BW - 4

MONITORING REPORTS

DATE:

REMEDIATION

Whole Earth Environmental, Inc.
2103 Arbor Cove
Katy, Tx. 77494
281.394.2050
whearth@msn.com

October 20, 2004

Wayne Price
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Sante Fe, NM 87505

Attn: Wayne Price

Dear Wayne:
Enclosed, please find a copy of the soil and water analysis from a monitor well situated at the southeast corner of the above ground storage pit at the Gandy Eidson Station near Lovington. As you will note from the attached results, we've fairly significant chloride concentrations within the soil to a depth of approximately 30' below ground surface. As we go deeper, we've got a 255 ppm concentration for approximately 20' and then 30' of non detectable concentrations immediately above the water table.

The results of sampling the water reveals the monitor well to have no detectable BTEX and acceptable concentrations of chlorides – indeed the chloride concentration within the monitor well is less than the source well located approximately 150' up-gradient.

Wayne, we've presently got three activities relating to this station all working concurrently. The first is our request to modify the permit to allow us to place a series of four tanks on the property to replace the above ground pit. In our telecom of this morning, you indicated that the permit application is coming near to review. If approved, we will immediately set the tanks in the location shown on the attached diagrams and begin earnestly removing the above ground impoundment.

The second issue before the OCD is the review and approval of a spill plan for the January release that ran along the highway. If the plan is approved, we can immediately begin the excavation and clay capping of the affected area.

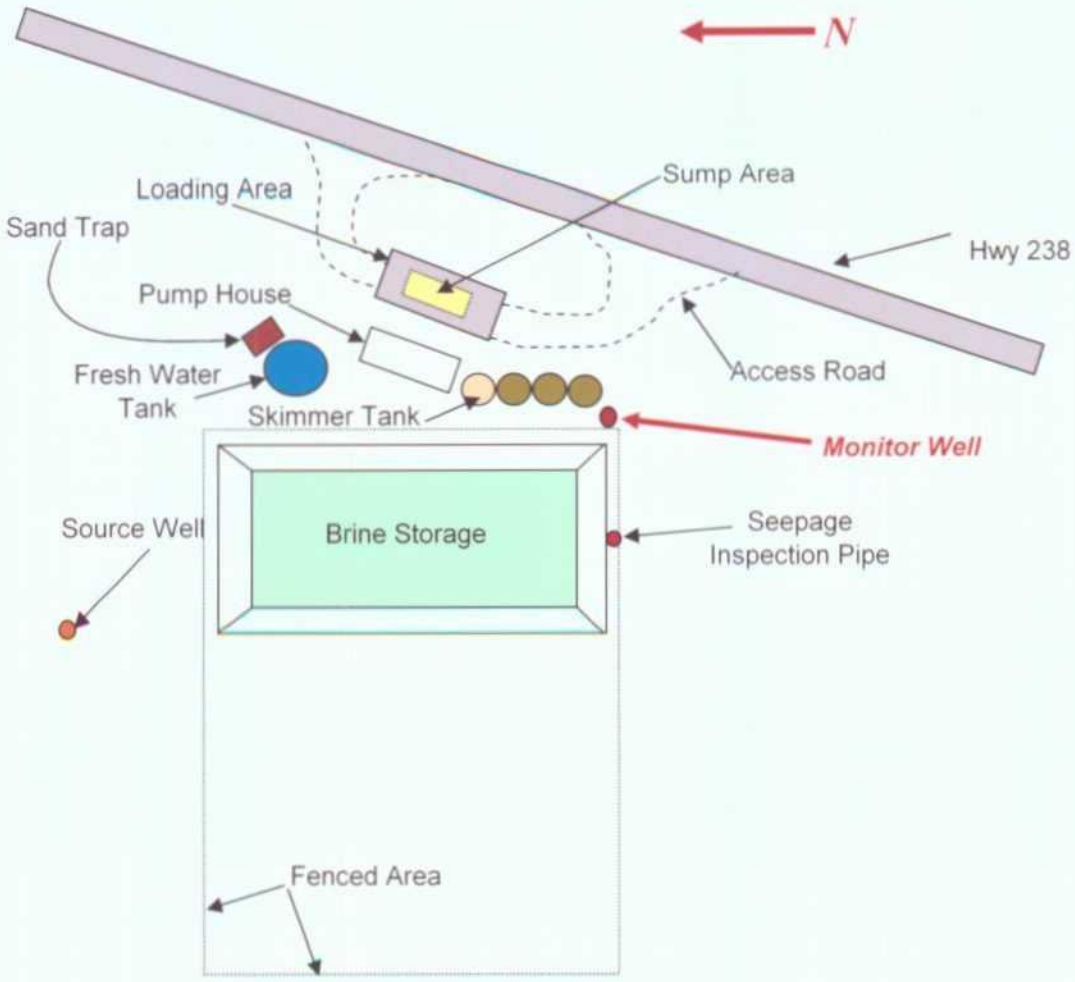
The third issue is the pit and surrounding area. The soil borings conducted last May and earlier this month indicate a fairly large area of brine contaminated soils to exist around the entire facility. Until we remove the pit we'll not be able to really get our arms around the extent of spread. Perhaps we could set this issue up as a separate file within your office and return to it within a couple of months. This will give us some time to actually set up the replacement for the existing pit and allow us to make some progress in getting the pit out of service.

Warmest regards,

Mike Griffin
President
Whole Earth Environmental, Inc.

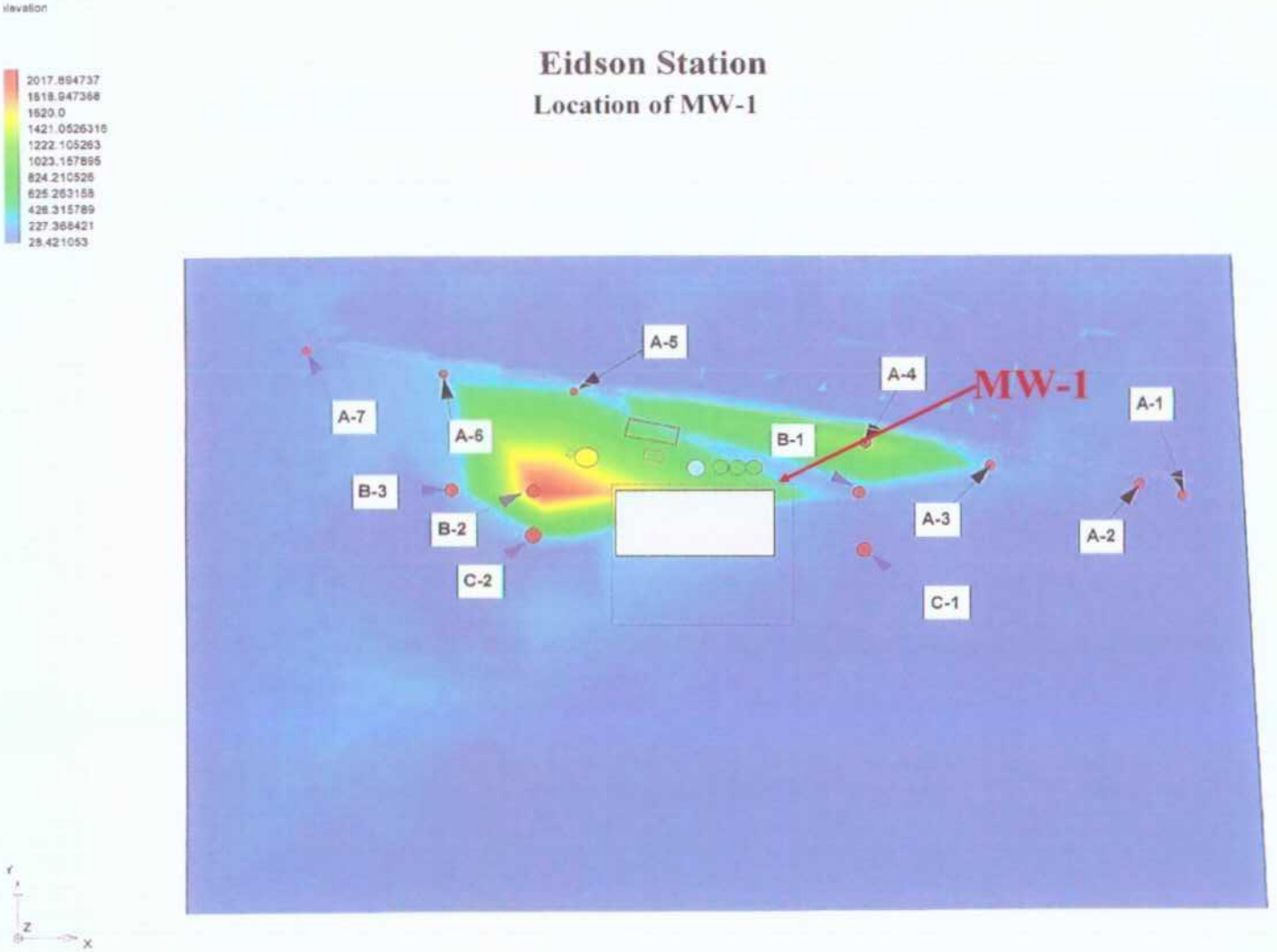
cc. Larry Gandy / Gandy Corporation
Paul Sheeley / NMOCD – Hobbs Office

Gandy Corporation
Eidson Brine Station
Site Schematic



Eidson Station

Location of MW-1



ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Mike Griffin

WHOLE EARTH ENVIRONMENTAL

2103 Arbor Cove

Katy, TX 77494

Project: Eidson Station

Project Number: None Given

Location: None Given

Lab Order Number: 4J04013

Report Date: 10/17/04

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Station	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	10/17/04 17:17

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	4J04013-01	Water	10/02/04 00:00	10/03/04 13:00
Source	4J04013-02	Water	10/02/04 00:00	10/03/04 13:00

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Station	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	10/17/04 17:17

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4J04013-01) Water									
Benzene	ND	0.00100	mg/L	1	EJ41205	10/11/04	10/11/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*88.8 %*		*80-120*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*89.7 %*		*80-120*	"	"	"	"	
Source (4J04013-02) Water									
Benzene	ND	0.00100	mg/L	1	EJ41205	10/11/04	10/12/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*87.2 %*		*80-120*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*81.1 %*		*80-120*	"	"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Station	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	10/17/04 17:17

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4J04013-01) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EJ40705	10/04/04	10/04/04	EPA 310.2M	
Bicarbonate Alkalinity	**184**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**230**	5.00	"	"	EJ40704	10/05/04	10/05/04	EPA 325.3M	
Sulfate	**537**	5.00	"	10	EJ40905	10/09/04	10/09/04	EPA 375.4	
Source (4J04013-02) Water									
Carbonate Alkalinity	ND	0.100	mg/L	1	EJ40705	10/04/04	10/04/04	EPA 310.2M	
Bicarbonate Alkalinity	**112**	2.00	"	"	"	"	"	"	
Hydroxide Alkalinity	ND	0.100	"	"	"	"	"	"	
Chloride	**292**	5.00	"	"	EJ40704	10/05/04	10/05/04	EPA 325.3M	
Sulfate	**1840**	25.0	"	50	EJ40905	10/09/04	10/09/04	EPA 375.4	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Station	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	10/17/04 17:17

