NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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

November 19, 1999

CERTIFIED MAIL
RETURN RECEIPT NO. P.326-936-660

Ms. Corinne B. Grace
P.O. Box 1418
3722 National Parks Hwy.
Carlsbad, N.M. 88220

Re: NOTICE OF VIOLATION
Corinne B. Grace
Salty Bill Water Disposal Facility
NE/4, NW/4 of Section 36, Township 22 South, Range 26 East, NMPM
Eddy County, New Mexico

Dear Ms. Grace:

The New Mexico Oil Conservation Division (OCD) inspected the Salty Bill Water Disposal Facility operated by Corinne B. Grace on August 25, 1999 and on October 18,1999. On August 25, 1999 the inspectors found:

1. An unlined below-grade pit receiving waste oil and produced water from a leaking pump (pictures 1 & 2); and
2. Overflows at the truck unloading point that had left salt encrusted puddles (picture 3).

On October 18, 1999 the inspectors found:

1. An unlined below-grade pit receiving waste from a leaking pump (picture 4);
2. The suction tank had overflowed (picture 5);
3. Produce water tanks 1- 6 had overflowed (pictures 6 & 7);
4. A leaking valve at the truck unloading point that was leaking a steady stream (picture 8);
5. An overflowing sump (picture 8);
6. Salt encrusted puddles around the unloading areas fed by the leaking valve and overflowing sump (picture 8); and
7. The containment berm surrounding the tanks is not large enough to hold 1 1/3 the volume of all interconnected tanks (pictures 6 &7).

The OCD has reviewed the cleanup and investigation data submitted by Corinne B. Grace on June 16, 1998, June 29 1998 and August 13, 1999. The sample analysis data shows that additional site

assessment is needed at the Salty Bill Water Disposal Facility (see enclosed table). Corinne B. Grace shall submit a site assessment plan for the following investigation and remedial actions **by January 5, 2000**.

1. **Below-grade sump (pictures 1 & 4):** Analytical results at 4 feet below ground surface (bgs) from the May 14, 1998 sampling event show levels of total petroleum hydrocarbons (TPH) that are above the closure standard (100 ppm) set for this facility. Results for arsenic, barium, lead, and chloride are above Water Quality Control Commission (WQCC) standards for ground water. Additional produced water and oil have entered the unlined below-grade hole.

   A. Corinne B. Grace shall remove contaminated soils exceeding 100 ppm TPH, 50 ppm benzene, toluene, ethylbenzene, and xylene (BTEX), and 10 ppm benzene from the unlined below-grade sump. The vertical and horizontal extent of contamination shall be investigated for TPH, BTEX, benzene, arsenic, barium, lead and chloride. To determine vertical extent Corinne B. Grace shall collect samples for analysis from the center of the sump at five foot intervals. Corinne B. Grace shall determine if ground water beneath the sump has been impacted. Chloride shall be sampled until two consecutive five foot interval samples contain less than 250 ppm or until ground water is reached. If ground water is reached the Santa Fe OCD office shall be notified immediately.

   B. Corinne B. Grace shall install a double lined containment that is capable of holding an all leaks, spills, and precipitation runoff from the pump pad. In addition, Salty Bill Water Disposal Facility shall be permitted under Rule 711 (as amended 1-1-96).

2. **Excavated Former Overflow Pit (picture 9):** Analytical results at 6 feet bgs from the May 7, 1998 sampling event show levels of TPH that are above the closure standard (100 ppm) set for this facility. Results for barium and chloride are above WQCC standards for ground water.

   A. Corinne B. Grace shall remove contaminated soils exceeding 100 ppm TPH, 50 ppm BTEX, and 10 ppm benzene from the former overflow pit. The vertical and horizontal extent of contamination shall be investigated for TPH, BTEX, benzene, and chloride. To determine vertical extent Corinne B. Grace shall collect samples for analysis from the center of the pit at five foot intervals. Corinne B. Grace shall determine if ground water beneath the pit has been impacted. Chloride shall be sampled until two consecutive five foot interval samples contain less than 250 ppm or until ground water is reached. If ground water is reached the Santa Fe OCD office shall be notified

immediately.

3. **Produced Water and Skim Oil Tank Area (picture 6 &7):** Analytical results at 12 and 18 inches bgs from the May 14,1998 and May 7,1998 sampling events show levels of TPH and BTEX that are above the closure standard (100 ppm and 50 ppm) set for this facility. Results for arsenic, barium and chloride are above WQCC standards for ground water. Tanks have been overtopped and spills have not been reported or cleaned up pursuant to Rule 116.

