallons	Drum Storage Area	Drums on Pallets or Hal Tanks	Secondary containment, sealed containers, proper handling procedures
Chemicals, Dry	Briefly while loading and unloading	+ 25,000 pounds	Chemical Warehouse	Pallets	Stored inside warehouse, loaded and unloaded outside
Cement	None	bulk	In Northeast Corner	Sealed Storage Tanks	Loading & Unloading Pneumatically done. Dust Collection system to control emissions
Sand	None	bulk	East Center	Sealed Storage Tanks	Loading & Unloading Pneumatically done. Dust Collection system to control emissions
Iron Storage	continual	Various	East Center	Stacked on Pallets	Keep Painted , Minimize storage time
Wash Rack Grit	continual	25 cubic yards	Northeast Corner near wash bays	Stored in concrete walled area	Kept in concrete storage until hauled to Land Farm
Excess Cement Storage	Small amount of spilled material	residual amounts	South East Corner	Sealed storage vessels	Loading & unloading Pneumatically done. Proper handling procedures

## ATTACHMENT VI

## SPILL CONTINGENCY PLAN

(FORTHCOMING)

## ATTACHMENT VII

## MAP SHOWING ONE MILE RADIUS AND WATER BODIES



## ATTACHMENT VIII

## SUBSURFACE INVESTIGATION

## san juan testing laboratory, inc.

PHONE: 327-9944 909 W. APACHE . P. O. BOX 2079 . FARMINGTON, NEW MEXICO 87401

March 11, 1975

Halliburton Services Co. P. O. Drawer 960 Farmington, New Mexico

Attn. Raymond Gunn
District Superintendent

Re: Bulk Plant Addition Halliburton Services Co. Farmington, New Mexico

Dear Mr. Gunn:

Pursuant to your request, we have completed the subsurface investigation for the referenced plant expansion. The attached report includes test boring logs, soil resistivity summary, conclusions and recommendations regarding recommended foundation systems for the proposed bulk plant. If additional information is required, do not hesitate to contact us.

Pursuant to your instructions, we have forwarded two copies of this report to Mr. Jack Kramer with the Bulk Construction Department in Duncan, Oklahoma.

Very truly yours,

SAN JUAN TESTING LABORATORY, INC.

Lawrence A. Brewer, P.E.

President

LAB:bep

Attachments

CC: Jack Kramer

BULK PLANT ADDITION
HALLIBURTON SERVICES CO.
FARMINGTON, NEW MEXICO
SUBSURFACE INVESTIGATION

#### GENERAL CRITERIA

Three test borings were attempted beneath the proposed structures to depths of 7' to 9'. The test borings were located beneath the proposed addition as indicated on Project Drawing No. FC 268A dated January 1975. Said test holes were extended by rotary drilling utilizing an Acker Terado truck mounted drill rig to the depths indicated on the logs. Rotary drilling of gravel, cobbles and boulders is extremely difficult and expensive. For this reason, advancement of test borlings was terminated at the depths shown. Backhoe test pits were considered but were rejected due to the potential damage to the existing parking lot paving. An alternate solution to advancing the test borings thru the use of a cable tool was the earth resistivity method.

Earth resistivity readings were taken at two locations in the project area as shown on Plate "A" at depth intervals of 3'. Resistivity readings were established thru the utilization of a Strata Scout resistivity meter, Model R-40, manufactured by Soil Test, Inc.. The electrode spacing and readout calculations are based on the Wenner method. The results of the resistivity readings are summarized on Sheets 6 and 7. The resistivity readings correlate with projected depths of the various subgrade strata as evidenced by the other subsurface investigations and by outcrops in the vicinity. A geologic cross section, Plate "B", Indicates the projected subgrade strata beneath the site.

The location of the test holes and their relationship to the proposed planf expansion are shown on Plate "A". The boring logs, complete with laboratory analysis, AASHO classifications, in place moisture, penetration resistance, etc., are shown on Sheets 3, 4 and 5.

Substrata conditions at the site consist of sedimentary and alluvial deposits of clayey silt, sand, gravel and cobbles, with the entire site underlain by sand—stone as evidenced by the resistivity survey and test borings completed for others and shown graphically on the geologic section, Plate "B".

Conclusions and recommendations regarding maximum bearing values, recommended footing systems and other data pertinent to the development of the project at the site are summarized on pages 8, 9 and 10.

#### SAN JUAN TESTING LAB INC. 909 WEST APACHE FARMINGTON, NEW MEXICO

#### TEST BORING LOG

HOLE NO. 1 COLLAR ELEVATION 101.3			٠.	•					DATEMARCH 11,1975				
PROJECTAr	MIX BUILDING	<del></del>	CLIENT HALLIBURTON SERVICES										
LOCATIONF	ARMINGTON, N.M.	<u>.                                    </u>						,		NO18174			
INTERVAL	DESCRIPTION	II.	VE ANAL			ERBERG	LIMITS	EXIST.	PENE-	A.A.S.H.O.			
	DESCRIPTION	PASSING NO. 10	PASSING NO.40	PASSING NO.200	L.L.	P.L. P.1,		MOIST.	TRATION	CLASSFICATION	UNIFIED CLASS	REMARKS	
0 28	CLAYEY SILT				22.3	N.P.	N.P.			A-I-b			
2= - 69	SANDEGRAVEL W/ COBBLES	23.7	10.2	2.1	N.P.	N.P.	N.P			A-1-b	•		
69-95	GRAVEL & COBBLES	10.3	4.1	2.9	N.P.	N.P.	N.P.		100/1"	A-1-b			
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#### SAN JUAN TESTING LAB INC. 909 WEST APACHE FARMINGTON, NEW MEXICO

#### TEST BORING LOG

HOLE NO 2	_ COLLAR ELEVATIONIOI.3			, :					DATE	MARCH II,	1975	
PROJECTA	DMIX BUILDING			<i>t</i>					CLIE	NT HALLIBUR	TOD SE	2.v.c65
LOCATIONF	ARMINGTON, H.M.	· · ·		•					LAB	NO. 18175		
INTERVAL		1	VE ANAL			RBERG	LIMITS	EXIST.	PENE-	A.A.S.H.O.		
	DESCRIPTION	PASSING NO. 10	PASSING NQ 40	PASSING NO.200	L.L.	P.L.	P. I.	MOIST.	TRATION	CLASSFICATION	UNIFIED	REMARKS
0=-22	CLAYEY SILT				22.3	N.P.	N.P.			A-1-b		
22-49	SANDE GRAVEL W COBBLES	23,7	10.2	2.1	N.P.	N.P.	N.P			А-  - Ь		
49 -78	GRAVELE COBBLES	10.3	4.1	2.9	9,4	N.P.	N.P.		100 14	<del></del>	<b> </b>	
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#### SAN JUAN TESTING LAB INC. 909 WEST APACHE FARMINGTON, NEW MEXICO

#### TEST BORING LOG

HOLE NO	_ COLLAR ELEVATION	· ·		• .					DATE	MARCH II	1975	**************************************
PROJECTA	DMIK BUILDING			. •					CLIEN	T HALLIBU	RTON SE	EQVICES
LOCATION FA	reminaton, N.M.	<del></del>	- •	•						10. 18176		
INTERVAL	DESCRIPTION		SIEVE ANALYSIS			ERBERG	LIMITS	EXIST.	PENE-	A.A.S.H.O.		
	DESCRIPTION	PASSING NO. 10	PASSING NO 40	PASSING NO.200	L.L.	P.L.	P. I.	MOIST.	TRATION	CLASSFICATION	UNIFIED CLASS	REMARKS
02-25	CLAYEY SILT				22.3	N.P.	N.P.			A-1-b	<del></del>	
5 <sub>2</sub> -6 <sub>3</sub>	SAND & GRAVEL W/ COBBLES	23.7	10.2	2.1	N.P.	N.P.	N.P.	<del>                                     </del>		A-1-6	•	
62-83	GRAVEL & COSSLES	10.3	4.(	2.1	N.P.	N.P.	N.P.		100/11/2"	A-1-b		
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SON JUAN TESTING LAB, INC.

909 WEST APACHE
FARMINGTON, NEW MEXICO TO THE PROPERTY OF THE PROPERTY.

CLIENT HALLIBURTON SERVICES	PATE MARCH //, 1975	*****.
PROJECT ADMIX BUILDING	LOCATION FARMINGTON NEW	MEXICO
the contract of the contract o	COLLAR ELEV 100.93	- 4-0

PRO		•	DIRECT	10N		DIRECTION				
	BLOCK	DEPTH	OHMS	мноѕ	LAYER MHOS	RESISTIVITY	OHM5	MHOS	LAYER MHOS	RESISTIVITY
1.5	4.5	0-3	33.3	050	050.	19,000				
3.0	9.0	3-6	19.8	.051	150.	27,000	•			
4.5	13.5	6-9	11.7	.085	.034	17,000				
6.0	18.0	9 -12	9.37	. 107	550.	26,000		·	·	
1.5	-22.5	12-15	7.84	.128	.021	27,000				
9.0	27.0	15-18	7.32	./37	.009	64,000				:
10.5	31.5	18-21	6.69	.149	.012	48,000				
12.0	36.0	21-24	6.01	.166	.017	33,000				
13.5	40.5	24-27	5.01	.200	.034	17,000	Д			
15.0	45.0	27-30	4.59	.218	.018	32,000				`
16.5	49.5	30-33	4.52	.221	.003	192,000	B		_	
18.0	54.0	33-36							_	
19.5	58.5	36.39			·					
21.0	63.0	39-42								
22.5	<b>6</b> 7.5	42-45								
24.0	72.0	45-48		·						
25.5	76.5	48-51								
27.0	81.0	51-54								
28.5	85.5	54-57							·	
30.0	90.0	57-60				·				
31.5	94.5	60-63	-							
33.0	99.0	63-66								
34.5	103.5	66-69								
36.0	108.0	69-72		·						
37.5	112.5	72-75								

REMARKS

A- H2D B-SANDSTONE

TEST No. 16127

POCE 6

CLIENT HALLIB	DETON SERVICES	DATE MARCH 11, 1975				
PROJECT ADMIX		LOCATION FARMINGTON NEW MEXICO				
HOLE NO B	LAB NO 18178	COLLAR ELEV. 100.88				

							<del></del>			
PROBE		DIRECTION					DIRECTION			
SET	BLOCK	DEPTH	OHMS	мн05	LAYER MHOS	RESISTIVITY	OHMS	MHOS	LAYER MHOS	RESISTIVITY
1.5	4.5	0-3	102.0	.010	.010	57,000				
3.0	9.0	3-6	53.8	.018	.008	72,000				
4.5	13.5	6-9	31.4	.027	.009	64,000				
6.0	18.0	9 -12	25.7	.039	.012	48,000		Ī	:	
1.5	.22.5	12-15	19.1	.052	.0/3	44,000				
9.0	27.0	15-18	/5.9	.063	.01/	52,000				
10.5	31.5	18-21	12.0	.083	.020	29,000	•			
12.0	36.0	21-24	9.9	.101	.018	32,000				·
13.5	40.5	24-27	8.6	.116	.0/5	38,000				
15.0	45.0	27 <i>-30</i>	# 7. <b>6</b> 7	.130	.014	41,000	Д			
16.5	49.5	30-33	6.75	.148	.018	32,000				
18.0	54.0	33-36	5.69	.176	.028	20,500	<b>B</b>			
19.5	58.5	36-39	5.69	./78	.002	288,000	ס			
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22.5	<b>6</b> 7.5	42-45						<u>.                                    </u>		
24.0	72.0	45-48								
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27.0	81.0	51-54						;		
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34.5	103.5	66-69								
36.0	108.0	69-72								
37.5	112.5	72-75								

REMARKS

A- H20 B-SANDSTONE

TEST No. 16127

BULK PLANT ADDITION
HALLIBURTON SERVICES CO.
FARMINGTON, NEW MEXICO
SUBSURFACE INVESTIGATION

#### CONCLUSIONS & RECOMMENDATIONS

The subgrade strata encountered at the site as evidenced by this investigation is clayey silt, sand, gravel and cobbles, undertain by an extensive strata of sedimentary sandstone. No potentially expansive soil was encountered at the site. Free water could be encountered at a depth of 24.