Total Metals by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (4J04013-01) Water									
Calcium	**190**	1.00	mg/L	100	EJ41404	10/13/04	10/13/04	EPA 6010B	
Magnesium	**47.2**	0.0100	"	10	"	"	"	"	
Potassium	**9.47**	0.100	"	2	"	"	"	"	
Sodium	**110**	1.00	"	100	"	"	"	"	
Source (4J04013-02) Water									
Calcium	**883**	10.0	mg/L	1000	EJ41404	10/13/04	10/13/04	EPA 6010B	
Magnesium	**78.5**	0.100	"	100	"	"	"	"	
Potassium	**37.4**	0.500	"	10	"	"	"	"	
Sodium	**99.6**	1.00	"	100	"	"	"	"	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ41205 - EPA 5030C (GC)										
Blank (EJ41205-BLK1)				Prepared & Analyzed: 10/11/04						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*85.4*		*ug/l*	*100*		*85.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*83.1*		"	*100*		*83.1*	*80-120*			
LCS (EJ41205-BS1)				Prepared & Analyzed: 10/11/04						
Benzene	91.9		ug/l	100		91.9	80-120			
Toluene	91.6		"	100		91.6	80-120			
Ethylbenzene	82.7		"	100		82.7	80-120			
Xylene (p/m)	176		"	200		88.0	80-120			
Xylene (o)	84.7		"	100		84.7	80-120			
Surrogate: a,a,a-Trifluorotoluene	*104*		"	*100*		*104*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*111*		"	*100*		*111*	*80-120*			
Calibration Check (EJ41205-CCV1)				Prepared: 10/11/04 Analyzed: 10/12/04						
Benzene	89.8		ug/l	100		89.8	80-120			
Toluene	91.6		"	100		91.6	80-120			
Ethylbenzene	82.5		"	100		82.5	80-120			
Xylene (p/m)	176		"	200		88.0	80-120			
Xylene (o)	83.6		"	100		83.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	*102*		"	*100*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*117*		"	*100*		*117*	*80-120*			
Matrix Spike (EJ41205-MS1)	**Source: 4J04013-02**			Prepared: 10/11/04 Analyzed: 10/12/04						
Benzene	88.4		ug/l	100	ND	88.4	80-120			
Toluene	89.2		"	100	ND	89.2	80-120			
Ethylbenzene	80.4		"	100	ND	80.4	80-120			
Xylene (p/m)	165		"	200	ND	82.5	80-120			
Xylene (o)	80.4		"	100	ND	80.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	*101*		"	*100*		*101*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*107*		"	*100*		*107*	*80-120*			

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	*Result*	Reporting *Limit*	*Units*	Spike *Level*	Source *Result*	%REC	%REC *Limits*	RPD	RPD *Limit*	Notes
Batch EJ41205 - EPA 5030C (GC)										
Matrix Spike Dup (EJ41205-MSD1)	**Source: 4J04013-02**			Prepared: 10/11/04 Analyzed: 10/12/04						
Benzene	91.3		ug/l	100	ND	91.3	80-120	3.23	20	
Toluene	92.0		"	100	ND	92.0	80-120	3.09	20	
Ethylbenzene	82.3		"	100	ND	82.3	80-120	2.34	20	
Xylene (p/m)	174		"	200	ND	87.0	80-120	5.31	20	
Xylene (o)	83.2		"	100	ND	83.2	80-120	3.42	20	
Surrogate: a,a,a-Trifluorotoluene	*103*		"	*100*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*110*		"	*100*		*110*	*80-120*			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ40704 - General Preparation (WetChem)										
Blank (EJ40704-BLK1)				Prepared & Analyzed: 10/05/04						
Chloride	ND	5.00	mg/L							
Matrix Spike (EJ40704-MS1)		Source: 4I29007-01		Prepared & Analyzed: 10/05/04						
Chloride	4250	5.00	mg/L	1000	3260	99.0	80-120			
Matrix Spike Dup (EJ40704-MSD1)		Source: 4I29007-01		Prepared & Analyzed: 10/05/04						
Chloride	4270	5.00	mg/L	1000	3260	101	80-120	0.469	20	
Reference (EJ40704-SRM1)				Prepared & Analyzed: 10/05/04						
Chloride	4960		mg/L	5000		99.2	80-120			
Batch EJ40705 - General Preparation (WetChem)										
Blank (EJ40705-BLK1)				Prepared & Analyzed: 10/04/04						
Carbonate Alkalinity	ND	0.100	mg/L							
Bicarbonate Alkalinity	ND	2.00	"							
Hydroxide Alkalinity	ND	0.100	"							
Duplicate (EJ40705-DUP1)		Source: 4J04013-01		Prepared & Analyzed: 10/04/04						
Carbonate Alkalinity	0.00	0.100	mg/L		0.00				20	
Bicarbonate Alkalinity	183	2.00	"		184			0.545	20	
Hydroxide Alkalinity	0.00	0.100	"		0.00				20	
Reference (EJ40705-SRM1)				Prepared & Analyzed: 10/04/04						
Carbonate Alkalinity	0.0500		mg/L	0.0500		100	80-120			

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ40905 - General Preparation (WetChem)										
Blank (EJ40905-BLK1)				Prepared & Analyzed: 10/09/04						
Sulfate	ND	0.500	mg/L							
Calibration Check (EJ40905-CCV1)				Prepared & Analyzed: 10/09/04						
Sulfate	48.3		mg/L	50.0		96.6	80-120			
Duplicate (EJ40905-DUP1)	**Source: 4J04007-02**			Prepared & Analyzed: 10/09/04						
Sulfate	230	2.50	mg/L		222			3.54	20	

Total Metals by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ41404 - 6010B/No Digestion										
Blank (EJ41404-BLK1)				Prepared & Analyzed: 10/13/04						
Calcium	ND	0.0100	mg/L							
Magnesium	ND	0.00100	"							
Potassium	ND	0.0500	"							
Sodium	ND	0.0100	"							
Calibration Check (EJ41404-CCV1)				Prepared & Analyzed: 10/13/04						
Calcium	2.09		mg/L	2.00		104	85-115			
Magnesium	2.09		"	2.00		104	85-115			
Potassium	1.90		"	2.00		95.0	85-115			
Sodium	1.91		"	2.00		95.5	85-115			
Duplicate (EJ41404-DUP1)	**Source: 4J04013-02**			Prepared & Analyzed: 10/13/04						
Calcium	914	10.0	mg/L		883			3.45	20	
Magnesium	78.6	0.100	"		78.5			0.127	20	
Potassium	38.2	0.500	"		37.4			2.12	20	
Sodium	96.6	1.00	"		99.6			3.06	20	

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K. Tuttle Date: 10/17/04

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Biezugbe, Lab Tech.

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Mike Griffin

WHOLE EARTH ENVIRONMENTAL

2103 Arbor Cove

Katy, TX 77494

Project: Eidson Station

Project Number: None Given

Location: None Given

Lab Order Number: 4J04006

Report Date: 10/11/04

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Station	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	10/11/04 12:30

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Eidson @ 10'	4J04006-01	Soil	10/01/04 00:00	10/03/04 13:00
Eidson @ 20'	4J04006-02	Soil	10/01/04 00:00	10/03/04 13:00
Eidson @ 30'	4J04006-03	Soil	10/01/04 00:00	10/03/04 13:00
Eidson @ 40'	4J04006-04	Soil	10/01/04 00:00	10/03/04 13:00
Eidson @ 50'	4J04006-05	Soil	10/01/04 00:00	10/03/04 13:00
Eidson @ 60'	4J04006-06	Soil	10/01/04 00:00	10/03/04 13:00
Eidson @ 70'	4J04006-07	Soil	10/01/04 00:00	10/03/04 13:00
Eidson @ 80'	4J04006-08	Soil	10/01/04 00:00	10/03/04 13:00

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Station	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	Reported:
Katy TX, 77494	Project Manager: Mike Griffin	10/11/04 12:30

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Eidson @ 10' (4J04006-01) Soil									
Chloride	**12800**	20.0	mg/kg Wet	2	EJ40708	10/04/04	10/06/04	SW 846 9253	
Eidson @ 20' (4J04006-02) Soil									
Chloride	**4470**	20.0	mg/kg Wet	2	EJ40708	10/04/04	10/06/04	SW 846 9253	
Eidson @ 30' (4J04006-03) Soil									
Chloride	**2340**	20.0	mg/kg Wet	2	EJ40708	10/04/04	10/06/04	SW 846 9253	
Eidson @ 40' (4J04006-04) Soil									
Chloride	**255**	20.0	mg/kg Wet	2	EJ40708	10/04/04	10/06/04	SW 846 9253	
Eidson @ 50' (4J04006-05) Soil									
Chloride	**255**	20.0	mg/kg Wet	2	EJ40708	10/04/04	10/06/04	SW 846 9253	
Eidson @ 60' (4J04006-06) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EJ40708	10/04/04	10/06/04	SW 846 9253	
Eidson @ 70' (4J04006-07) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EJ40708	10/04/04	10/06/04	SW 846 9253	
Eidson @ 80' (4J04006-08) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EJ40708	10/04/04	10/06/04	SW 846 9253	

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Station	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	Reported:
Katy TX, 77494	Project Manager: Mike Griffin	10/11/04 12:30

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EJ40708 - Water Extraction										
Blank (EJ40708-BLK1)				Prepared: 10/04/04 Analyzed: 10/06/04						
Chloride	ND	20.0	mg/kg Wet							
Matrix Spike (EJ40708-MS1)		Source: 4J04006-01		Prepared: 10/04/04 Analyzed: 10/06/04						
Chloride	13200	20.0	mg/kg Wet	500	12800	80.0	80-120			
Matrix Spike Dup (EJ40708-MSD1)		Source: 4J04006-01		Prepared: 10/04/04 Analyzed: 10/06/04						
Chloride	13200	20.0	mg/kg Wet	500	12800	80.0	80-120	0.00	20	
Reference (EJ40708-SRM1)				Prepared & Analyzed: 10/06/04						
Chloride	5000		mg/kg	5000		100	80-120			

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Station	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	Reported:
Katy TX, 77494	Project Manager: Mike Griffin	10/11/04 12:30

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K. Tuttle Date: 10/11/04

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Biezugbe, Lab Tech.

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

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
2040 South Pacheco
Santa Fe, NM 87505

Revised March 17, 1999

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

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)

☐ New ☐ Renewal ☒ Modification

1. Type: BRINE STATION
2. Operator: WASSERHUND, INC

   Address: P. O. BOX 827, TATUM, NM 88267

   Contact Person: LARRY GANDY Phone: 505-398-4960

3. Location: SW /4 SW /4 Section 31 Township 16-S Range 35-E
   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.
7. 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 OCD rules, regulations and/or orders.

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

Name: LARRY GANDY Title: VICE-PRESIDENT

Signature: Larry Gandy Date: 5-27-04

IV. Attach the name, telephone number and address of the landowner of the facility site.

Response: The landowner of this facility is the State of New Mexico. Gandy Corporation makes annual rental payments to the office of the Commissioner of Public Lands, P. O. Box 1148, Sante Fe, New Mexico 87504-1148. Phone: (505) 398-4960.

The facility was purchased by the Gandy Corporation from Wasserhund Incorporated on October 1, 2000.

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

Response: Enclosed are Exhibits 1, 2 and 3 providing a schematic of the facility, location of flow lines, and a process description.

VI. Attach a description of all materials stored or used at the facility.

Response: There are no materials stored or routinely used at this facility.

VII. Attach a description of present sources of effluent and solid waste. Average quality and daily volume of waste water must be included.

Response: The facility produces no solid waste. The average daily volume of effluent is 5 barrels per day. The quality of effluent is contained within Exhibit 4.