   A. Corinne B. Grace shall remove contaminated soils exceeding 100 ppm TPH, 50 ppm BTEX, and 10 ppm benzene from the produced water and skim oil tank area. The vertical and horizontal extent of contamination shall be investigated for TPH, BTEX, benzene, arsenic, barium and chloride. To determine vertical extent Corinne B. Grace shall collect samples for analysis from 8 separate locations around the tanks at five foot intervals. Corinne B. Grace shall determine if ground water beneath the tanks has been impacted. Chloride shall be sampled until two consecutive five foot interval samples contain less than 250 ppm or until ground water is reached. If ground water is reached the Santa Fe OCD office shall be notified immediately.

   B. Corinne B. Grace shall increase the containment area for the tanks so that it will hold 1 1/3 the volume of the largest tank or all interconnected tanks.

   C. Corinne B. Grace shall modify the produce water tank system and/or monitor the volumes of water off-loaded to prevent overtopping of the system tanks.

4. **Valve Sump Off-loading Area (picture 8) :** Analytical results at 18 inches bgs from the May 14,1998 sampling event show levels of TPH and BTEX that are above the closure standard (100 ppm and 50 ppm) set for this facility. Results for arsenic, barium, lead and chloride are above WQCC standards for ground water.

   A. Corinne B. Grace shall remove contaminated soils exceeding 100 ppm TPH, 50 ppm BTEX, and 10 ppm benzene from the valve sump off-loading area. The vertical and horizontal extent of contamination shall be investigated for TPH, BTEX, benzene, arsenic, barium, lead and chloride. To determine vertical extent Corinne B. Grace shall collect samples for analysis from 1 location on the west side of the sump at five foot intervals. Chloride shall be sampled until two consecutive five foot interval samples contain less than 250 ppm or until ground water is reached. If ground water is reached the Santa Fe OCD office shall be notified immediately.

   B. Corinne B. Grace shall repair or replace the valve to prevent any future leaks.

C. Corinne B. Grace shall routinely pump out the sump to prevent overflow.

D. Corinne B. Grace shall routinely inspect and maintain the facility equipment to prevent future leaks and spills .

5. **Suction Tank (picture 5):** Tank has been overtopped and spill has not been reported or cleaned up pursuant to Rule 116.

A. Corinne B. Grace shall modify the produce water tank system and/or monitor the volumes of water off-loaded to prevent overtopping of the system tanks.

The soil and ground water samples will be sampled and analyzed using EPA-approved methods. Corinne B. Grace shall dispose of all wastes at an OCD-approved waste disposal facility.

The OCD requires that the site assessment plan be submitted to the OCD Santa Fe office (with a copy to the Artesia District office) by **January 5, 2000.** The site assessment shall contain plans detailing how the soils investigation, groundwater investigation, sampling and analysis of soils and groundwater, final closure backfilling and contouring of the facility, installation of preventative measures, and submittal of a final closure report will be performed. The site assessment plan will be reviewed by the OCD for completeness prior to the commencement of work.

Failure to submit the requested information by January 5, 2000 will result in the issuance of a compliance order which may include civil penalties pursuant to 70-2-31 NMSA 1978 as amended.

If you have any questions, please contact Martyne Kieling at (505) 827-7153.