The correlation between new test borings, test borings and pits completed by others and the resistivity survey results is summarized graphically on the north-west south-east cross sections shown on Plate "A". The extent of the cobble-stone layer, the water table and the surface of the sedimentary sandstone is approximate beneath the site since the resistivity survey is only accurate to approximately half the interval measured or approximately 2'.

We recommend that the footing system for the proposed plant expansion be founded at least 41 into the cobblestone strata.

The footing system may be composed of reinforced concrete footings and stem walls or spot footings with grade beams with footings founded as outlined above. The maximum soil pressure imposed by the footing system should not exceed 6,500 pounds per square foot for combined live and dead loads.

Footings adjacent to the existing facility should be founded at depths similar to those existing footings regardless of depth and should be sized on the basis of existing soil bearing pressures imposed by the existing structures. Settlement of the coarse granular non-cohesive soils is estimated to be less than 5/8" which total settlement should occur during construction.

The footing subgrade should be "over-excavated" to a minimum depth of 2" to eliminate the possibility of point bearing on any single boulder or cobble. Loose

gravel or cobbles should be removed from the excavation and the bottom of the footing excavation then brought back to "grade" with a non-plastic select backfill composed of crushed rock with the following gradation.

#### <u>Sieve Designation</u>

#### Percent Passing by Weight

1"

100%

No. 4

20%-45%

No. 200

0%-10%

The select backfill should be compacted to a density of 95% of the maximum density as determined by ASTM D-1557, Method "D", at optimum moisture content.

Interior load bearing walls or columns should be founded over spot footings with grade beams or continuous footings at depths similar to exterior footings in that area of the structure.

Interior slabs on grade should be isolated from all structural components of the footing system and should be founded over a 4" compacted subgrade composed of the select backfill as outlined above. A polyethlene vapor barrier should also be placed between the prepared subgrade and interior slabs. Interior non-load bearing partitions may be founded over thickened slabs, however, care should be exercised where such partitions join structural components through the placement of expansion joints or similar treatment to allow minor movement.

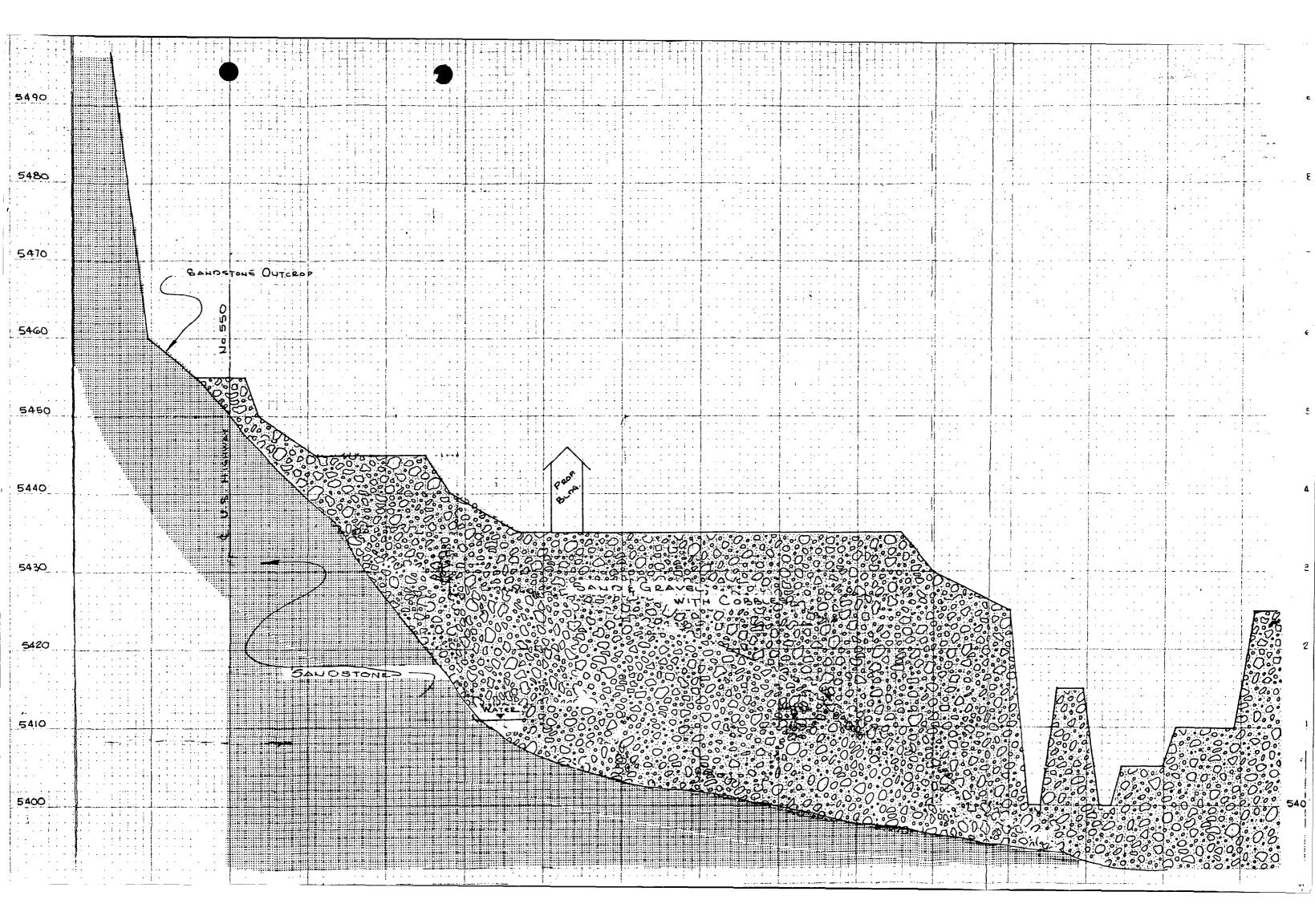
Compaction of slab subgrade and perimeter footing or grade beam backfill should be at least 95% of the maximum density as determined by ASTM D-1557, Method "A". Pressured plumbing placed below slabs on grade should be avoided where possible or should be installed in a pipe chase or water tight sleeve to insure the timely detection of leaks and reduce the possibility of saturating and subgrade strata. Gravity plumbing should be pressure tested where tested where placed between low grade for similar reasons.

Exterior site grading should insure rapid run-off of surface waters. Down spouts, parking lot drainage, outside wash rack areas and other concentrations of

surface run-off should be avoided on the north sides of structures and should be extended away from all structures in suitably sized culverts or paved drainage ditches.

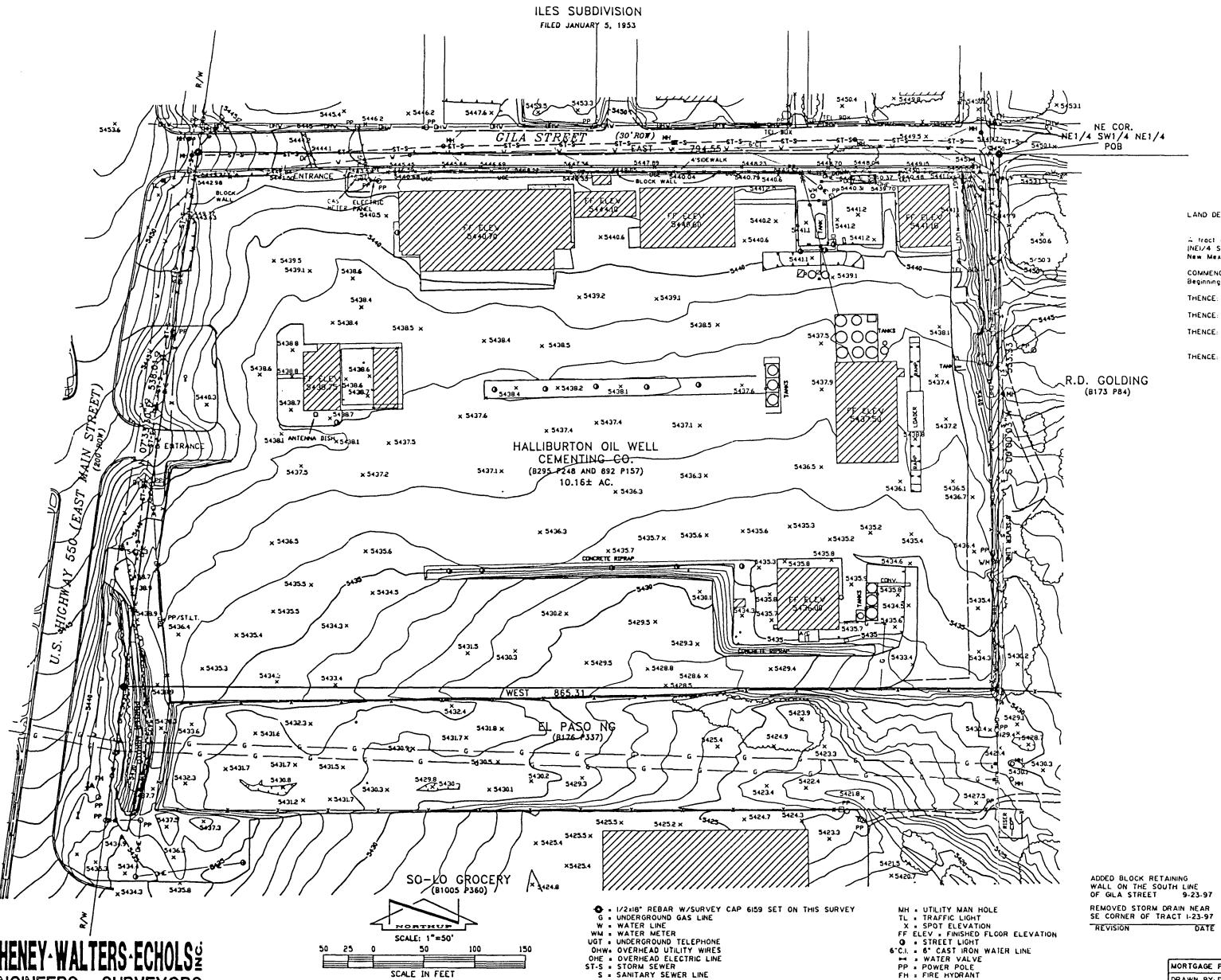
Street and parking lot construction should include recompaction of loosely consolidated fills prior to paving if "proof rolling" with a 50 ton roller indicates a lack of stability. The embankment areas should be compacted to 90% of the maximum density as determined by ASTM 698, Method "A" to within 12" of finished subgrade. Compaction for the remaining 12" of the embankment should meet 90% of ASTM D-1557, Method "A". The upper 6" of cut sections should also be compacted to a density of 90% of ASTM D-1557, Method "A". A minimum of 6" of dense graded aggregate base course should be placed over the compacted subgrade. The base course should be compacted to a density of 95% of ASTM D-1557, Method "B". A bituminous prime coat (MC70) may then be placed over the compacted base course at a rate not to exceed 0.15 gallons per square yard. Plant mixed asphaltic concrete paving should be placed to a depth of 3" over the prepared base.