VIII. Attach a description of current liquid and solid waste collection / treatment / disposal procedures.

Response: Exhibit 5 shows a cement loading ramp complete with a concrete sump tank to catch any spills of overflows. In the event of a spill or overflow, an electrical automatic float switch activates a sump pump and any spillage or overflow is pumped into the elevated 210 barrel tank shown on exhibit 6. Water from this tank is pumped into and removed by transport trucks.

The site is automatically metered to the extent that water, brine and fresh, can be counted at any time. Low and high pressure switches are mounted on all lines, and in the event of a spill, break or overflow that the sump pump cannot handle, the facility shuts down completely and automatically.

IX. Attach a description of proposed modifications to existing collection / treatment / disposal systems.

Response: We are planning the installation of three five hundred barrel above ground storage tanks and related impoundments to serve as an augmentation to the existing above ground surface impoundment for brine water. We ultimately intend to close the above ground surface impoundment in favor of tank storage only.

X. Attach a routine inspection and maintenance plan to insure permit compliance.

Response: The facility will be inspected on a weekly basis and after each heavy rainfall event. The inspection will look for any leaks, breaks, or spills. All pumps and flowlines will be inspected for obvious wear or damage.

XI. Attach a contingency plan for reporting and clean up of spills or releases.

Response: Gandy Corporation owns and operates backhoes, vacuum trucks and other construction equipment commonly employed on spill clean-ups. In the event of an unplanned release of brine water, Gandy will immediately notify the Hobbs office of the NMOCD and remove all free liquids. Such removed liquids will be sent to commercial disposal.

All impacted soils will be delineated as to both vertical and lateral extent and all affected soils removed to commercial disposal. Replacement soils will be re-deposited within the excavated area and compacted to match the surrounding topographical elevations.

XII. Attach geological hydrological information for the facility. Depth to and quality of groundwater must be included

Response: Exhibit 7 provides a cross section of the brine well. The quality of the well water is provided within Exhibit 4.

XIII. Attach a facility closure plan, and other information as is necessary to demonstrate compliance with any other OCD rules, regulations and / or orders.

Response: There are five closure issues within this facility.

A. **Wells:** At abandonment, the brine extraction well will be plugged in accordance with all appropriate state law.

B. **Lined Storage Reservoir Fluids:** At abandonment, all non-commercial grade fluids contained within the lined surface impoundment will be collected and transported to a licensed disposal facility.

C. **Lined Surface Reservoir Solids:** The plastic liner and associated solids consisting primarily of sodium chloride contaminated blow sands will be transported to a licensed commercial facility for disposal.

D. **Tanks and Ancillary Equipment:** Storage tanks, pumps, fencing materials, piping and other structures will be removed from the site. The final disposition of these materials is dependant on their condition at the time of dismantlement. Cement structures will be removed and transported to commercial disposal.

E. Contaminated Soils: After all surface structures are removed from the facility, the soils will be analyzed for the presence and concentrations of total petroleum hydrocarbons, benzene, toluene, ethylbenzene, xylene and chlorides. All soils containing criteria contaminant concentrations in excess of NMOCD closure guidelines will either be remediated in accordance NMOCD spill closure guidelines or transported to commercial disposal.

Quarterly reports for both fresh and brine water produced are sent to the proper authorities. Fresh water reporting goes to the State Engineer Office, 1900 West Second Street, Roswell, New Mexico 88201. Brine water reporting goes to the Commissioner of Public Lands, Box 1148, Sante Fe, New Mexico 87504. Fresh and brine water reporting goes to the Oil Conservation Division, State Land Office Building, P.O. Box 2088, Sante Fe, New Mexico 87504.

Exhibits

- Exhibit 1: Plat map of the facility.
- Exhibit 2: Flow Schematic of the facility.
- Exhibit 3: Narrative of flow schematic.
- Exhibit 4: Chain of custody and laboratory analytical results of fresh and produced brine waters.
- Exhibit 5: Photograph of sump grate.
- Exhibit 6: Photograph of sump water storage tank.
- Exhibit 7: Schematic cross section of the brine well.

Gandy Corporation
Eidson Brine Station
Exhibit 1
Site Schematic
Exhibit 2

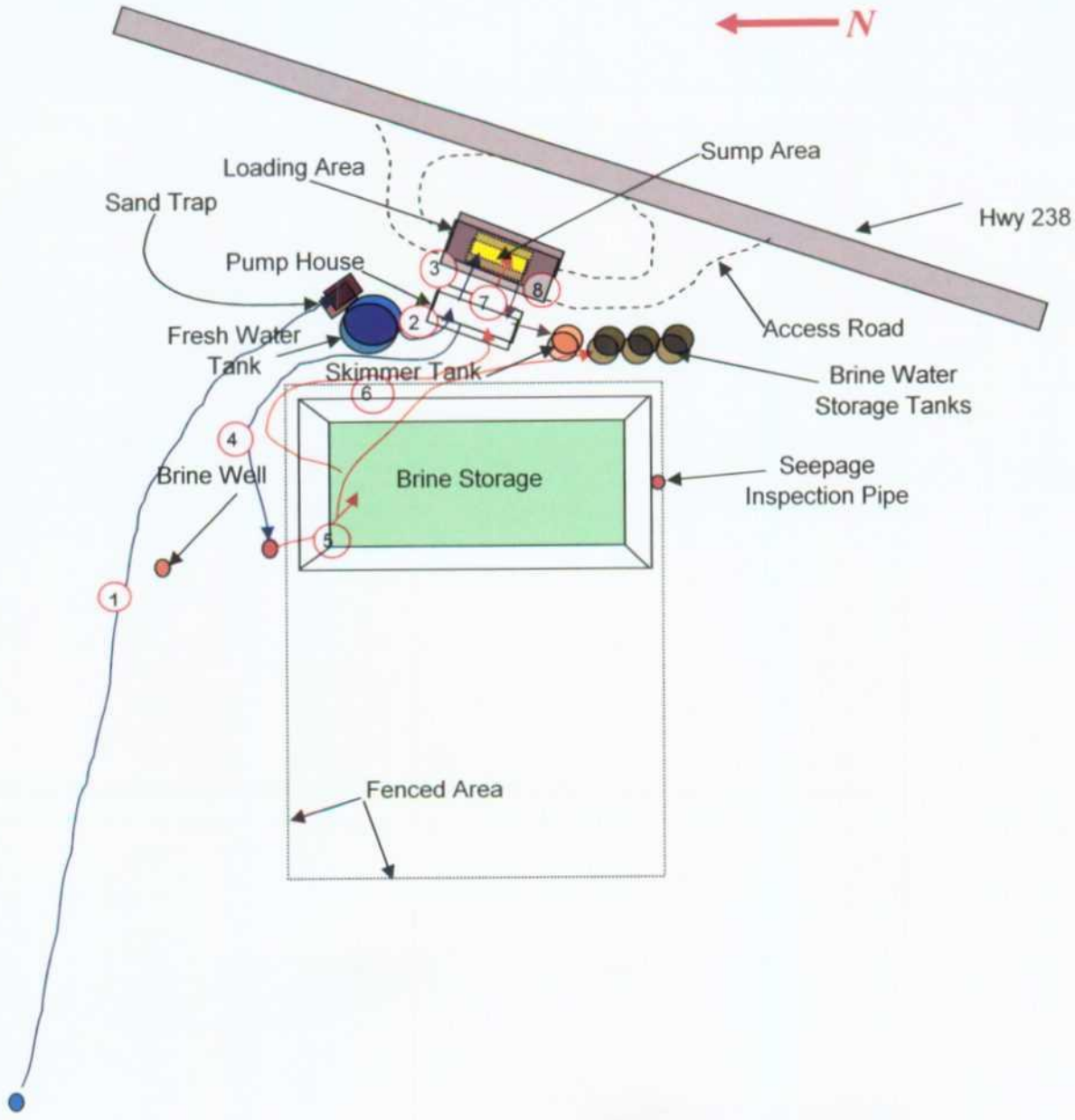


Exhibit 3
Eidson Brine Station
Process Description

1. Fresh water is pumped from a well through a sand filter and into a 500 barrel storage tank.
2. The fresh water is transferred from the storage tank to the pump house.
3. The fresh water may be pumped directly into an overhead truck loading system
4. Fresh water may also be diverted into the annulus of the brine well.
5. Brine water may be pumped into an above grade reservoir ***(or)*** **into three 500 bbl. storage tanks**
5. The brine water is then diverted to the pump station.
6. The brine water is pumped through an overhead loading system directly into trucks.
7. Runoff or effluent is collected within a sump and automatically pumped into a 210 barrel tank where it is trucked off to commercial disposal.

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL
ATTN: MR. MIKE GRIFFIN
19606 SAN GABRIEL
HOUSTON, TEXAS 77084
FAX: 281-646-8996

Sample Type: Water
Sample Condition: Intact/ 4 deg. C
Project #: None Given
Project Name: Eidson Station
Project Location: None Given

Sampling Date: 12/04/00
Receiving Date: 12/09/00
Analysis Date: See Below

ELT#	FIELD CODE	Sulfate mg/L	Chloride mg/L	Carbonate mg/L	Bicarbonate mg/L	TDS mg/L	Conductivity uS/cm
35143	Salt Water	3113	221563	<2	78	332232	164200
35144	Fresh Water	60.2	35	<2	146	318	590
	QUALITY CONTROL	50.5	5318	*	*	*	1432
	TRUE VALUE	50.0	5000	*	*	*	1413
	% PRECISION	101	106	*	*	*	101
	BLANK	<0.5	<10	<2	<2	<5	*
	ANALYSIS DATE	12/13/00	12/12/00	12/12/00	12/12/00	12/11/00	12/12/00

METHODS: EPA 375.4, 325.3, 310, 160.1, 120.1

Raland K. Tuttle

12-27-00
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL
ATTN: MR. MIKE GRIFFIN
19606 SAN GABRIEL
HOUSTON, TEXAS 77084
FAX: 281-646-8996

Sample Type: Water
Sample Condition: Intact/ 4 deg. C
Project #: None Given
Project Name: Eidson Station
Project Location: None Given

Sampling Date: 12/04/00
Receiving Date: 12/09/00
Analysis Date: 12/12/00

ELT#	FIELD CODE	pH s.u.	Hardness mg/L	Specific Gravity @ 60 deg F
35143	Salt Water	6.88	42000	1.185
35144	Fresh Water	8.42	650	1.000
	QUALITY CONTROL	7.02	*	*
	TRUE VALUE	7.00	*	*
	% PRECISION	100	*	*
	BLANK	*	<10	*

METHODS: EPA 150.1, 130.2

Raland K. Tuttle

12-27-00
Date

ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

WHOLE EARTH ENVIRONMENTAL
ATTN: MR. MIKE GRIFFIN
19606 SAN GABRIEL
HOUSTON, TEXAS 77084
FAX: 281-646-8996

Sample Type: Water
Sample Condition: Intact/ 4 deg. C
Project #: None Given
Project Name: Eidson Station
Project Location: None Given

Sampling Date: 12/04/00
Receiving Date: 12/09/00
Analysis Date: 12/12, 12/14, 12/20/00

ELT#	FIELD CODE	Ca mg/L	Mg mg/L	Fe mg/L	Ba mg/L
35143	Salt Water	2328	7885	1.44	<0.10
35144	Fresh Water	34.2	9.52	0.18	<0.10
	QUALITY CONTROL	10.29	4.91	0.99	2.01
	TRUE VALUE	10.00	5.00	1.00	2.00
	% PRECISION	103	93	99	100
	BLANK	<0.10	<0.10	<0.03	<0.10