Sincerely,

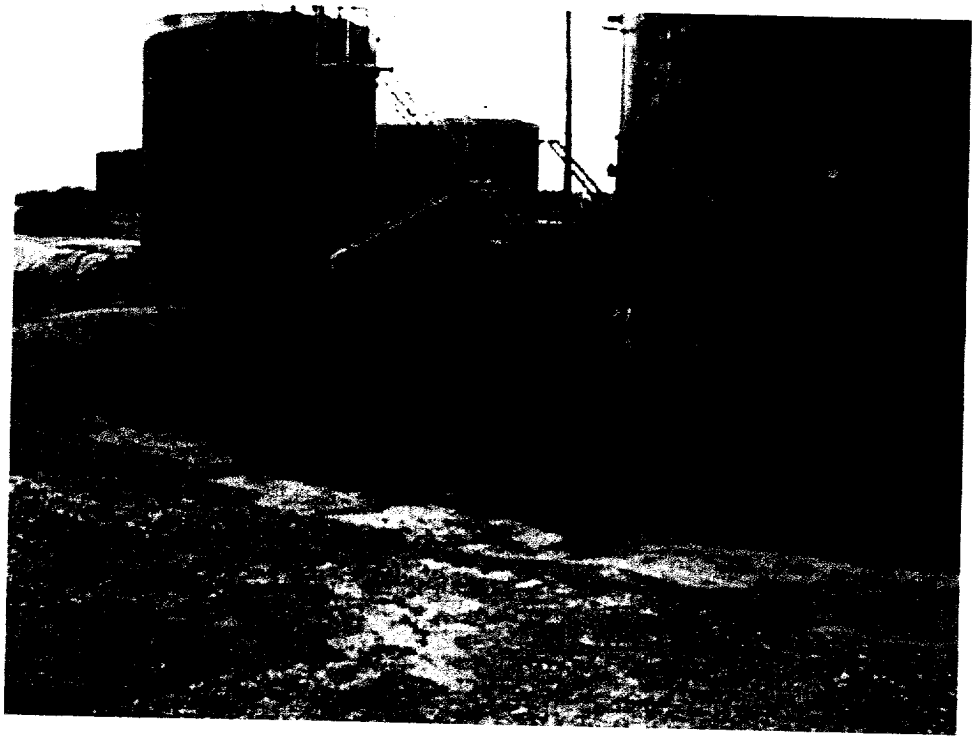
Roger C. Anderson
Environmental Bureau Chief

RCA/mjk

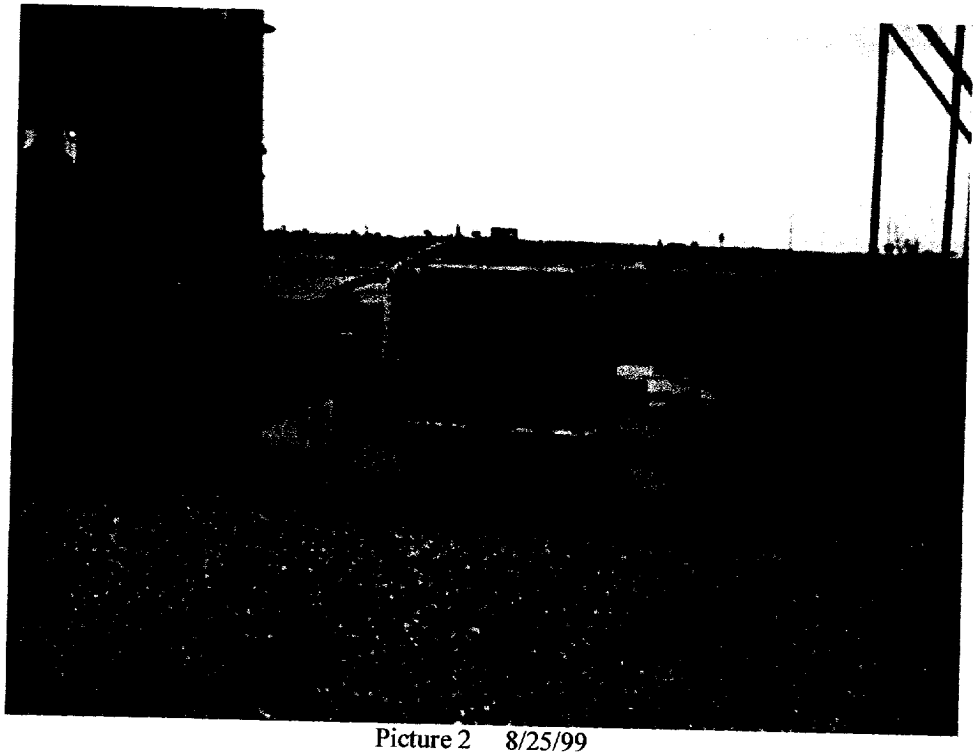
attached inspection pictures and data tables.