The chemical analysis of the soils at the site indicate that Type II Air Entrained cement will provide adequate protection for all exposed concrete from the moderate sulfate content.



## A SURVEY FOR HALLIBURTON OIL WELL CEMENTING CO.

LYING IN THE NE1/4 SW1/4 NE1/4 OF SECTION 1, T29N R13W, N.M.P.M., FARMINGTON, SAN JUAN COUNTY, NEW MEXICO



S = SANITARY SEWER LINE

o SIGN

ENGINEERS - SURVEYORS

909 W. APACHE . FARMINGTON, NEW MEXICO 87401 . (505)327-3303

#### LAND DESCRIPTION

A tract of land lying in the Northeast Quarter of the Southwest Quarter of the Northeast Quarter [NEI/4 SWI/4 NEI/4] of Section I, T29N RI3W, N.M.P.M., in Farmington, San Juan County, New Mexico, more particularly described as follows:

COMMENCING at the Northeast Corner of said NEI/4 SWI/4 NEI/4, the True Point of

 $S00^{\circ}00'03"W$  and along the east line of said NEI/4 SWI/4 NEI/4 for a THENCE:

distance of 533.33 feet; WEST for a distance of 865.31 feet to the east right-of-way line of U.S. Highway

550; NO7\*33'30°E and along said east right-at-way line for a distance of 538.01 feet to a point on the north line of said NEI/4 SWI/4 NEI/4, also said point being on the south line of Gila Street; LEAVING said U.S. Highway 550 right-of-way line and EAST and along the south line of Gila Street and the north line of said NEI/4 SWI/4 NEI/4 for a distance of 794.55 feet and back to the true point of beginning. Said tract contains 10.16 acres, more or less, and is subject to any and all easements of

record or in existence.

I, GEORGE T. WALTERS , A REGISTERED PROFESSIONAL SURVEYOR UNDER THE LAWS OF THE STATE IN WHICH THIS SURVEY WAS PERFORMED, HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY MEETING THE MINIMUM REQUIREMENTS OF THE STANDARDS FOR LAND SURVEYS AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND THAT NO ENCROACHMENTS EXIST EXCEPT AS NOTED ABOVE, AND THAT ALL IMPROVEMENTS ARE SHOWN IN THEIR CORRECT LOCATION FEATURE TO RECORD BOUNDARIES AS LOCATED BY THIS SURVEY.

DI . DROP INLET FOR STORM SEWER

GEORGE WALTERS
PROFESSIONAL SURVEYOR NO. STATE OF NEW MEXICO

MORTGAGE PLATINO	PROPERTY SURVEYTYES	MONUMENTS SETTYES
DRAWN BY: DON	PARTY CHIEF: GRT	APPROVED: GTW
DATE: 09-23-97	DATE OF FIELD SURVEY: 9-22-97	DEED: GUARDIAN
BASIS OF BEARING: HIGHWAY	550	PROJECT NO: 94537 FILE: 4537

# ATTACHMENT IX RADIOACTIVE SURVEY

HALLIBURTON

## NUCLEAR PHYSICS LABORATORY

Gamma-ray Analysis

Sample name/	date/#:_farm	ington N.M. / 8-21-96	$S/B\pi G$
Sample form:	Soil	, taken by: RSO ,	report to: RSO .
Data start d	late: 9/24/9/	hour: /5:28 Cov	int time: <u>50,000</u> s.
Weight: 90	3 a X 500 ml	M B or point s	source @ SDD:cm.
HDCe v-ray d	10+ # 3 Cro	m.b. orpoint s	# FARWRITG
nrde y-ray o	lec. #_2 GIO	up # <u>l'</u> , Tag/file	#
Taskans	MD/IS ( at al)	** b	<b>D</b> = 1 = -
<u>Isotope</u>	MDC <sup>a</sup> (pCi q <sup>-1</sup> )	Meas. b (pCi q-1)	<u>Remarks</u>
46SC	7.0E-2	1.91	
110ma	6.4E-3		
110mAq 131 I	5.4E-3		
	4.7E-3		•
137 <sub>Cs</sub>	6.1E-3	1.0\-1	
<sup>192</sup> Ir	4.8E-3		
<sup>241</sup> Am	1.5E-3		
<sup>232</sup> Th series			
<sup>228</sup> AC	1.9E-2	6.91-1	
<sup>228</sup> Th	2.9E-1		
<sup>224</sup> Ra	9.4E-2	2,7\-1	
<sup>212</sup> Pb	9.3E-3	8.61-1	
212Bi	7.6E-2	8.3 \-1	
<sup>208</sup> Tl	4.9E-3	2.3\-1	
<del></del>	_ <del></del>		
<sup>238</sup> Ū series			
<sup>234</sup> Th	1.1E-1	4.81-1	
<sup>234</sup> Pa	1.9E-2		
<sup>226</sup> Ra	1.2E-1		
<sup>214</sup> Pb	1.1E-2	7,4\-1	
<sup>214</sup> Bi	1.1E-2	7-4\-1	
<sup>210</sup> Tl	4.5E-3		
<sup>210</sup> Pb	1.2E-1	4.6 \-1	
<sup>235</sup> U series			
235U	8.6E-3		
<sup>231</sup> Pa	1.6E-1		
<sup>227</sup> Th	4.5E-2		
<sup>223</sup> Fr	1.5E-1		
<sup>223</sup> Ra	2.9E-2		
<sup>219</sup> Rn	3.7E-2		
<sup>211</sup> Pb	1.2E-1		
<sup>211</sup> Bi	2.9E-2		
Comments: _			

Min. det. conc. above det. bkg. @ 95% c.l. for spec. parameters. Measured conc. above det. bkg.

Ron J. Buchanan, Ph.D., CHP

DTC (405) 251-4444

## HALLIBURTON

### NUCLEAR PHYSICS LABORATORY

Gamma-ray Analysis

Sample name/d	late/#: Farmer	taken by: RSO,	1 arch with
Sample form:	Soil	taken by: RSO .	report to: RSO .
Data start da	te 9/25/96. h	nour: 08:16 Cou	nt time: <u>50,000</u> s.
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mrde y-lay de	:c. # <u>4</u> . Group	#, rag/rire	
Isotope	MDCa (-a: -:1)	Meas. b (pci q-1)	Remarks
40K	MDC <sup>a</sup> (pCi q <sup>-1</sup> ) -7.0E-2	/,4\'	Remarks
46SC	6.4E-3		
110mAq	5.4E-3		
131 I			
137Cs	_6.1E-3	3,/\-2	
192 Ir	4.8E-3		
<sup>241</sup> Am	1.5E-3		
	1.36-3		
<sup>232</sup> Th series			
228 AC	_1.9E-2	8.2 >1	
<sup>228</sup> Th	2.9E-1	9.71-1	
<sup>224</sup> Ra	9.4E-2	3.2 \-1	
<sup>212</sup> Pb	9.3E-3	1.0	
<sup>212</sup> Bi	7.6E-2	9,9\-1	
<sup>208</sup> T1	4.9E-3	2.8\-1	
<del></del>	_ <del></del>		
<sup>238</sup> U series			
<sup>234</sup> Th	1.1E-1	5,714	
<sup>234</sup> Pa	1.9E-2		
<sup>226</sup> Ra	1.2E-1	1,3	
<sup>214</sup> Pb	1.1E-2	7.81-1	<del></del>
<sup>214</sup> Bi	1.1E-2	7.71-1	
<sup>210</sup> Tl	4.5E-3		
<sup>210</sup> Pb	1.2E-1	5. 1\-1	
<sup>235</sup> U series			
<sup>235</sup> U	8.6E-3		
<sup>231</sup> Pa	1.6E-1		
<sup>227</sup> Th	4.5E-2		
<sup>223</sup> Fr	1.5E-1		
<sup>223</sup> Ra	2.9E-2		
<sup>219</sup> Rn	3.7E-2		
<sup>211</sup> Pb	1.2E-1		
<sup>211</sup> Bi	2.9E-2		
Comments:	· · · · · · · · · · · · · · · · · · ·		

10-14-95

Ron J. Buchanan, Ph.D., CHP DTC (405) 251-4444

Min. det. conc. above det. bkg. @ 95% c.l. for spec. parameters. Measured conc. above det. bkg.

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

January 20, 1998

## CERTIFIED MAIL RETURN RECEIPT NO. Z-357-869-911

Mr. Mike Cornforth Sr. Environmental Specialist Halliburton Energy Services P. O. Drawer 1431 Duncan, Oklahoma 73536-0108

RE: FARMINGTON HALLIBURTON FACILITY, GW-099, SAN JUAN COUNTY, NEW MEXICO

Dear Mr. Cornforth:

Enclosed are copies of the Discharge Plan Application forms for Service Companies, etc. Also enclosed is a copy of the Guidelines for Preparation of Discharge Plans for your information.

Based upon your letter, dated January 15, 1998, a Public Notice has been prepared for publication. Your immediate attention to this matter is required. If you have any questions please contact me at (505) 827-7156.

Sincerely,

W. Jack Ford, C.P.G.

Geologist

Environment Bureau

Oil Conservation Division

#### 7 357 469 911

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	US Postal Service Receipt for Cert No Insurance Coverage I Do not use for Internation Sent to Wike Com	Provid	ded.
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000	TOTAL Postage & Fees	\$	
S Form 3800, April 1995	Postmark or Date	2	

No. 0519 P.