METHODS: SM 7000 series

Raland K. Tuttle

12-27-00
Date

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: M. Griffin
Company Name: Whole Earth Environmental
Company Address:
City/State/Zip:
Telephone No: 800-854-4358 Fax No: 281-646-8996
Sampler Signature:

Project Name: Edson Station
Project #:
Project Loc:
PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	Preservative: HNO_3 – metals	Preservative: HCl	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None	Preservative: Other (Specify) None	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify)	Analyze For: TCLP: (TDS) Cl / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	TCLP: TOTAL: ~~Metals: As Ag Ba Cd Cr Pb Hg Se~~ NO3 – F	Volatiles	Semivolatiles	BTEX 8021B/5030	Chlorides, SO_4	Alk, CO_3/HCO_3 pH	Hardness	Mg, Ca, Fe, Ba	Spec. Gravity	RUSH TAT (Pre-Schedule)	Standard TAT
35143	Salt Water	12-4	9:40	2	X	X					X					X								1	X	X	X	X		
35144	Fresh Water	12-4	9:46	2	X	X					X					X								1	X	X	X	X		

Special Instructions:

Sample Containers Intact? (Y) N
Temperature Upon Receipt: Rec 4°C
Laboratory Comments: * = as per M. Griffin 12-1-00

Relinquished by:	Date	Time	Received by:	Date	Time
M. Griffin	12-09-00	1230			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			[illegible]	12.09.00	1230


Exhibit 5
Detail of Drainage Grate

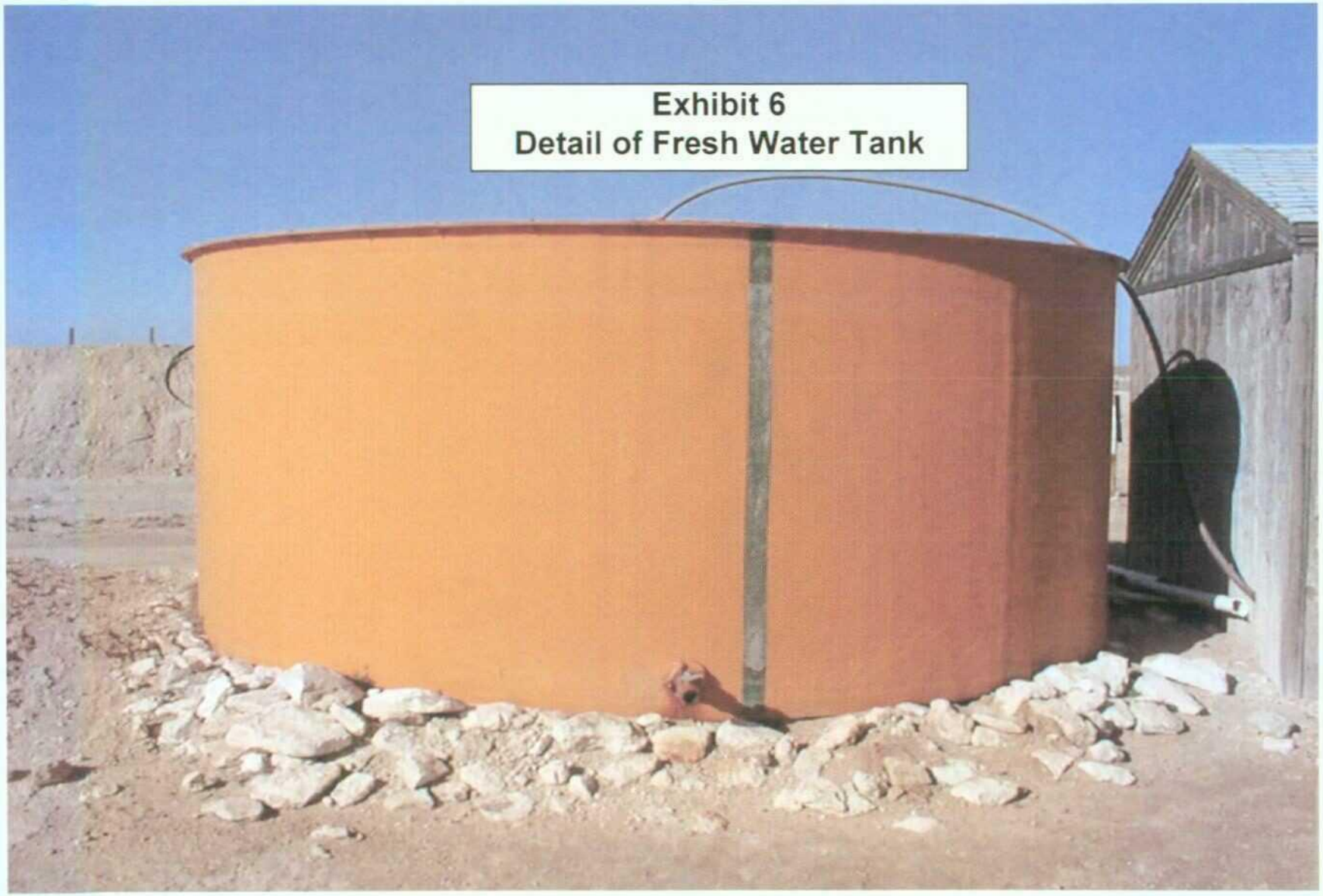


Exhibit 6
Detail of Fresh Water Tank

Candy CORPORATION

Eidson Station
Remediation Project

Whole Earth Environmental
2103 Arbor Cove
Katy, Tx. 77494
281.394.2050
whearth@msn.com

GANDY CORPORATION
OILFIELD SERVICES
P.O. BOX 827
TATUM, NEW MEXICO 88267
(505) 398-4960
FAX 505-398-6887

Mr. Wayne Price
State of New Mexico
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

Dear Wayne:

Enclosed we have submitted the remediation project for Wasserhund Inc. Eidson Brine Station for your approval.

Sincerely,

Larry Gandy

Executive Summary

Location
The site is situated in Lea County, New Mexico immediately west of State Highway 238 on fee land. The primary land use of the surrounding property is grazing of cattle however extensive oil and gas operations are present within the area. The area is semi-arid with a net precipitation / pan evaporation amount of -73" per year.

The legal description of the property is: SW 1/4 of the SW 1/4 of Section 31, Township 16 South, Range 35 East.

Spill History
In January, 2004 the containment pit overflowed approximately 50 barrels of brine water. The majority of the fluids were collected and recycled within the facility however the water was standing for a period of several hours on the west side of a bar ditch running parallel to the highway. The spill was initially investigated by ETGI on January 21st and was found to contain high chloride concentrations that rapidly diminished with depth. Based on these initial findings, Whole Earth Environmental was selected to further the investigation and submit a remediation protocol.

Investigation
On May 7th, Atkins Engineering advanced a series of twelve soil borings. Five of the borings were located within the spill plume with one additional boring at either end intended to measure background chloride concentrations and define the north / south extent of the plume, (Shown on plat map as A-1 through A-7). Second and third strings consisting of five total borings were advanced east of the first in order to develop the information necessary to accurately model the plume. A series of forty-two samples were collected and submitted to Environmental Lab of Texas for chloride analysis.

GMS Modeling
The results of the laboratory analytical tests were used to prepare a three dimensional model of the plume shape using the United States Air Force contaminant migration model GMS. The GMS model was not used to predict the vertical flow of contaminants – only the potential for horizontal migration. The model reflected the presence of two individual plumes: the first is centered on test bore hole A-4

and is probably the result of the January spill; the second is centered around test bore hole B-2 and is probably the result of historical spills at the facility prior to its' being purchased by the Gandy Corporation.

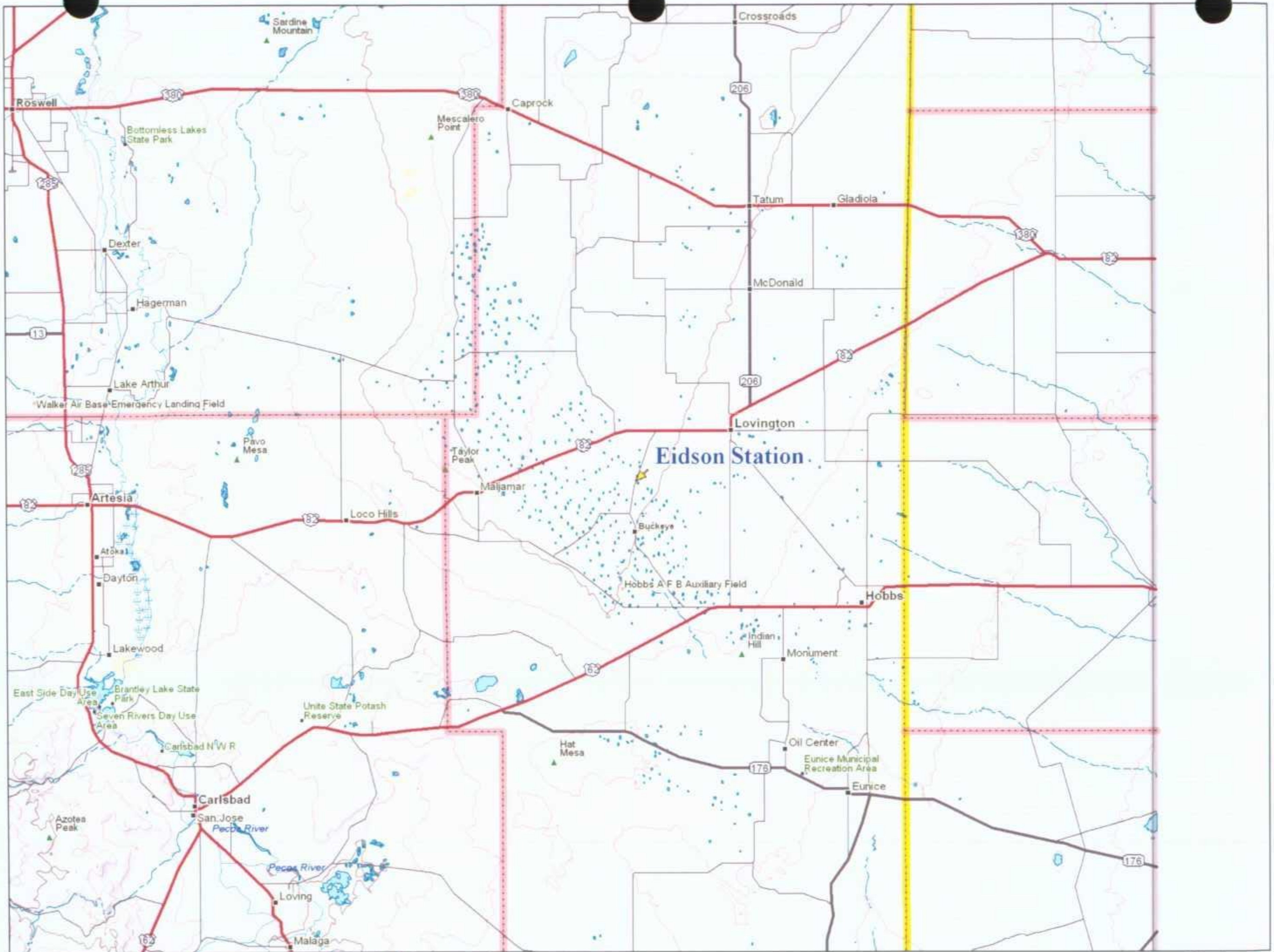
HYDRUS-1D Modeling

In order to obtain a clearer understanding of the potential for vertical migration of the chlorides associated with the January spill, Whole Earth contracted Dr. Jan Hendrickx to prepare a migration model using HYDRUS-1D. The results of the migration model show that passive remediation is an appropriate remedy for the site. The surface damage is limited to the bar ditch where the growth of vegetation is actually discouraged by the New Mexico State Highway Department in an effort to provide positive drainage; the vertical migration into groundwater may be ameliorated by the simple expedient of placing compacted soils atop the spill.