xc with attachments:
Artesia OCD Office

Salty Bill Water Disposal Facility

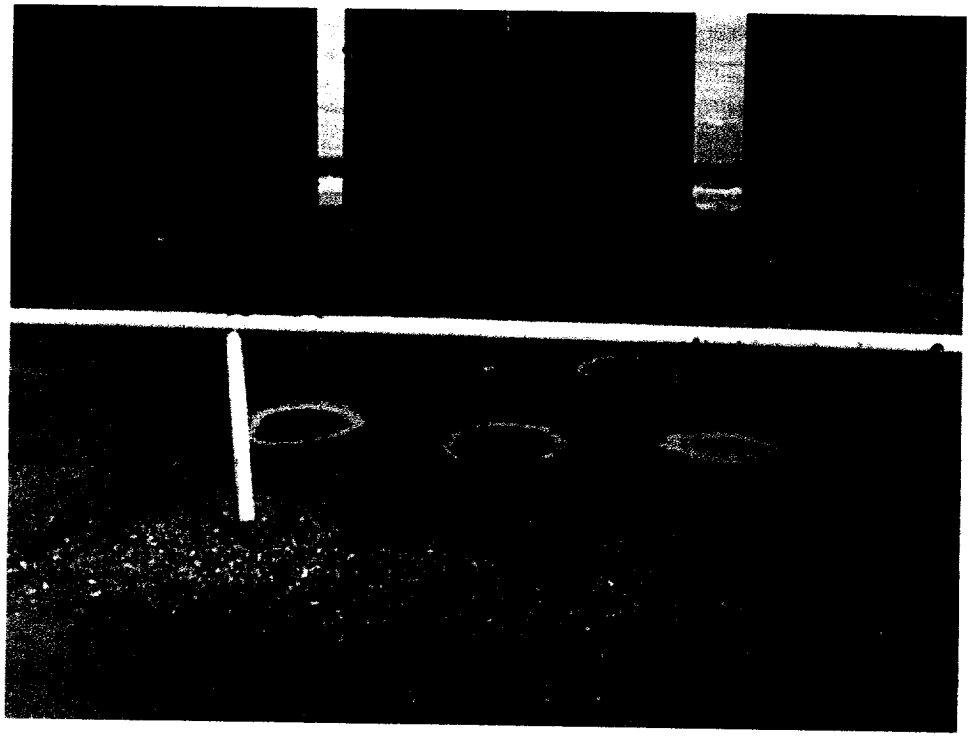


Picture 1 8/25/99



Picture 2 8/25/99

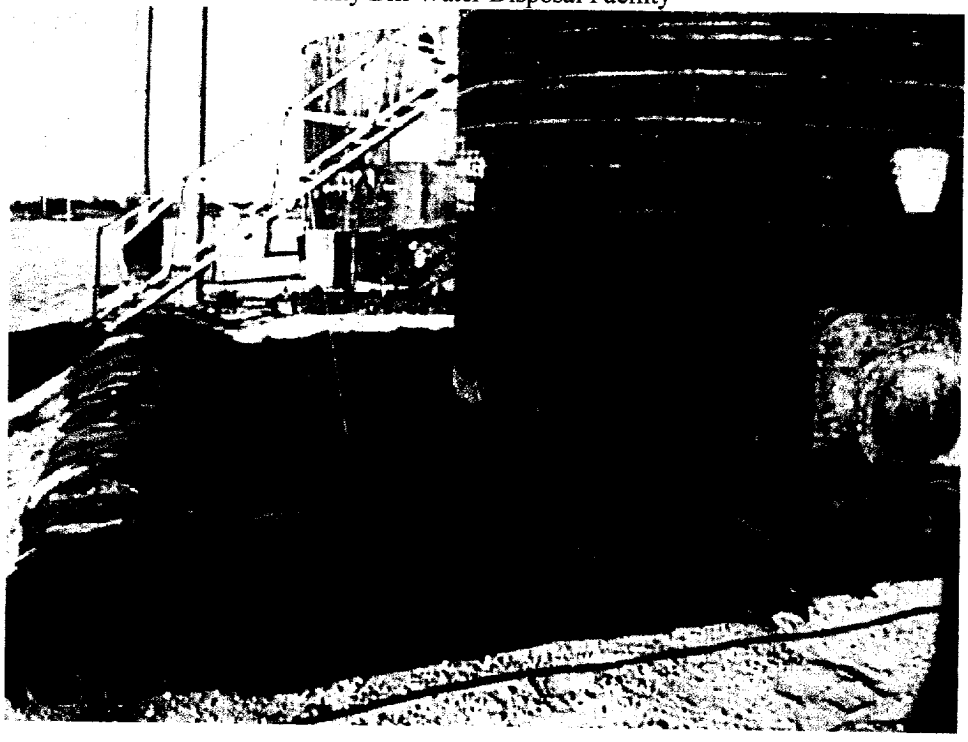
Salty Bill Water Disposal Facility



Picture 3 8/25/99

Picture 4 10/18/99

Salty Bill Water Disposal Facility



Picture 5 10/18/99

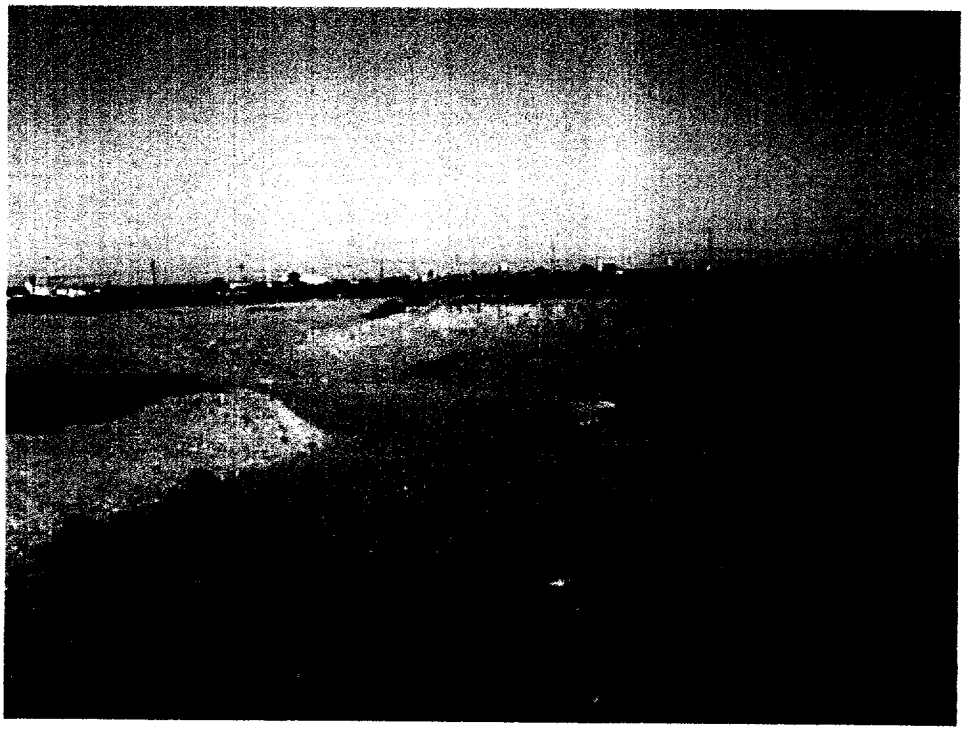
Picture 6 10/18/99

Salty Bill Water Disposal Facility

Picture 7 10/18/99

Picture 8 10/18/99

Salty Bill Water Disposal Facility



Picture 9 10/18/99

Salty Bill Water Disposal Cleanup 1998 Analytical Reports

NMOCD Required Cleanup Levels: Benzene 10 ppm, BTEX 50 ppm, TPH 100 ppm.

NMOCD Soil Investigation Guidance Levels: Metals and Chloride at WQCC levels.