Halliburton Shared Services P. O. Box 1431 Duncan, OK 73536

## facsimile transmittal

To:	JACK FOR	$\mathcal{L}\mathcal{D}$	Fax	:			
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#### HALLIBURTON ENERGY SERVICES

Post Office Drawer 1431 / Duncan, Oklahoma 73536-0108 / Tel: 405-251-4197 / Fax: 405-251-3969

January 15, 1998

State of New Mexico
Energy, Minerals and Natural Resources Department
Oil Conservation Division
P.O. Box 2088
Santa Fe, NM 87501

Attn: Jack Ford

Re: GW-99 Discharge Plan

Farmington Service Facility
San Juan County, New Mexico

Dear Mr. Ford,

By way of this letter I am requesting that the GW-99 Discharge Plan for the Halliburton Energy Services Facility, located at 4109 E. Main, Farmington, NM, be renewed. We will continue to operate under the original discharge plan criteria until the permit is renewed.

For more information, please feel free to contact me at the letterhead number.

Sincerely,

Mike Cornforth

Sr. Environmental Specialist

cc:

Jim Haney, Shared Services Coordinator

Tom Allen, Environmental Coordinator

Arti Vir, Environmental Support, Houston

4100 Clinton (77020-6299) / Post Office Box 3 / Houston, TX 77001-0003

December 17, 1997

Mr. Roger C. Anderson Environmental Bureau Chief Oil Conservation Division 2040 South Pacheco Street Santa Fe, New Mexico 87505

RE:

Discharge Plan GW-099 Halliburton Services Farmington facility San Juan County, New Mexico

Dear Mr. Anderson:

The groundwater discharge plan for the Farmington Facility is due for renewal at the end of this month. The required documents along with the renewal application are being compiled at this time. However, we request a 30 day extension to January 30, 1998, in order to ensure that all information provided to the Oil Conservation Division is complete.

Sincerely,

HALLIBURTON ENERGY SERVICES

Arti Vir

**Environmental Specialist** 

Act. Vi

Helliberton Co. PO Drawer 1431

Duscan, OK 73536-

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

June 11, 1997

## CERTIFIED MAIL RETURN RECEIPT NO. P-326-936-601

Mr. Jim Haney Halliburton Services P.O. Box 960 Farmington, NM 87499

RE: Discharge Plan GW-099

Halliburton Services
Farmington facility

San Juan County, New Mexico

Dear Mr. Haney:

On December 30, 1992, the groundwater discharge plan, GW-099, for the Farmington Facility located in the NW/4 NE/4, Section 1, Township 29 North, Range 13 West, NMPM, San Juan County, New Mexico, was approved by the Director of the New Mexico Oil Conservation Division (OCD). This discharge plan was required and submitted pursuant to Water Quality Control Commission (WQCC) regulations and was renewed for a period of five years. The approval will expire on December 30, 1997.

If the facility continues to have potential or actual effluent or leachate discharges and Halliburton Serices wishes to continue operation, the discharge plan must be renewed. Pursuant to WQCC Section 3106.F, if an application for renewal is submitted at least 120 days before the discharge plan expires (on or before August 30, 1997), then the existing approved discharge plan for the same activity shall not expire until the application for renewal has been approved or disapproved. The OCD is reviewing discharge plan submittals and renewals carefully and the review time can extend for several weeks to months. Please indicate whether Halliburton Services has made, or intends to make, any changes in the system, and if so, please include these modifications in the application for renewal.

The discharge plan renewal application for the Farmington Facility is subject to WQCC Regulation 3114. Every billable facility submitting a discharge plan renewal will be assessed a fee equal to the filing fee of \$50 and a flat fee of \$690 for service companies. The \$50 filing fee is to be submitted with the discharge plan renewal application and is nonrefundable.

Please make all checks payable to: NMED-Water Quality Management and addressed to the OCD Santa Fe Office.

Mr. Jim Haney HS, GW-099 6 Month Notice June 11, 1997 Page 2

Please submit the original discharge plan renewal application and one copy to the OCD Santa Fe Office and one copy to the OCD Aztec District Office. Note that the completed and signed application form must be submitted with your discharge plan renewal request. A copy of the WQCC regulations, discharge plan application form, and guidelines are enclosed. (If you require additional copies of these items notify the OCD at (505)-827-7152. A complete copy of the regulations is also available on OCD's website at <a href="https://www.emnrd.state.nm.us/ocd.htm">www.emnrd.state.nm.us/ocd.htm</a>.)

If Halliburton Services no longer has any actual or potential discharges and a discharge plan is not needed, please notify this office. If Halliburton Services has any questions, please do not hesitate to contact Pat Sanchez at (505) 827-7156.

Sincerely,

Roger C. Anderson

Environmental Bureau Chief

We for Roger C. Anderson.

RCA/pws

c: OCD Aztec District

b 35P 43P POP

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

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District I - (505) 393-6161 P. O. Box 1980 Hobbs, NM 88241-1980 District II - (505) 748-1283

#### New Mexico Energy Mmerals and Natural Resources Department Oil Conservation Division

Form C-138 Originated 8/8/95

811 S. First

A DIVISION Artesia, NM 88210 "trict III - (505) 334-6178 Rio Brazos Road

a #1 8 52 ~...c, NM 87410

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

CDISCHARGE PLAN copy>

Submit Original Plus 1 Copy to appropriate District Office

trict IV - (505) 827-7131		Env JN: <u>9213</u> 2	2
REQUEST FOR API	PROVAL TO ACCEPT SO	LID WASTE	
1. RCRA Exempt: Non-Exempt:		الميداة 4. Generator	rundon Evergy Services
Verbal Approval Received: Yes	No 🔀	5. Originating Site	Wash Bar Sum
2. Management Facility Destination Envirotech Landfarm	Soil RemediationFac.	6. Transporter Ex	Juirstech
3. Address of Facility Operator 5796 U.S. Hi Farmington,	_	8. State Hanks	اه) ده
7. Location of Material (Street Add. ess or ULSTR)	)	4109 E.HAIL. FA	remineron, N. ol
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All transporters must certify the wastes delivered	d are only those consigned fo	transport.	
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	Environmental Bursau Oil Conservation Division	<i>⊌</i>	
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SIGNATURE: Harla Tru Brown Waste Management Facility Authorized Agent	TITLE: Landfarm Ma	nager DAT	E: 1-6-97
YPE OR PRINT NAME: Harlan M. Brown	TELEP	HONE NO. <u>(505)632</u>	<u>2-0615</u>
(This space for State Use)  APPROVED BY: Deny J. Zeit	TITLE: Geolog	DATE	e: <u>1/6/9</u> /
APPROVED BY: Jatain Jan	TITLE: EWGINETS	- DAT	E: 1-9-9



#### State of New Mexico

#### ENVIRONMENT DEPARTMENT

Harold Runnels Building
1190 St. Francis Drive, P.O. Box 26110
Santa Fe, New Mexico 87502
(505) 827-0187

MARK E. WEIDLER SECRETARY

EDGAR T. THORNTON, III
DEPUTY SECRETARY

Certified Mail - Return Receipt Requested

November 13, 1996

Mr. Jim Haney Haliburton Services 4109 East Main Farmington, New Mexico 87401

RE: Compliance Evaluation Inspection, Haliburton Services, NPDES Permit #NMROOA285, October 4, 1996

Dear Mr. Haney:

Enclosed, please find a copy of the report for the referenced inspection that I conducted at your facility. This inspection report will be sent to the U.S. Environmental Protection Agency (USEPA) in Dallas, for their review. These inspections are used to determine compliance with the National Pollutant Discharge Elimination System (NPDES) permit issued in accordance with the federal Clean Water Act.

Problems noted during this inspection are discussed in the Further Explanations section of the inspection report. You are encouraged to review the inspection report, correct any problems noted during the inspection, and to modify your operational and/or administrative procedures, as appropriate. Further, you are encouraged to notify in writing, both USEPA and NMED regarding modifications and compliance schedules.

My thanks to Mr. Clyde Lasster of your staff for his help and cooperation during this inspection. If you have any questions, please feel free to contact me at he above address or by telephone at (505) 827-2798.

Sincerely,

Richard E. Powell

Surface Water Quality Bureau

xc: USEPA, Dallas (2 copies)
Taylor Sharpe, USEPA (6EN-WT)
NMED, District I, Albuquerque

NMED, Farmington Field Office

Roger Anderson, NMOCD

RECEIVED

NOV 1 8 1996

Environmental Bureau
Oil Conservation Division





## NPDES Compliance Inspection Report

Form Approved OMB No. 2040-0003 Approval Expires 7-31-85

Ç.	ction A: National Data Sv	stem Coding			
Section A: National Data System Coding					
Reserved   Facility Evaluation Rating   BI   QA     Reserved					
	Section B: Facility	Data			
Name and Location of Facility Inspected 'Haliburton Services - east side of Farmingto of Main Street (US Hwy 550 - Aztec Hwy)	n on southside	Entry Time (X) AM {   PM 7:50  Exit Time Date 0935 hrs. 10-4-96	Permit Effective Date 9-9-92  Permit Expiration Date 9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-9-		
Name(s) of On-Site Representative(s)	Title(s)		Phone No(s)		
Clyde Lasster*	Service Superv	risor	505-324-3100		
Name, Address of Responsible Official Jim Haney	Title				
Halliburton Services 4109 East Main Farmington, NM 87401  Phone No.  Contacted  * Yes No					
	ion C: Areas Evaluated D M = Marginal, U = Unsa	uring inspection tisfactory, N = Not Evaluated)			
S Permit N Flow Measurer U Records/Reports N Laboratory M Facility Site Review Effluent/Receiv	N	riedeaunem	Operation and Maintenance Sludge Disposal Other:		
		ttach additional sheets if necessary)			
<ol> <li>Permittee has coverage under the NPDES baseline general storm water permit and has a Storm Water Pollution Prevention Plan (SWPPP)</li> <li>The description of potential pollutant sources in the SWPPP and on the site map is incomplete.</li> <li>In general, the permittee does not address storm water pollution controls in the SWPPP.</li> <li>The permittee has not conducted the required annual site compliance evaluation.</li> </ol>					
Name(s) and Signature(s) of Inspector(s)	Agency/Office/Telephon	•	Date 3		
Richard E. Powell	NMED/SWQB - 50	)5-82/-2/98 	11-15-96		
		···			
Signature Of Reviewer	Agency/Office		Date		
	Regulatory Office U	se Only			
Action Taken		Date	Compliance Status  Noncompliance  Compliance		