Conclusions and Recommendations

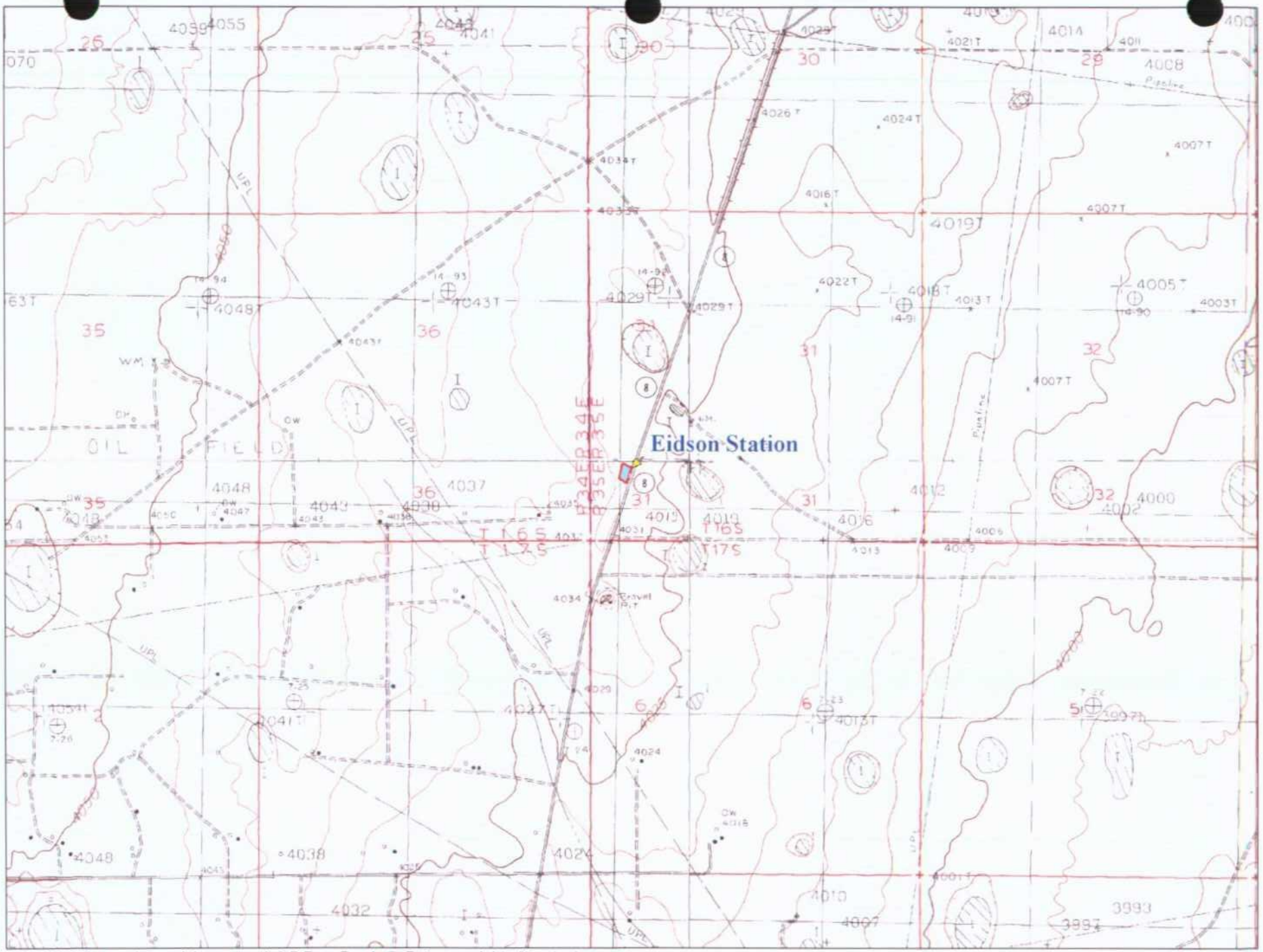
The enclosed protocol is based upon the most conservative estimates contained within the HYDRUS - 1D model. To insure that groundwater will not be impacted we further propose to install a water monitoring well 7' down-gradient from the spill epicenter. The well will be sampled on an annual basis for the presence and concentrations of chlorides for a period of five years.

Exhibit Index



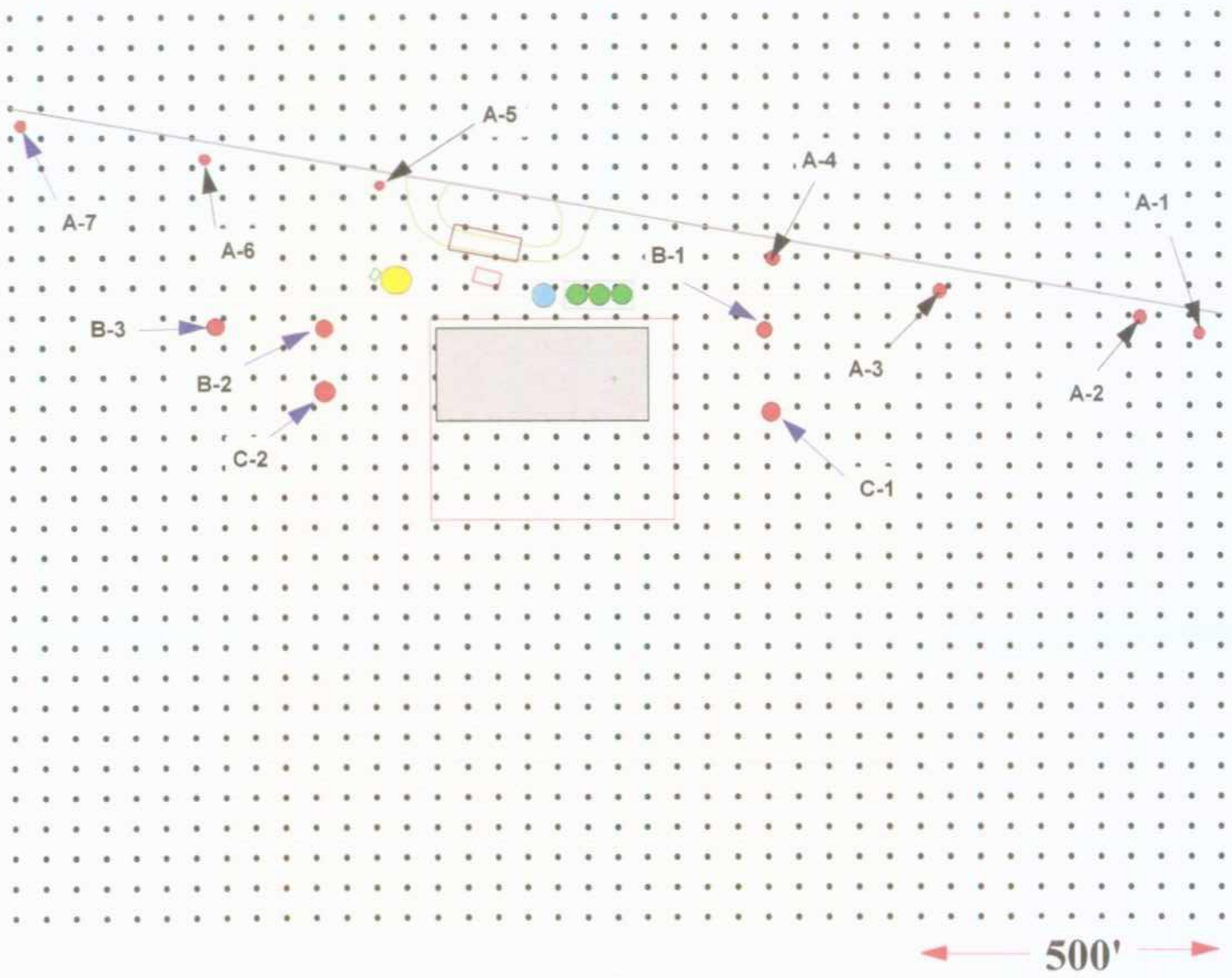
© 2002 DeLorme (www.delorme.com). 3-D TopoQuads ®. Data copyright of content owner.

Scale: 1 : 800,000 Map Rotation: 0° Magnetic Declination: 8.8°E



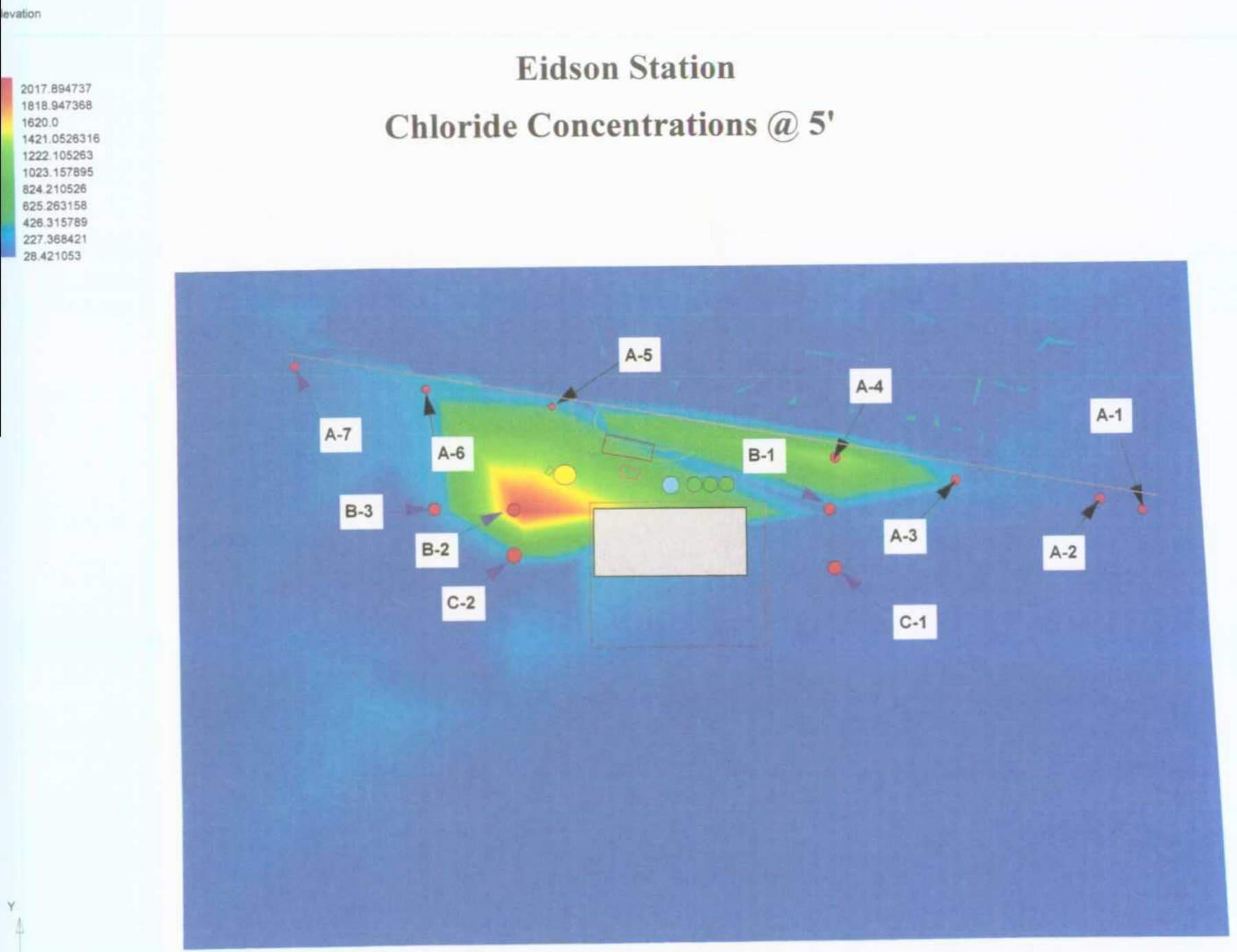
Scale: 1 : 25,000 Map Rotation: 0° Magnetic Declination: 8.8°E