Date Sampled	Sample Number	Sample Location	Sample Depth	Benzene 10 ppm	BTEX 50 ppm	Diesel range org.	Gasoline range org.	Mercury 0.002 ppm	Arsenic 0.1 ppm	Barium 1.0 ppm	Cadmium 0.01 ppm	Chromium 0.05 ppm	Lead 0.05 ppm	Selenium 0.05 ppm	Silver 0.05 ppm	Chloride 250 ppm
05/14/98	pump sump # 1	pump sump	4' bgs	<RDL	21	**4,500**	<RDL	<RDL	**1.1**	**3.0**	<RDL	<RDL	**1.1**	<RDL	<RDL	**10,000**
05/14/98	pump sump # 2	pump sump	4' bgs	<RDL	<RDL	**300**	<RDL	<RDL	**1.8**	**1.3**	<RDL	<RDL	<RDL	<RDL	<RDL	**8,800**
05/14/98	pump sump # 3	pump sump	4' bgs	<RDL	<RDL	**110**	<RDL	<RDL	**2.1**	**1.5**	<RDL	<RDL	<RDL	<RDL	<RDL	**8,500**
05/14/98	pump sump # 4	pump sump	4' bgs	<RDL	<RDL	85	<RDL	<RDL	**2.1**	**1.3**	<RDL	<RDL	<RDL	<RDL	<RDL	**9,100**
05/14/98	T-1	valve sump	18" bgs	<RDL	18	**960**	<RDL	<RDL	**2.0**	**1.6**	<RDL	<RDL	<RDL	<RDL	<RDL	**9,100**
05/14/98	T-2	valve sump	18" bgs	<RDL	**191**	**2,800**	**13**	<RDL	**1.1**	**1.6**	<RDL	<RDL	**1.2**	<RDL	<RDL	**5,100**
05/14/98	T-3	valve sump	18" bgs	<RDL	<RDL	**320**	<RDL	<RDL	**2.0**	**1.8**	<RDL	<RDL	<RDL	<RDL	<RDL	**16,000**
05/14/98	T-4	oil tanks	18" bgs	<RDL	34	**320**	<RDL	<RDL	<RDL	**1.7**	<RDL	<RDL	<RDL	<RDL	<RDL	**16,000**
05/14/98	T-5	oil tanks	18" bgs	<RDL	<RDL	**270**	<RDL	<RDL	**2.2**	**2.0**	<RDL	<RDL	<RDL	<RDL	<RDL	**15,000**
05/14/98	T-6	oil tanks	18" bgs	<RDL	<RDL	**690**	<RDL	<RDL	**1.2**	**1.6**	<RDL	<RDL	<RDL	<RDL	<RDL	**12,000**
05/14/98	T-7	oil tanks	18" bgs	<RDL		**1,500**	<RDL	<RDL	**1.9**	**1.5**	<RDL	<RDL	<RDL	<RDL	<RDL	**12,000**
05/14/98	Method blank			<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL
05/07/98	1-CG	overflow pit	6' bgs	<RDL	<RDL	**2,100**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**60,000**
05/07/98	2-CG	overflow pit	6' bgs	<RDL	<RDL	**150**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**10,000**
05/07/98	3-CG	overflow pit	6' bgs	<RDL	<RDL	**120**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**20,000**
05/07/98	4-CG	overflow pit		<RDL	<RDL	**200**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**20,000**
05/07/98	5-CG	overflow pit	6' bgs	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**30,000**
05/07/98	6-CG	overflow pit	6' bgs	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**1.7**	<RDL	<RDL	<RDL	<RDL	<RDL	**60,000**
05/07/98	7-CG	overflow pit	6' bgs	<RDL	<RDL	37	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**40,000**
05/07/98	8-CG	overflow pit		<RDL	<RDL	**1,400**	<RDL	<RDL	<RDL	**1.1**	<RDL	<RDL	<RDL	<RDL	<RDL	**40,000**
05/07/98	9-CG	overflow pit		<RDL	<RDL	**940**	<RDL	<RDL	<RDL	**1.3**	<RDL	<RDL	<RDL	<RDL	<RDL	**60,000**
05/07/98	10-CG	overflow pit		<RDL	<RDL	**720**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**30,000**
05/07/98	11-CG	overflow pit		<RDL	<RDL	34	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**80,000**
05/07/98	12-CG	overflow pit		<RDL	<RDL	**360**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**20,000**
05/07/98	13-CG	p. water tanks	12" bgs	<RDL	5.9	**350**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**40,000**
05/07/98	14-CG	p. water tanks	12" bgs	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**1.0**	<RDL	<RDL	<RDL	<RDL	<RDL	**40,000**
05/07/98	15-CG	p. water tanks	12" bgs	<RDL	**60**	**1,200**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**30,000**
05/07/98	16-CG	p. water tanks	12" bgs	<RDL	<RDL	**780**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**30,000**
05/07/98	17-CG	p. water tanks	12" bgs	<RDL	<RDL	**130**	<RDL	<RDL	<RDL	**1.3**	<RDL	<RDL	<RDL	<RDL	<RDL	**30,000**
05/07/98	18-CG	p. water tanks	12" bgs	<RDL	43	**860**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**30,000**
05/07/98	19-CG	p. water tanks	12" bgs	<RDL	<RDL	**310**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**20,000**
05/07/98	20-CG	p. water tanks	12" bgs	<RDL	<RDL	**150**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**30,000**
05/07/98	21-CG	p. water tanks	12" bgs	<RDL	<RDL	**1000**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**30,000**
05/07/98	22-CG	p. water tanks	12" bgs	<RDL	<RDL	**560**	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	**40,000**
05/07/98	Method blank			<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL	<RDL

NOTE: Soil sample concentrations in **Bold** are above site standards or above WQCC standards.