## Storm Water Industrial General Permit Pollution Prevention Plan

Haliburton Services	10-4-96	PERMIT NO NMROOA285	H OLE PROPERTY
POLLUTION PREVENTION TEAM			
MEETS PERMIT REQUIREMENTS. DETAILS:	S <b>Ģ M</b> □ U	□ N/A □ (FURTHER EXPLANATION ATTACHED	no .
1. IDENTIFY SPECIFIC INDIVIDUALS.		ү <b>Ж</b> и 🗆 и	/A □
2. OUTLINE INDIVIDUALS RESPONSIBILITIES.		Y <b>⊠</b> N □ N/	/A 🗆
DESCRIPTION OF POTENTIAL POLLUTANT SOURCES			
MEETS PERMIT REQUIREMENTS. DETAILS:	ѕ□ м₫ ∪	□ N/A □ (FURTHER EXPLANATION ATTACHED_	yes
1. SITE MAP INDICATING.		s <b>п м 🗗</b> и п м	/A 🗆
a) DRAINAGE AREAS		Y 🗆 N <b>X</b> O N	/A □
b) DRAINAGE PATTERNS AND OUTFALLS		у <b>п 1%</b> и 🗅 Ү	/A 🗆 🖁
c) STRUCTURAL AND NON-STRUCTURAL CONTROLS have no ou	itside controls	S Y N N N	/A <b>(</b>
d) SURFACE WATERS on separate topographic map		Y <b>Č</b> N 🗆 N	/A 🗆
e) SIGNIFICANT MATERIALS EXPOSED TO PRECIPITATION		Y <b>ĕ</b> N□ N	/A 🗆
f) LOCATION OF LEAKS/SPILLS WHICH HAVE OCCURED IN THE LAST	3 YEARS	Y 🗆 N 🗆 N	/A 🔀
g) LOCATION OF INDUSTRIAL ACTIVITIES EXPOSED TO PRECIPITATION	ON Not all	Y□ N <b>*</b> N	/A 🗆
FUELING STATIONS need to remove from map-no lor	nger on-site	Y □ N □ N	/A <b>X</b> C
MAINTENANCE OR CLEANING AREAS all inside of sta	iging area	Y C N D N	/A 🗆
LOADING/UNLOADING AREAS		Y <b>X</b> 3 N 🗆 N	/A 🗆
WASTE TREATMENT, STORAGE OR DISPOSAL AREAS insid	ie	Y I N to N	/A □
LIQUID STORAGE TANKS HAL tanks not marked		Y □ N <b>2</b> N	/A 🗆
PROCESSING AREAS		Y I N I N	/A <b>K</b> I
STORAGE AREAS		Y 🗗 N 🗆 N	/A 🗆
2. LIST OF POLLUTANTS LIKELY TO BE PRESENT IN DISCHARGES, $1i$ :	st materials b	ut not spec. pg∐utants <sub>□ N</sub>	/A 🗆
3. DESCRIPTION OF SIGNIFICANT MATERIALS HANDLED, TREATED, STATE THAT EXPOSURE TO STORM WATER OCCURED IN THE LAST 3 YEAR	TORED OR DISPOSE ARS. <b>period of</b>	EDOFSUCH S M M U N exp. & quantity not listed	/A 🗆
a) DESCRIPTION OF THE METHOD AND LOCATION OF STORAGE OR	DISPOSAL	Y <b>₹</b> N □ N	/A 🗆
b) DESCRIPTION OF ALL MATERIAL MANAGEMENT PRACTICES		Y <b>£</b> 0 N □ N	/A 🗆
c) DESCRIPTION AND LOCATION OF EXISTING STRUCTURAL AND NO	ON-STRUCTURAL C	ONTROLS Y LX N I N	/A □
4. SUMMARY OF EXISTING STORM WATER SAMPLING DATA		s 🗆 M 🗆 U 🗆 N	/A 🗷
5. DESCRIPTION OF AREAS WITH A HIGH POTENTIAL FOR SIGNIFICAL	NT SOIL EROSION	s□ M□ U□ N	/A 🛎
6. A NARRATIVE SUMMARIZING POTENTIAL POLLUTANT SOURCES 1		tankers, s□ MŽ u□ N	I/A □

# Storm Water Industrial General Permit Pollution Prevention Plan

CHECKLIST

Haliburton Services	10-4-96	NMR00A285
DESCRIPTION OF APPROPRIATE MEASURES AND CONTROLS		
MEETS PERMIT REQUIREMENTS. S DETAILS:		(FURTHER EXPLANATION ATTACHED Yes
1. GOOD HOUSEKEEPING PROCEDURES.		S M U U N/A C
2. PREVENTIVE MAINTENANCE PROCEDURES.		S M U M N/A L
3. SPILL PREVENTION AND RESPONSE PROCEDURES.	·	S 🗗 M 🗆 U 🗆 N/A 🗆
4. INSPECTION PROCEDURES. none conducted		S I M I U IX N/A I
5. EMPLOYEE TRAINING PROGRAM. <b>none conducted</b>		S D M D U D N/A D
6. RECORDKEEPING AND INTERNAL REPORTING PROCEDURES		S M U U M N/A
7. NON-STORM WATER DISCHARGE CERTIFICATION.		S D M D V M N/A D
a) IDENTIFY AUTHORIZED NON-STORM WATER DISCHARGES AND A	PPROPRIATE CONT	ROLS Y□N□N/AŽ
8. EROSION AND SEDIMENT CONTROLS FOR AREAS WITH HIGH EROS	SION POTENTIAL.	S D M D U D N/A 💆
9. A NARRATIVE CONSIDERATION OF TRADITIONAL STORM WATER M	ANAGEMENT PRAC	TICES. S M D U 🗷 N/A 🗆
10. PLANS FOR IMPLEMENTATION AND MAINTENANCE OF TRADITION.	AL MEASURES APPI	ROPRIATE. S M U U N/A D
ANNUAL SITE COMPLIANCE EVALUATION REPORTS		
MEETS PERMIT REQUIREMENTS. SO M Details <b>none</b>	I U ME N/A (FU	URTHER EXPLANATION ATTACHED Yes
1. SUMMARY OF THE SCOPE OF THE INSPECTION.		S O M O U O N/A O
2. PERSONNEL MAKING THE INSPECTION.		S O M O U O N/A C
3. MAJOR OBSERVATIONS.		S D M D U D N/A D
4. ACTIONS TAKEN TO REVISE THE POLLUTION PREVENTION PLAN.		S M M U U N/A C
5. CERTIFICATION OF COMPLIANCE OR A LIST OF INCIDENTS OF NON	-COMPLIANCE.	S □ ,M □ U □ N/A □
COMPLIANCE WITH MUNICIPAL STORM WATER MANAGEMENT	REQUIREMENTS	
MEETS PERMIT REQUIREMENTS. SI MODETAILS:	1□ U□ N/A 🗗 (FU	JRTHER EXPLANATION ATTACHED
CONSISTENCY OF POLLUTION PREVENTION PLAN WITH OTHE	R PLANS	
MEETS PERMIT REQUIREMENTS. SPCC SC NO DETAILS:	IO UO N/AO (FE	JRTHER EXPLANATION ATTACHED)
SALT STORAGE PILES ONSITE COVERED OR ENCLOSED		
MEETS PERMIT REQUIREMENTS. SO MEETAILS:	M D U D N/A 🗷 (F	URTHER EXPLANATION ATTACHED

## NPDES Compliance Inspection Haliburton Services, NMR00A285

#### Further Explanations

#### Introduction

On October 4, 1996, a Compliance Evaluation Inspection was conducted at Haliburton Services, well servicing company (Standard Industrial Classification 1389) located at Farmington, New Mexico by Richard E. Powell of the State of New Mexico Environment Department (NMED). The purpose of this inspection was to evaluate the permittee's compliance with the NPDES baseline general storm water permit for industrial activities and storm water regulations at 40 Code of Federal Regulations Part 122.26.

Haliburton Services was granted permit coverage under the NPDES baseline general storm water permit and is assigned permit #NMR00A285. Storm water runoff from this site discharges to the San Juan River in Segment 2401 of the San Juan Basin. This report is based on review of files maintained by the permittee, on-site observation by NMED personnel, and verbal information provided by the permittee's representative, Mr. Clyde Lasster, Service Supervisor.

An entrance interview was conducted with Mr. Lasster, at approximately 0815 hours on October 4, 1996. The inspector made introductions, presented his credentials and discussed the purpose of the inspection.

#### Storm Water Pollution Prevention Plan (SWPPP)

**Description of Potential Pollutant Sources:** Overall rating of "Marginal"

Part IV.D.2 of the permit states, in part, "Each plan shall provide a description of potential sources which may reasonably be expected to add significant amounts of pollutants to storm water discharges or which may result in the discharge of pollutants during any dry weather from separate storm sewers draining the facility. Each plan shall identify all activities and significant materials which may potentially be significant pollutant sources."

The permittee has prepared a site map as required by the general permit but has not indicated drainage areas and patterns, outfall locations, locations of <u>all</u> industrial activities and materials exposed to precipitation such as a maintenance staging and parking area where liquid nitrogen tank trucks and other mobile equipment are parked, and a liquid storage tank (HAL tank). In addition, while the SWPPP describes some of the potential pollutant sources at this site, the above liquid nitrogen tankers and maintenance/storage area are not described, nor does the permittee describe the pollutants potentially present in storm water discharges.

**Description of Appropriate Measures and Controls:** Overall rating of "Unsatisfactory"

Part IV.D.3 of the permit states, In part, "Each facility covered by this permit shall develop a description of storm water management controls appropriate for the facility, and implement such controls. The appropriateness and priorities of controls in a plan shall reflect identified potential sources of pollutants at the facility."

Measures and controls to be described and implemented by the permittee include such things as good housekeeping, preventive maintenance, periodic inspections, employee training, record keeping, non-storm water evaluations and certifications, sediment and erosion control, as well as implementation/maintenance of traditional storm water management practices, where appropriate.

Although the permittee obviously conducts preventive maintenance and has established good housekeeping procedures, these practices are not addressed or recorded in the SWPPP. Also, the permittee has not described or implemented storm water management controls for some areas at this site, including the above mentioned maintenance parking and equipment storage area.

In addition, the permittee either does not conduct employee storm water management training or does not record this training, does not conduct periodic inspections or does not record these inspections, their scheduled frequency, personnel conducting the inspection, dates of the inspection, results of the inspection, actions taken to correct problems encountered during the inspection, etc., in the SWPPP. The permittee also has not done the required non-storm water certification and does not discuss implementation/maintenance of traditional storm water management practices.

Annual Site Compliance Evaluation Reports: Overall rating of "Unsatisfactory"

Part IV.D.4 of the permit states, in part, "Qualified personnel shall conduct site compliance evaluations at appropriate intervals specified in the plan, but, except as provided in paragraph IV.D.4.d (below), in no case less than once a year."

According to the permittee's representative, no annual site compliance evaluations have been conducted at this facility.