Eidson Station
Surface Features
Test Point Locations



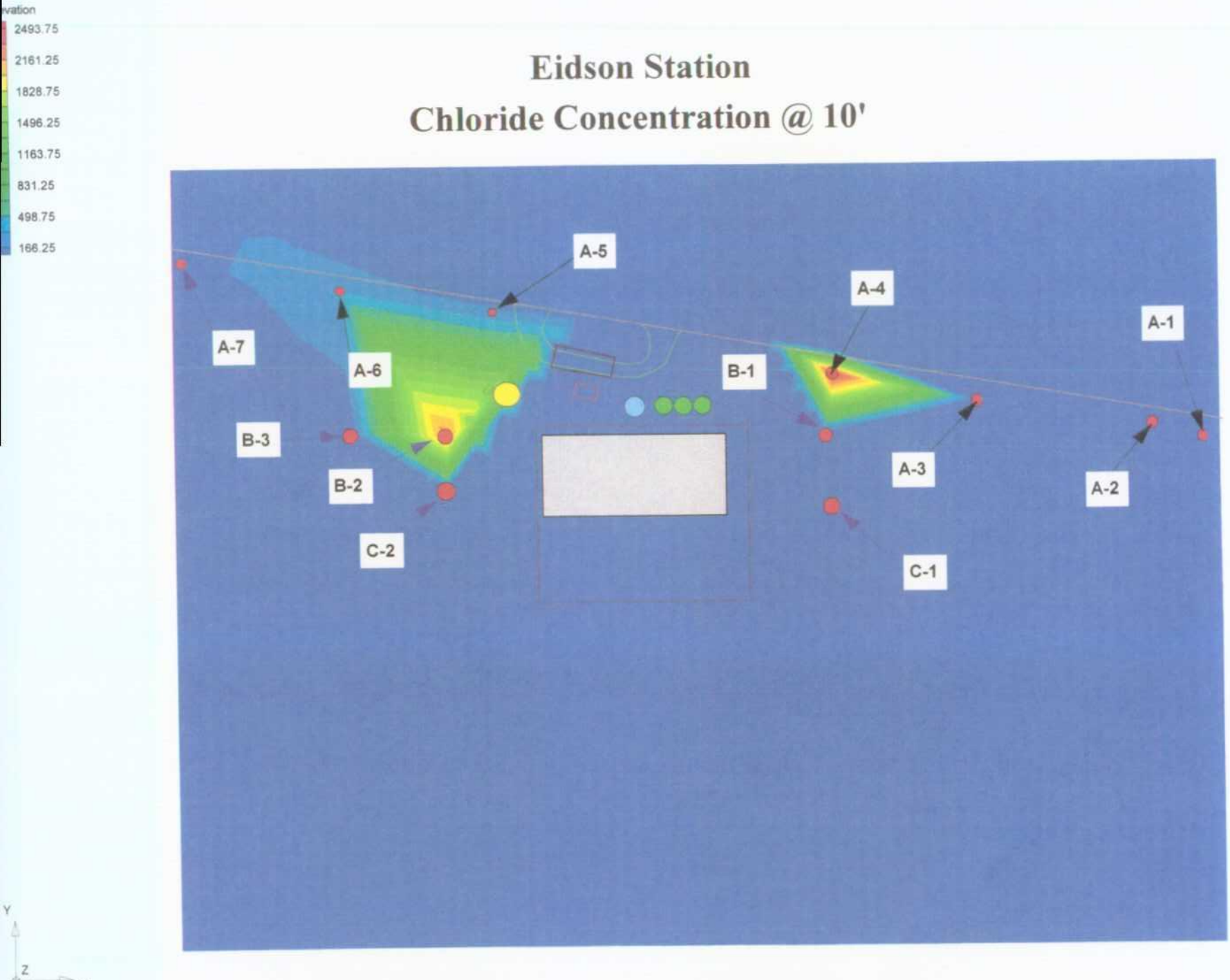
Eidson Station

Chloride Concentrations @ 5'

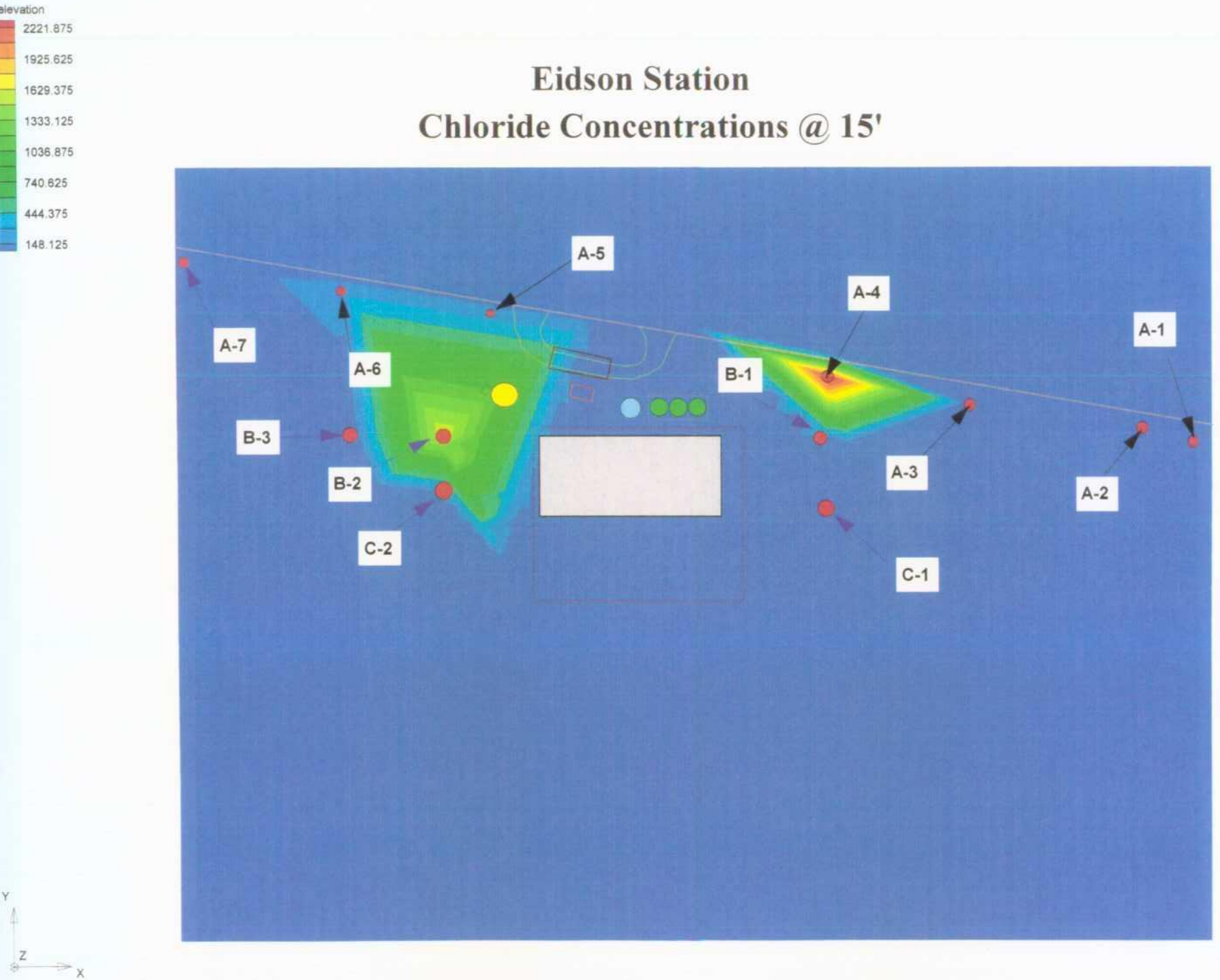


Eidson Station

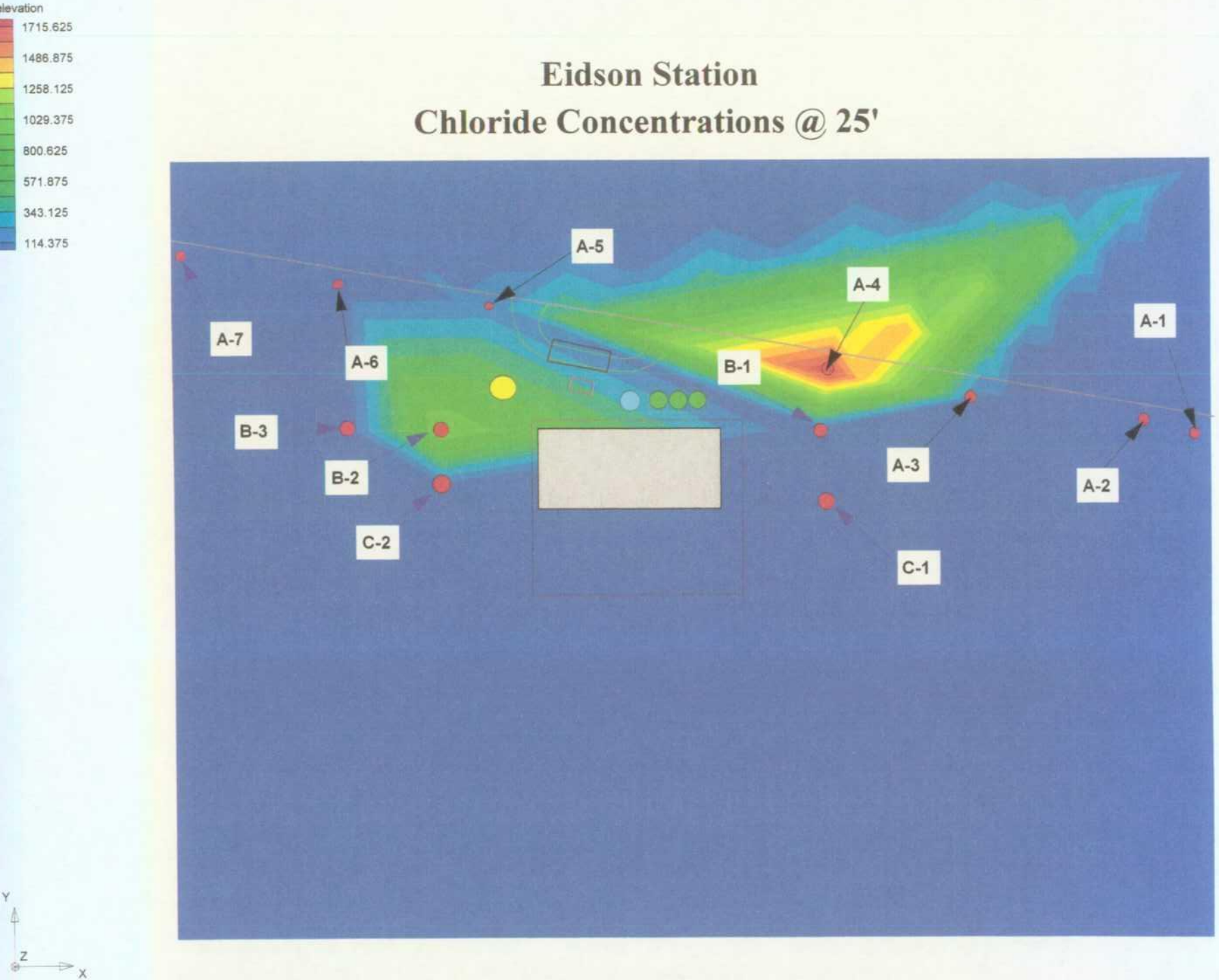
Chloride Concentration @ 10'

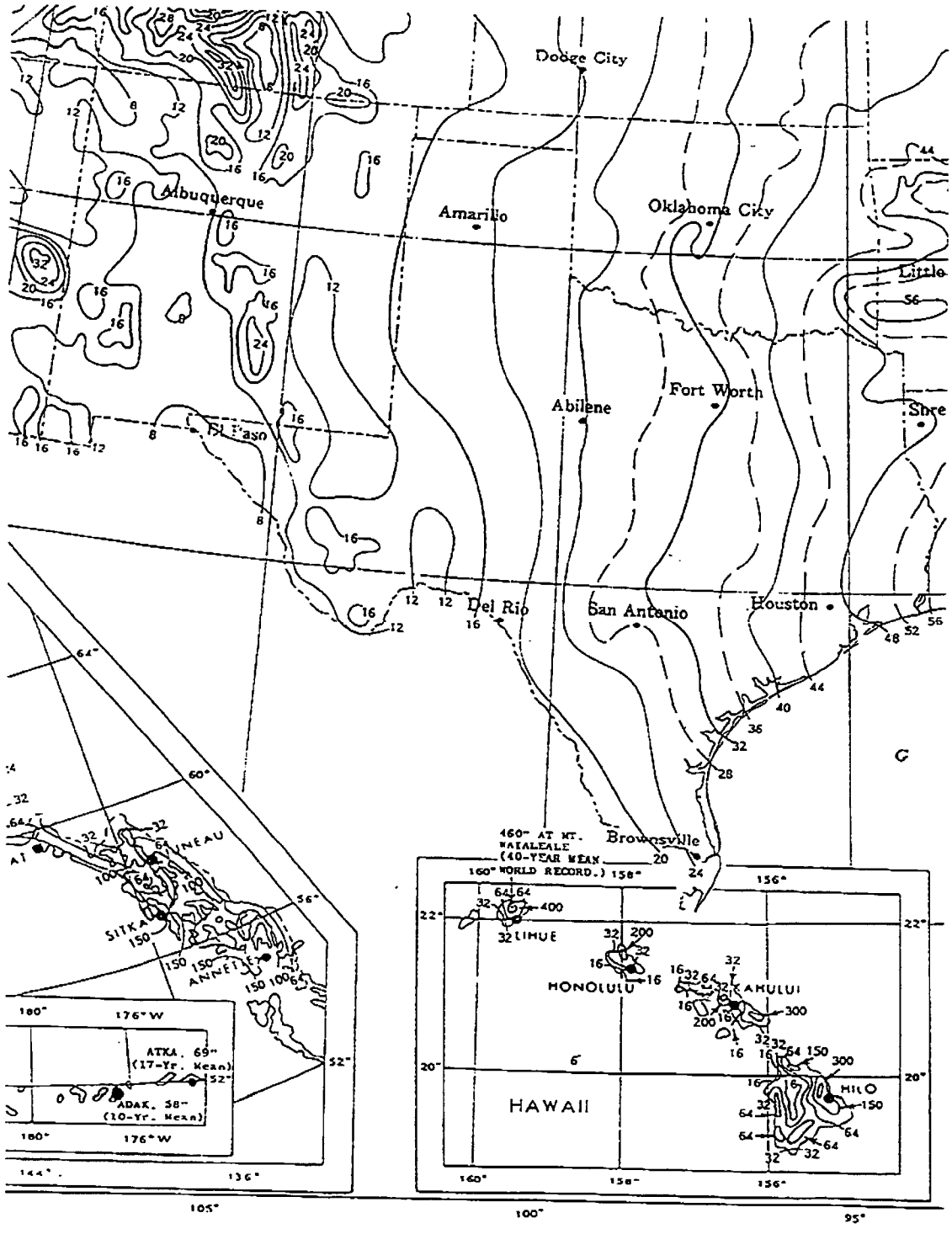


Eidson Station
Chloride Concentrations @ 15'

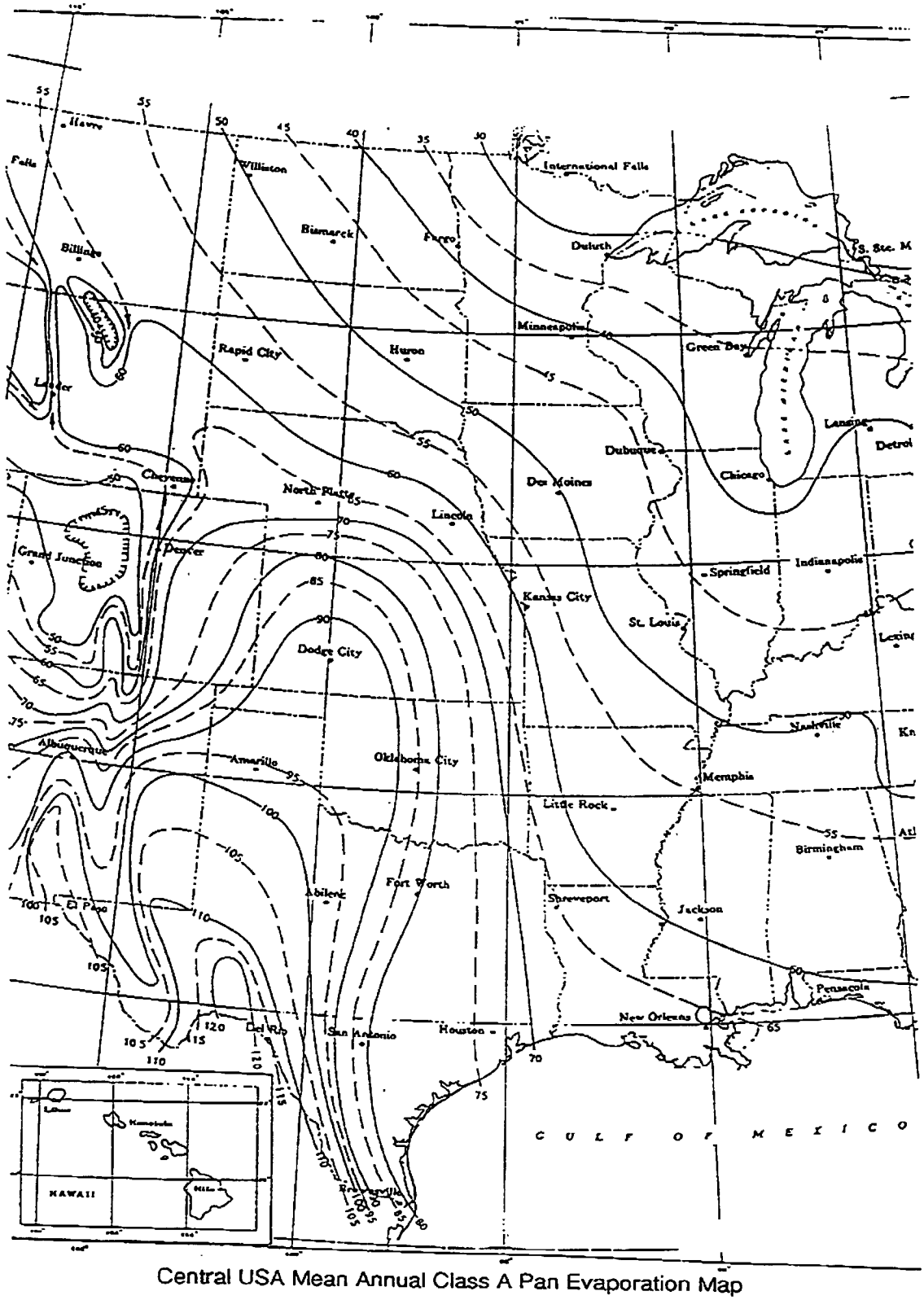


Eidson Station
Chloride Concentrations @ 25'





Central Southwest USA Normal Annual Total Precipitation Map



Central USA Mean Annual Class A Pan Evaporation Map

HYDRUS 1D
Migration Modeling

This section contains a copy of the migration model prepared by Dr. Jan Hendricks, Ph.D. offering several potential remediation alternatives based on actual site conditions reflected within the Laboratory Analytical Results section of this submittal.

DRAFT FOR REVIEW BY WHOLE EARTH ENVIRONMENTAL
June 26, 2004

SIMULATION OF REMEDIATION STRATEGIES

FOR THE JANUARY 2004 BRINE RELEASE AT EIDSON STATION

A Report Prepared for
Whole Earth Environmental, Inc.
Phone: 281-394-2050
Houston, TX 77084
whearth@msn.com

By

Jan M.H. Hendrickx, Ph.D., Ir.
PO Box 897
Los Lunas, NM 87031
Pone: 505-565-9211
JanGraHendrickx@aol.com

June 2004

EXECUTIVE SUMMARY

Whole Earth Environmental, Inc. (WEE) is preparing a remediation plan for a brine release at Eidson Station in January 2004. The purpose of this study is to conduct computer simulations for evaluation of different remediation scenarios so that WEE can optimize its final remediation plan.

Four remediation strategies are considered suitable for the January 2004 release at Eidson Station: natural remediation (R1), excavation of 1 ft of hard caliche and refilling with compacted clean loamy sand (r2), and capping the release site with, respectively, 1 and 3 ft of compacted loamy sand without excavation of hard caliche (R3 and R4).

The close agreement between the chloride distributions measured in test holes and those simulated with our computer models is strong evidence that at Eidson Station a series of brine releases has taken place over a multi-year period.

The computer simulations demonstrate that the differences in maximum chloride concentrations in a down gradient monitoring well among the four remediation strategies are rather small. Moreover, the predicted maximum chloride concentrations are low. Therefore, natural remediation appears to be an attractive strategy to deal with the environmental consequences of the January 2004 brine release at Eidson Station.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

SIMULATION OF REMEDIATION STRATEGIES

FOR THE JANUARY 2004 BRINE RELEASE AT EIDSON STATION

Purpose

Whole Earth Environmental, Inc. (WEE) is preparing a remediation plan for a brine release at Eidson Station in January 2004. The purpose of this study is to conduct computer simulations for evaluation of different remediation scenarios so that WEE can optimize its final remediation plan.

Site Description

Eidson station is located near Lovington, Lea County, New Mexico. WEE has provided us with a map of surface features and locations of test boreholes at Eidson Station (Appendix A) as well as the laboratory measurements of electrical conductivity and chloride concentrations in the samples taken from the boreholes (Appendix B). In addition, WEE informed us that depth to ground water is about 75 ft (22.5). The flow direction of ground water is from the bottom to the top of the map, i.e. from approximately borehole C-1 to borehole A-4 (Appendix A - provided by WEE).