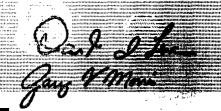
An exit interview to discuss the findings of this inspection was conducted at approximately 0925 hours on October 4, 1996 with Mr. Lasster, at the site.

## ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of che	ack No. dated 2-9-95,
or cash received on	in the amount of \$ 138000
from HALLIBURTON ENERGY	SERVICES
for GW-99 FARMINGTON	N SERVICES FACILITY
Submitted by:	Date:
submitted to ASD by: CHRIS EUS	
Received in ASD by: Confer fe. &	
Filing Fee New Facilit	
ModificationOther	and the state of t
•	(aguasidy)
Organization Code	Applicable FY
To be deposited in the Water Qual	ity Management Fund.
Full Payment or Annua	1 Increment

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HALIBURTON ENEROY SERVICES on anti-anti-anti-anti-anti-anti-anti-anti-		02 09 95	\$******1380.00
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NMED-WATER QUALITY MANAGEMENT P O BOX 2088 SANTA FE NM 87504-2088



# State of New Mexico ENERGY, MERALS and NATURAL RESOURCES DE RTMENT Santa Fe, New Mexico 87505





January 19, 1995

## CERTIFIED MAIL RETURN RECEIPT NO. P-176-012-093

Mr. Harry Massenheimer Halliburton Company 1015 Bois D'Arc P.O. Drawer 1431 Duncan, Oklahoma 73536-0100

Re: Discharge Plan (GW-99)

Halliburton Farmington Facility San Juan County, New Mexico

Dear Mr. Massenheimer:

A review of the file for discharge plan GW-99 for the Haliburton Farmington Service Facility located in the NW/4 NE/4, Section 1, Township 29 North, Range 13 West, NMPM, San Juan County, New Mexico has revealed the payment for the December 30, 1992 discharge plan flat fee has not been submitted to the Oil Conservation Division (OCD). These fees were due upon receiving the letter approving the discharge plan.

In order to be in compliance with Water Quality Control Commission (WQCC) Regulation 3-114 B.6, please remit the flat fee in full to the OCD immediately. The balance on the flat fee for the above referenced facility is one thousand three hundred eighty dollars (\$1380.00). The check should be made payable to: NMED-WATER QUALITY MANAGEMENT and addressed to the OCD Santa Fe office.

If there are any questions on this matter, please contact me (505) 827-7153.

Sincerely,

Chris Eustice Geologist

cc: OCD-Aztec Office

VILLAGRA BUILDING - 408 Gallateo

Forestry and Resources Conservation Division P.O. Box 1948 87504-1948 827-5830

> Park and Recreation Division P.O. Box 1147 87504-1147 827-7465

2040 South Pacheco

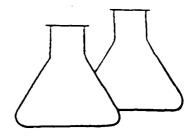
Office of the Secretary 827-5950

Administrative Services 827-5925

Energy Conservation & Management 827-5900

Mining and Minerals 827-5970

Oil Conservation 827-7131



# ENVIROTECH LABSTECT

5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615 • FAX: (505) 632-1865

OIST SELECTION

## EPA METHODS 8010/8020 AROMATIC VOLATILE ORGANICS/HALOGENATED VOLATILE ORGANICS

Client: Hallibu	ton Resource Mgmt.	Project #:	92118
Sample ID:	20 Barrel Comp	Date Reported:	03-18-94
Laboratory Number:	7059	Date Sampled:	03-15-94
Sample Matrix:	Soil	Date Received:	03-16-94
Preservative:	Cool	Date Extracted:	03-16-94
Condition:	Cool & Intact	Date Analyzed:	03-17-94
		Analysis Requested:	TCLP

	Cancontration	Det. Limit	Regulatory Limits
	Concentration		
Parameter	(mg/L)	(mg/L)	(mg/L)
Vinyl Chloride	ND	0.005	0.2
1,1-Dichloroethene	ND	0.005	0.7
2-Butanone	ND	0.005	200
Chloroform	ND	0.005	6.0
Carbon Tetrachloride	ND	0.005	0.5
Benzene	ND	0.005	0.5
1,2-Dichloroethene	ДŊ	0.005	- 0.5
Trichloroethene	, ND	0.005	0.5
Tetrachloroethene	ND	0.005	0.7
Chlorobenzene	ND	0.005	100
1,4-Dichlorobenzene	ИD	0.005	7.5

SÜRROGATE	RECOVERIES:	Parameter	Percent	Reco	very
,		Bromochloromethane Bromofluorobenzene		96 96	-

Method:

Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 5030, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8010, Halogenated Volatile Organics, Test Methods

for Evaluating Solid Waste, SW-846, USEPA, July 1992. Method 8020, Aromatic Volatile Organics, Test Methods for

Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

Note:

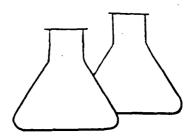
Regulatory Limits based on 40 CFR part 261 Subpart C section 261.24, July 1, 1992

ND - Parameter not detected at the stated detection limit.

Comments: 1125 Hwy 550, Aztec

Analyst Gener

mani I Houng



5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615 • FAX: (505) 632-1865

## EPA METHOD 8040 PHENOLS

Client:	HRM	Project #:	92118
Sample ID:	20 bbl composite	Date Reported:	04-04-94
Laboratory Number:	7059	Date Sampled:	03-15-94
Sample Matrix:	Soil	Date Received:	03-16-94
Preservative:	Cool	Date Extracted:	03-16-94
Condition:	Cool & Intact	Date Analyzed:	04-03-94
		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
o-Cresol	ND	0.020	200.0
p,m-Cresol	ND	0.040	200.0
2,4,6-Trichlorophenol	ND	0.040	2.0
2,4,5-Trichlorophenol	ND	0.040	2.0
Pentachlorophenol	0.39	0.025	100.0

SURROGATE	RECOVERY	Parameter	Percent Recovery
			+
		2-fluorophenol	114 %
••	·•	2,4,6-tribromophenol	106 ' %

Method:

Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8040, Phenols, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986.

Note:

Regulatory Limits based on 40 CFR part 261 subpart C section 261.24, July 1992

ND - Parameter not detected at the stated detection limit.

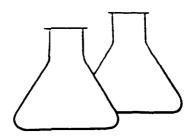
Comments:

1125 Hwy 550, Aztec

Sample from compressor oil waste stream

Analyst

Review Young



5796 US Highway 64-3014 • Farmington, New Mexico 87401 Phone: (505) 632-0615 • Fax: (505) 632-1865

## EPA METHOD 8090 NITROAROMATICS AND CYCLIC KETONES

Client:	HRM	Project #:	92113
Sample ID:	20 bbl composite	Date Reported:	04-03-94
Laboratory Number:	7059	Date Sampled:	03-15-94
Sample Matrix:	Sand	Date Received:	03-16-94
Preservative:	Cool	Date Extracted:	03-16-94
Condition:	Cool & Intact	Date Analyzed:	04-02-94
·		Analysis Requested:	TCLP

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Limit (mg/L)
Pyridine	ИD	0.020	5.0
Hexachloroethane	ND	0.022	5.0
Nitrobenzene	ND	0.020	5.0
Hexachlorobutadiene	ND .	0.020	0.5
2,4-Dinitrotoluene	ND	0.020	0.13
HexachloroBenzene	ND -	0.020	0.13

Method:

Method 1311, Toxicity Characteristic Leaching Procedure Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992

Method 3510, Separatory Funnel Liquid-Liquid Extraction, Test Methods for Evaluating Solid Waste, SW-846, USEPA, July 1992.

Method 8090, Nitroaromatics and Cyclic Ketones, Test Methods for Evaluating Solid Waste, SW-846, USEPA, Sept. 1986

ND - Parameter not detected at the stated detection limit.

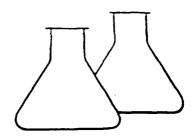
Comments:

1125 Hwy 550 Aztec

Sample from compressor oil waste stream

Analyst

Review Journa



5796 US HIGHWAY 64-3014 • FARMINGTON, NEW MEXICO 87401 PHONE: (505) 632-0615 • FAX: (505) 632-1865

# EPA METHOD 1311 TOXICITY CHARACTERISTIC LEACHING PROCEDURE TRACE METAL ANALYSIS

Client: Ha	alliburton Resource Mgmt.	Project #:	92118
Sample ID:	20 Barrel Comp.	Date Reported:	03-18-94
Laboratory Num	mber: 7059	Date Sampled:	03-15-94
Sample Matrix	: Soil	Date Received:	03-16-94
Preservative:	Cool	Date Analyzed:	03-17-94
Condition:	Cool & Intact	Date Extracted:	03-16-94
•		Analysis Needed:	TCLP metals

Parameter	Concentration (mg/L)	Det. Limit (mg/L)	Regulatory Level (mg/L)
ARSENIC	0.003	0.001	5.000
BARIUM	1.3	0.1	100.0
CADMIUM	0.030	0.001	1.000
CHROMIUM	ND	0.001	5.000
LEAD	0.042	0.001	5.000
MERCURY	ND	0.002	0.200
SELENIUM	0.008	0.001	1.000
SILVER	ND	0.01	5.00

Method:

Methods 3010A, 3020A, Acid Digestion of Aqueous Samples and Extracts for Total Metals, SW-846, USEPA, July 1992.

Methods 7060, 7080, 7131, 7191, 7470, 7421, 7740, 7760A Analysis of Metals by GFAA and FLAA, SW-846, USEPA

Method 1311, Toxicity Characteristic Leaching Procedure SW-846, USEPA, July 1992.

Note:

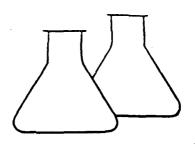
Regulatory Limits based on 40 CFR part 261 subpart C 'section 261.24, July 1, 1992

ND - Parameter not detected at the stated detection limit.

Comments: 1125 Hwy 550, Aztec

Alexand. Openien

Review O



5796 US Highway 64-3014 • Farmington, New Mexico 87401 Phone: (505) 632-0615 • Fax: (505) 632-1865

#### RCRA CHARACTERISTICS

Client: Halliburton Resources Mgmt. Project #: 92118
Sample ID: 20 Barrel Composite Date Reported: 03-16-94

Lab ID#: 7059 Date Sampled: 03-15-94
Sample Matrix: Soil Date Received: 03-16-94
Preservative: Cool Date Analyzed: 03-16-94

Condition: Cool & Intact

IGNITABILITY: Did not ignite upon direct contact with flame

after heating to 60°c.

CORROSIVITY: pH of 8.19

REACTIVITY: Did not react violently with water, strong base

(10N Sodium Hydroxide), or strong acid

(6N Hydrochloric acid).

Reference: 40 CFR part 261 Subpart C sections 261.21 - 261.23,

July 1, 1992.

Comments:  $\leq$  pH 2 or  $\geq$  pH 12.5 is hazardous waste.

1125 Hwy 550, Aztec

Analyst Gener

Reviewed James

# Green dye spilled in Farmington Lake

ROGER BURR STAFF WRITER

waters of Farmington Lake was found to be a harmless dve. but not until after worried officials of the dve, used to check for spent more than seven hours on the shores of the city reservoir.

Fire Marshal Tom Aurnham- in the sand. mer said the dye was discovered by a citizen about 5 p.m. Thursday. A sewage treatment plant chemist identified the substance about 10 p.m., but a Fire Department hazardous materials team wasn't back in its station until after midnight.

The dye was traced to a Halliburton Services Co. truck, and Halliburton cleaned up the spill Friday morning.

hammer said, noting that Farm- truck for disposal.

ington Lake is the city's water supply.

"Luckily for us and the respon-" A green substance in the sible people, it turned out to be nontoxic."

Aurnhammer said a container leaks, had fallen from a Halliburton truck that had become stuck

A second truck was freeing the first when the dye spilled onto the ground, and eventually ran into the lake. Aurnhammer said.

Someone had seen the Halliburton trucks earlier in the day, and the company agreed the dve. is a kind it uses, Aurnhammer said.

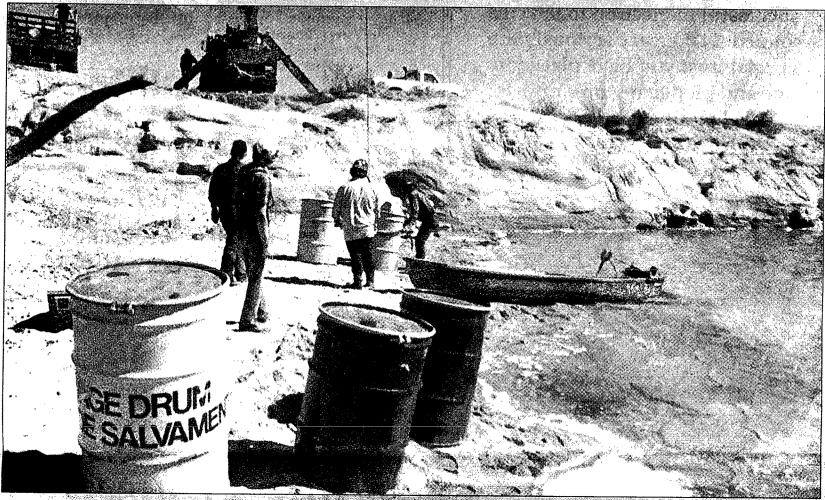
A Halliburton crew shoveled the dye from the lake shore and vacuumed it from the water and "It's something you don't want into barrels Friday morning. A to take a chance with," Aurn- crane hoisted the barrels to a

Hallohuston File

THE CONCERT - THE DIVISION RECE JED

'94 MB+ 11 BM 8 39

## Lake cleanup



A Halliburton Services Co. crew works Friday to remove barrels of a harmless dye that spilled into Farmington Lake. Story, Page A10.



## UNITED STATES DEPARTMENT OF THE INTERIOR

#### FISH AND WILDLIFE SERVICE

Ecological Services
Suite D, 3530 Pan American Highway, NE
Albuquerque, New Mexico 87107

November 30, 1992

OIL CONSERV UN DIVISION RECEIVED

'92 DE' 2 AM 8 36

Cons. #2-22-93-I-045

Director
Oil Conservation Division
State Land Office Building
P.O. Box 2088
Santa Fe, New Mexico 87504-2088

Dear Sir:

This responds to your letter dated November 4, 1992, requesting a review of discharge plan GW-9/10 by the U.S. Fish and Wildlife Service (Service). Halliburton Services has submitted the plan for their Farmington Service Facility (FSF), located in the NW/4 NE/4, Section 1, T29N, R13W, San Juan County, New Mexico. The plan calls for the discharge of approximately 2,200 gallons per day of waste water collected from a truck washrack and floorsump, into the City of Farmington's Sewage Treatment System (POTW).

The Service has concerns over the nature of the effluent, and the proximity of the FSF to the Animas and San Juan Rivers. To prevent, and mitigate for, accidental spills, leaks and other discharges, the Service offers the following comments for consideration.

- 1. Fuels, lubricants, and other petrochemicals and solvents should not be discharged in the river or near it's banks. Every effort should be made to prevent any discharge from entering the Animas or the San Juan Rivers.
- 2. The downgradient face of the FSF should be bermed to a height of 16 inches to prevent hydrocarbon contaminated runoff from entering the Animas River. The Service recommends a clay and caliche mixture for construction of the berm. This material is relatively inexpensive, and an excellent barrier to water runoff.
- 3. The berm should be constructed and compacted in such a fashion that it's integrity will remain intact, and it should be inspected on a regular basis to insure there is no overflow.
- 4. Associated hydrocarbon contaminated soils at the site should not be present near the berm, or on any gradient that could lead to the Animas River. If necessary, an upland aeration site should be considered for the treatment of hydrocarbon contaminated soils. Any such site would also need to be bermed to prevent contact with any runoff water that would migrate downgradient.

Director 2

5. A treatment system for the effluent prior to it's discharge into the POTW should be incorporated into the discharge plan. This treatment should consist of a gravity oil-water separator. The inclusion of such a device in the discharge plan will help ensure that no hydrocarbon-contaminated materials migrate off site.

- 6. The effluent should be monitored prior to discharge into the POTW. Optimally, the discharge will be free of heavy metal and hydrocarbon contaminants.
- 7. If, after monitoring the discharge, it is found that hydrocarbons are still present, then a secondary treatment system may be necessary. An activated carbon filter system would enhance the removal of hydrocarbons from the discharge.

We appreciate the opportunity to review this proposed project, and hope that our comments are considered for inclusion in the discharge plan. If we can be of further assistance, please call Clent Bailey at (505) 883-7877.

Sincerely,

Jenniger Fowler-Propet

Field Supervisor

#### Enclosure

cc: (wo/enc)

Director, New Mexico Department of Game and Fish, Santa Fe, New Mexico Director, New Mexico Energy, Minerals and Natural Resources Department, Forestry and Resources Conservation Division, Santa Fe, New Mexico

NOTICE OF PUBLICATION
STATE OF NEW MEXICO
ENERGY, MINERALS AND
NATURAL RESOURCES
OIL CONSERVATION DISTRICT
NOTICE IS hereby given, that our

Notice is hereby given that pur-buant to the New Mexico. Water Quality Control Commission Regula-Quality Control Commission Regulations, the following discharge plan applications have been submitted to the Director of the Oil Conservation Division, State Land Office Building, PO Box 2088, Santa Fe, New Mexico 87504-2088, Telephone 505-827-5800. Apr. Halliburton Services, Harry Messenhelmer, P.O. Drawer

(GW-97)- Halliburton Services, Harry Mossenheimer, P.O. Drawer Services, The Marketon Farmington, New Mexico 87499, has submitted a discharge plan application for their Farmington Service Facility located in the NW/4 NE/4, Section 1, Township 29 North, Range 13 West, NMPM, San Juan County, New Mexico. Approximately 2200 gallons per day of waste water is collected in the truck washrack and floor sump and discharged and floor sump and discharged into the City of Farmington Sewage into the City of Farmington Sewage
Treatment System (POTW).
Ground water most likely to be affected by an accidential discharge is at a depth of approximately 80 feet with a total discover solids concentration ranging from 600 mg/l to 900 mg/l. The discharge plan addresses how splits, leaks, and other accidental dicharges to the surface will be amanaged.

Any interested person may obtain further information from the Oil Conservation Division and may submit

further information from the Qil Conservation Division and .may submit
written comments to the Director of
the Qil Conservation Division at the
address given above. The discharge
plan application may be Viewed at the
above address between 8:00 a.m.
and 4:00 p.m., Monday through Friday. Prior to ruling on any proposed
discharge plan or its modification, 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 to him and public
hearing may be requested by any hearing may be requested by any interested person. Requests for pub-lic 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 letterest.

interest

If no public hearing is held, the
Director will approve or disapprove
the proposed plan based on information available. If a public hearing is
hel, the director will approve or
disapprove the proposed plan besed
on information in the plan and information submitted at the hearing

GIVEN under the Seal of the New Mexico Oil Conservation Commission at Santa Fe, New Mexico on this 4th day of November, 1992 STATE OF NEW MEXICO

OIL CONSERVATION DIVISION s/William J. Lemay, Director Journal: November 20, 1992

#### S.ATE OF NEW MEXICO County of Bernalillo

'L CONSERV - UN DIVISION RECE VED

Thomas J. Smithson being duly sworn declares and says that he is National Advertising manager of the Albuquerque Journal, and that this newspaper is duly qualified to publish legal notices or advertisements within the meaning of Section 3, Chaper 167, Session Laws of 1937, and that payment therefore has been made or assessed as court costs; that the notice, a copy of which is hereto attached, was published in said paper in the regular daily edition.

SS

for	times, the first publication being on the	
	, 1992, and the subsequent consecutive	
publications on	Thomas J. Smithson	
Bernadith Orty	Sworn and subscribed to before me. a Notary Public in	
· · · · · · · · · · · · · · · · · · ·	PRICE \$22.85	(-
12-18-93	Statement to come at end of month.	12~
CLA-22-A (R-12/92)	ACCOUNT NUMBER US 1/84	

STATE OF NEW MEXICO,
County of San Juan:
KIT OWENS being duly sworn, says: "That he is the ADVERTISING MANGERR of The Farmington Daily Times, a daily newspaper of general circulation published in English in Farmington, said county and state, and that the hereto attached LEGAL NOTICE
was published in a regular and entire issue of the said Farmington Daily Times, a daily newspaper duly qualified for the purpose within the meaning of Chapter 167 of the 1937 Session Laws of the State of New Mexico for ONE consecutive (days) (/////) on the same day as follows:
First Publication WEDNESDAY, NOVEMBER 18, 1992
Second Publication_
Third Publication
Fourth Publication
and the cost of publication was \$ 32.53
Subscribed and sworn to before me this day of, 1992 .
Notary Public, San Juan County, New Mexico
My Comm expires: JULY 3, 1993

No.

30310

# NOTICE OF PUBLICATION STATE OF NEW MEXICO ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT OIL CONSERVATION DIVISION

Notice is hereby given that pursuant to New Mexico Water Quality Control Commission Regulations, the following discharge plan application has been submitted to the Director of the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Santa Fe, New Mexico 87504-2088, Telephone (505) 827-5800:

(GW-97)99 - Halliburton Services, Harry Messenhimer, P.O. Drawer 960, Farmington, New Mexico 87499, has submitted a discharge plan application for their Farmington Service Facility located in the NW/4 NE/4, Section 1,Township 29 North, Range 13 West, NMPM, San Juan County, New Mexico. Approximately 2200 gallons per day of waste water is collected in the trunk washrack and floor sump and discharged into the City of Farmington Sewage Treatment System (POTW). Ground water most likely to be affected by an accidental discharge is at a depth of approximately 80 feet with a total dissolved solids concentration ranging from 600 mg/l to 900 mg/l. The discharge plan addresses how spills, leaks, and other accidental discharges to the surface will be managed.

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 discharge plan application may be viewed at the above address between 8:00 a.m. and 5:00 p.m., Monday through Friday. Prior to ruling on any proposed discharge plan or its modification, 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 to him and public hearing may be requested by any interested person. Requests for 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.

If no public hearing is held, the Director will approve or disapprove the proposed plan based on information available. If a public hearing is held, the director will approve or disapprove the proposed plan based on information in the plan and information submitted at the hearing.

GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 4th day of November, 1992.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION WILLIAM J. LEMAY, Director

SEAL

Legal No 30310 published in the Farmington Daily Times, Farmington, New Mexico on Wednesday, November 18, 1992.

#### **NOTICE OF PUBLICATION**

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

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GIVEN under the Seal of New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 4th day of November, 1992.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY, Director

SEAL

## ACKNOWLEDGEMENT OF RECEIPT OF CHECK/CASH

I hereby acknowledge receipt of check No dated 10-9-92,
or cash received on $10/23/92$ in the amount of \$ $50.00$
from Hallibucton Company
for Farmington Service Facility GW-99
(Facility Name)  Submitted by:  Date:
Submitted to ASD by: Kathy Brown Date: 10/23/92
Received in ASD by: Showy Ganzales Date: 10/23/92
Filing Fee X New Facility Renewal
Modification Other
Organization Code 521.07 Applicable FY 93
To be deposited in the Water Quality Management Fund.
Full Payment or Annual Increment

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VOID AFTER 60 DAYS

N1005801

\$50.00

\$50 DOLLARS

DATE

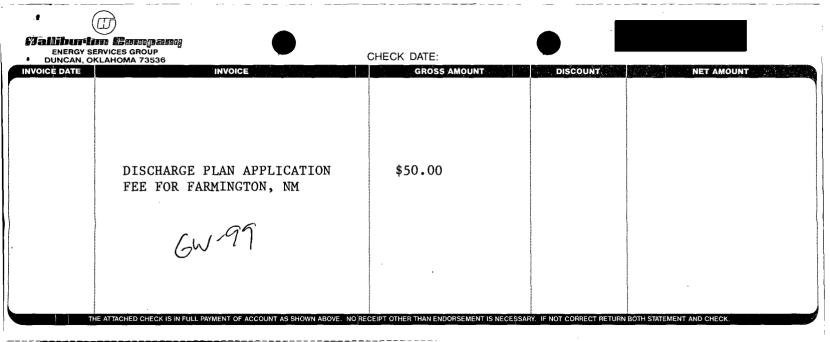
10-09-92

.00 CENTS

NMED WATER QUALITY MANAGEMENT STATE OF NM QUALITY CONTROL P O BOX 2088 STATE LAND OFFICE BLDG SANTA FE NM 87504

Ag

Jimmy E. Cooper



OIL CONSER! JN DIVISION

REC: VED

'92 JUL 21 NM 8 57

REGULATORY AFFAIRS DEPARTMENT

Writer's Direct Dial Number: (405) 251-3042

July 16, 1992

State of New Mexico Energy, Minerals and Natural Resources Department Oil Conservation Division Attention: Director P.O. Box 2088 Santa Fe, NM 87504-2088

Dear Sir,

It has recently come to my attention that the Discharge Plan Application for Oilfield Service Facilities sent to our Farmington, New Mexico site is past due. Halliburton Company, including the Halliburton Services Division, is continuing to be restructured and personnel reassigned. I have been recently assigned this work that was previously handled by Matt Ratliff.

Due to the large quantity of material requested in the application and the restructuring taking place within our organization, I am requesting an extension of the deadline until October 1st.

Thank you for you patience in this matter. If you have any questions or need additional information, please contact me at the letterhead number.

Sincerely,

MESSENHEIMER

Environmental Engineer

HHM/cl

David King cc:

Hugh Hanson

Farmington/STofNM.dsk1



#### ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING

February 21, 1992

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

## CERTIFIED MAIL RETURN RECEIPT NO. P-327-278-292

Mr. David S. King, District Manager Halliburton Services P.O. Drawer 960 Farmington, New Mexico 87499

RE: DISCHARGE PLAN REQUIREMENT FARMINGTON SERVICE FACILITY SAN JUAN COUNTY, NEW MEXICO

Dear Mr. King:

Under the provisions of the New Mexico Water Quality Control Commission (WQCC) Regulations, you are hereby notified that the filing of a discharge plan is required for your existing Farmington Service Facility located at 4109 East Main, Farmington, San Juan County, New Mexico.

This notification of discharge plan requirement is pursuant to Part 3-104 and Part 3-106 of the WQCC Regulations. The discharge plan, defined in Part 1.101.P. of the WQCC Regulations, should cover all discharges of effluent or leachate at the facility or adjacent to the facility site. Included in the application should be plans for controlling spills and accidental discharges at the facility (including detection of leaks in below grade sumps, buried underground process tanks and/or piping), and closure plans for any pits or ponds whose use will be discontinued.

A copy of the regulations is enclosed for your convenience. Also enclosed is an application and a copy of OCD Guidelines for the Preparation of Discharge Plans at Oil Field Service Facilities. Three copies of your discharge plan should be submitted for review purposes.

Section 3-106.A. of the regulations requires submittal of the discharge plan application within 120 days of receipt of this notice unless an extension of this time period is sought and approved for good cause. Part 3-106.A. also allows discharges to

Mr. David S. King February 21, 1992 Page -2-

continue without an approved discharge plan until 240 days after written notification by the Director of the OCD that a discharge plan is required. An extension of this time may be sought and approved for good cause.

Pursuant to the New Mexico Water Quality Control Commission (WQCC) Regulation 3-114 "every billable facility submitting a discharge plan for approval, modification or renewal shall pay the fees specified in this section to the Water Quality Management Fund". WQCC Rule 3-114 became effective as of August 18, 1991, and is found on page 33.1 of the enclosed WQCC Rules and Regulations.

Every billable facility submitting a new discharge plan will be assessed a fee equal to the filing fee plus either a flat fee or discharge fee. The filing fee is fifty (50) dollars and shall be submitted with the discharge plan application (nonrefundable). The remainder of the "total fee" for oil and gas service companies falls under the "flat fee" category and is equal to one-thousand, three-hundred and eighty dollars (\$1380). The flat fee for an approved discharge plan may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the discharge plan, with the first payment due at the time of approval. Please make all checks out to the NMED - Water Quality Management.

If there are any questions on this matter, please feel free to contact Roger Anderson at (505) 827-5812 or Kathy Brown at (505) 827-5884 as they have the assigned responsibility for review of all discharge plans.

Sincerely,

William J. LeMay

Director

WJL/rca

xc: Denny Foust - OCD Aztec Office

### WELL SERVICE COMPANY INSPECTION

NAME OF COMPA	NY: Halliburton - Larry Willinger					
LOCATION: 4109 E. Main, Farmington						
INSPECTION DATE: 8 / 5 / 85						
REPORT: Under ground storage tanks; a) 6,000 gal. gasoline;						
b) 6,000 gal. diesel. All cement lot-everywhere.						
Above ground tanks; a) 2 acid-some drip into sand						
by valves; b) 3 nitrogen; c) cement storage, d)self						
contained solvent bath; e) slop oil. Pump packing						
room has 25'x 2 1/2' used oil pit pumped out and						
bought by Mesa Oil (Albq.) and Radium Petroleum						
(K.C., Missouri). Separator pit: 3 concrete lined						
pits	10'sq. separates oil from water sent to city					
sewer	. Oil goes to slop oil tank. Dry chemicals					
stored in warehouse; if sack breaks, replace if pos-						
sible	, sweep up excess and put in dumpster.					
RECOMMENDATIONS	: Neutralize sand by acid tank valve. Very clean					
opera	tion; no major problems.					
FOLLOW UP:						
···						



#### TONEY ANAYA GOVERNOR

#### STATE OF NEW MEXICO

#### ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION



50 YEARS

June 4, 1985

POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING. SANTA FE, NEW MEXICO 87501 (505) 827-5800

Halliburton Services Co. 4109 E. Main Farmington, NM 87401

Dear Sir:

In response to recent events, the Oil Conservation Division is conducting a survey of well service companies operating within the State. A response to this survey is required to establish the gravity of potential pollution problems in the field.

Please check the appropriate categories describing operations at your facilities and fill-in blanks with short one or two word answers. A long, detailed description of company activities is not required at this time.

This survey is part of the OCD regulatory duties and responsibilities and it will be used to assess activities statewide. A response to this questionnaire is requested within 30 days; your full cooperation is appreciated in this matter.

If there are any questions or more information is necessary, please call Jami Bailey in Santa Fe at (505) 827-5884.

R. L. STAMETS,

Director

RLS/JB/dp

Enc.

cc: OCD District Office



## WELL SERVICE COMPANIES QUESTIONNAIRE

Check	k one or more, as applicable.						
I.	Types of Services Performed:						
	Vacuum Hauling/Tank Cleaning  X Acidizing X Fracturing X Cementing Drilling mud/additives Other (Specify)						
II. General Types of Products and Quantities Used in Service or Transported in 1984:							
	Acids Brines Caustics Drilling Mud/Additives Corrosion Inhibitors Surfactants/Polymers Shale Control Inhibitors	Quantity (bbls.) 5200 bbls.					

JUL 1985

Government Regulations Department

## III. TYPE, QUANTITY, AND LOCATION OF WELL SERVICE FLUIDS AND SOLIDS, PRODUCED WATER, OR WASTE OIL DISPOSAL

TYPE OF FLUID OR SOLID	VOLUME (BARRELS)	DISPOSAL (NO. FROM BELOW)	SITE LOCATION	NATURE OF DISPOSAL LOCATION (LETTER FROM BELOW)
Cement Fracturing Gells	Less than 50 bbls. Less than 50 bbls.	] ]	San Juan Basin San Juan Basin	. B B
Water Based Fracturing	Less than 500 bbls.	1	San Juan Basin	В
Sand Spent acid	Less than 5 bbls.	1	San Juan Basin	В

#### Disposal Sites

- 1. Individual Well Site (Do not list
   all locations)
- 2. Sanitary Landfill
- 3. Injection Wells (Do not list locations)
- 4. Evaporation Pond
- 5. Chemical Waste Tank
- 6. City Sewer
- 7. Company Facilities
- 8. Other (Specify)

#### Nature of Disposal Location

- A. Lined Pit
- B. Unlined Pit
- C. Ground Surface
- D. Above Ground Tank
- E. Buried Tank
- F. Injection Well
- G. Other (Specify)

JUL 1985

Government

Regulations

Department

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