The description of the geological layers is qualitative. The top couple of feet consists of extremely hard caliche (teeth of a backhoe broke and an auger of the boring rig almost burned out); below this layer is at least 50 ft (15 m) of softer caliche without much apparent variation in color, texture, or density in any of the test boreholes. This caliche appears "a bit sandier than what WEE has observed at other locations (not as much dust as usual in the augering)".

Two of the boreholes have elevated chloride contents: test holes A-4 and B-2 (Appendix B – provided by WEE). The maximum chloride concentrations found in, respectively, boreholes A-4 and B-2 are 2,660 ppm and 2,300 ppm at depth 10 ft (3 m). The concentrations in B-2 gradually diminish with depth to a value of 362 ppm at depth 50 ft (15 m); the concentration at 25 ft (8 m)

is 936 ppm. In borehole A-4 the concentrations also decrease below depth 10 ft (3 M); at 25 ft (8 m) the concentration is 1,830 ppm.

This report deals with a brine release that occurred in January 2004 when water ran from the containment pit towards the highway and filled a ditch running parallel to it. The release covered a distance of about 2,000 ft (600 m) in the approximately 9 ft (3 m) wide ditch. The chloride concentrations in test hole A-4 represent the area of major release impact. The chloride concentration in the released brine is estimated to be approximately 221,563 mg/L based on a measurement in December 2000.

Approach

In this report we evaluate four remediation strategies that are considered suitable for the January 2004 release at Eidson Station: R1 is passive or natural remediation, R2 is excavation of 1 ft of hard caliche and refilling with compacted clean loamy sand, R3 and R4 are to cover the release site with, respectively, 1 and 3 ft of compacted loamy sand without excavation. Passive remediation relies on natural processes such as precipitation and dispersion to dilute and mitigate the effects of a produced water release. Mechanical remediation involves the permanent removal of hard caliche that has been contaminated and its replacement with clean soil. This technique is often the most expensive remediation alternative due to the use of the large machinery necessary to remove and replace contaminated soils. Capping the release site with a barrier of 1 or 3 ft of clean compacted soil will reduce infiltration rates and, thus, reduce chloride fluxes into the shallow aquifer.

To compare the effectiveness of these four remediation strategies we simulate the effect of each strategy on the chloride concentration in a monitoring well 20 m downstream of the release at the other side of the highway. The modeling will be conducted by coupling two models: the model HYDRUS1D for simulating vertical water movement and chloride transport through the vadose zone (Simunek et al., 1998) and a simple spreadsheet model to simulate horizontal movement of chloride in the aquifer and predict the chloride concentration in a down gradient monitoring well.

Both models are described in the report AModeling of Chloride Fate after Brine releases@ by R. T. Hicks Consulting, Ltd., that is in print by the American Petroleum Institute. Dr. Hendrickx is one of the senior authors of this report.

Input Parameters for Models

The models need a number of input parameters: concentration of released brine waters, amount of brine water infiltrated, i.e the height of the spill, site lithology, hydraulic properties of each soil and geological layer, depth of ground water table, thickness of underlying aquifer, porosity of underlying aquifer, chloride content in aquifer, ground water flux in aquifer, daily precipitation rates, daily potential evapotranspiration rates, and initial soil moisture and chloride distributions in the vadose zone. For most brine releases many of these input parameters are not readily available. Therefore, it is necessary to use a combination of forward modeling, pseudo inverse modeling, and expert judgments for evaluation of different remediation strategies.

Known Input Parameters: At the Eidson Station site information is available for several parameters. Climate data for 47 recent years were obtained for Lea County, NM from the National Climatic Data Center (NCDC, www.ncdc.noaa.gov). The data consisted of historical daily temperature and **precipitation** measurements collected at specific weather stations identified by a NCDC Coop identification number. Data for Lea County were collected at the Pearl, NM weather station (Coop # 296659). **Potential evapotranspiration** (PET) was calculated from daily temperature observations using the method of Samani and Pessarakli (1986). When a HYDRUS-1D simulation was performed for a longer time period than the period of record for the weather station, the climate data was repeated for as many years as was necessary. The thickness of the vadose zone or **ground water table depth** is 75 ft (22.5 m). The **brine chloride concentration** is 221,563 mg/L.

Input Parameters with Approximately Known Values. It would take much effort to measure the characteristics of the Ogalla aquifer underlying Eidson Station and to exactly determine the size of the release. However, often it is possible to determine reasonable values for these parameters

based on literature reports and/or field observations. In this study typical Ogalalla aquifer values will be used. The **groundwater flux** represents the rate of groundwater movement and effects the ability of an aquifer to dilute chloride and other constituents of a brine release. A large groundwater flux produces greater dilution. Using information by Native and Smith (1987) we estimate a typical average ground water flux of 0.07 ft/day (2.1 cm/day). The **porosity** of the aquifer is estimated as 25 volume percent. The **ambient chloride concentration** in the Ogalalla aquifer is typically 100 ppm or less (Nicholson and Clebsch, 1961) with a characteristic minimum value of 10 ppm. The thicker the aquifer, the more opportunity for mixing (dilution), and the lower the predicted chloride concentration will be in the aquifer. In this study two **aquifer thicknesses** are selected 33 ft (10 m) and 98 ft (30 m). In many places the Ogalalla Aquifer and other unconfined, alluvial aquifers are thicker than 30 m.

The **width of the release area** and the **location of the monitoring well** also influence the chloride concentration measured in the monitoring well. A reasonable minimum width for the January 2004 release at Eidson Station would be the width of the ditch along the highway that filled with brine, i.e. 10 ft (3 m). As a worst case scenario we consider a release with a width of 10 m.

A suitable location for the monitoring well would be opposite test hole A-4 at the other side of the highway. This would locate the monitoring well about 70 ft (20 m) away from the edge of the release at the other side of the highway.

The **dispersion length** of the chloride inside the vadose zone has also an impact on the chloride concentration at the bottom of the vadose zone where the chloride flux enters the aquifer. The higher the dispersion length the more dilute the chloride concentration will become at the bottom of the vadose zone. The dispersion length depends on a large number of factors; a rule of thumb is to take the dispersion length equal to one-tenth of the scale of the simulation. For the 75 ft (22.5 m) vadose zone at Eidson Station we have selected a dispersion length of 200 cm, somewhat smaller than one-tenth of 22.5 m.

Unknown Input Parameters. Generally no quantitative information is available on (i) the **amount of brine** that has infiltrated into the vadose zone and (ii) the **hydraulic properties** of the different geological layers in the vadose zone. Without these parameters it is not possible to even approximately validate models for the evaluation of remediation strategies. Fortunately, at many sites test holes have been drilled and monitoring wells have been installed that provide at least some qualitative information on the composition of the vadose zone and the quality of the ground water.

Using the chloride contents from test hole B-2 and assuming a dry soil bulk density of about 1650 kg/m^3 with an average soil water content of 15 volume procent, it is calculated that about 36 kg/m^2 of chloride is present in the vadose zone (0-22.5 m). Using a chloride background concentration of about 100 mg per kg of moist soil based on the data in test holes without obvious release impacts, it is estimated that the natural chloride mass in the profile is approximately 3 kg/m^2 or about 10 percent of the chloride deposited by brine releases. The amount of natural chloride deposition is small compared to the amount deposited by the brine release. Therefore, in this report we will not consider the effects of natural chloride deposition.

A brine height of 1 cm with brine concentration of 200,000 ppm will deposit 2 kg of chloride at each square meter (about 11 square ft). Thus, the height of the brine release at the site is estimated as 36/2 is 18 cm of brine waters.

At Eidson Station twelve test holes have been drilled and sampled (Appendix B – provided by WEE). In these test holes it has been observed that the first few feet of the vadose zone consists of extremely hard caliche; below this is a layer of at least 50 ft of a homogeneous softer caliche appearing to have a sandy nature. Based on these visual observations and field observations at other sites we composed the following conceptual model for the vadose zone at Eidson Station. The top three feet consists of a hard caliche layer intersected by fractures filled with fine soil materials not unlike loamy sand. For our simulations we assume these fractures to occupy approximately 20 volume percent of the top caliche. We assume that most of the water and

chloride transport takes place through these fractures; the hard caliche plays no role for the downward transport of chloride and water. Below the top layer we assume the soft caliche to extend to the ground water table at a depth of 22.5 m. Based on the field observations we select hydraulic properties for the soft caliche similar to those of loamy sand. The hydraulic properties (water retention and unsaturated hydraulic conductivity curves) for the hard and soft caliche are presented in Table 1.

Table 1. Van Genuchten parameters for determination of hydraulic properties of the vadose zone.

Material	Van Genuchten Hydraulic Parameters¶				
	Θ_r	Θ_s	α	n	K_{sat}
	cm^3/cm^3	cm^3/cm^3	cm^{-1}	-	cm/day
Loamy Sand	0.026	0.287	0.063	1.292	17.7
Hard Caliche	0.011	0.082	0.124	2.280	70.0
Soft Caliche	0.005	0.370	0.015	1.400	52.0

¶ θ_r residual water content, θ_s saturated water content, α and n are shape parameters, K_s saturated hydraulic conductivity.

The next step is to validate the conceptual model formulated above. The validation is done by comparing the measured chloride concentrations in test holes B-2 and A-4 with those predicted by the model HYDRUS1D after simulation of a series of imaginary brine releases at the site. To convert the measured chloride concentrations in moist soil (ppm or mg per kg of moist soil) into simulated chloride concentrations in the soil water (ppm or mg/L) we used a conversion factor of 12 based on the bulk density of caliche and the simulated soil water contents in the vadose zone.

Validation of Conceptual Model

Hydraulic properties have been assigned to the vadose zone on basis of visual observations during the drilling of the test holes and our experience with previous simulations of brine releases. Soil water dynamics in the vadose zone have been simulated for approximately 100 years to obtain an estimate of the soil moisture conditions at the time of the release.

First we tried to simulate the observed chloride distribution in test hole B-2 after one release of height 18 cm with chloride concentration 200,000 ppm. Even after making reasonable changes in the estimated hydraulic properties and initial soil moisture distribution, it was not possible to simulate the chloride distribution measured in test hole B-2 and the top of test hole A-4 (Fig. 1). The simulated chloride concentrations in the top 10 ft (3 m) of the vadose zone remain about 25 times higher than those measured four months after the occurrence of the January 2004 brine release. On the other hand, if the same chloride mass is applied during four releases with a total height of 18 cm over a six year period, a good agreement with the measured chloride distribution is found (Fig. 2).

The agreement between measured and simulated chloride distributions shown in Figure 2 demonstrates that the chloride distributions in test hole B-2 and -most likely- also the one in test hole A-4 are not the result of one single recent brine release. The chloride distributions are the result of a series of brine releases over a multi-year period. The agreement also demonstrates that the hydraulic properties of the vadose zone selected on the basis of qualitative field information and experience result in reliable simulations of current environmental conditions at Eidson Station. Therefore, we can use these with confidence for the simulation of the four remediation strategies. The hydraulic properties are expressed in the parameters of the VanGenuchten functions as presented in Table 1.

Evaluation of Remediation Strategies

In this report we present simulations of four remediation strategies that are considered suitable for the January 2004 release at Eidson Station: R1 is passive or natural remediation, R2 is excavation of 1 ft of hard caliche and refilling with compacted clean loamy sand, R3 and R4 are to cover the release site with, respectively, 1 and 3 ft of compacted loamy sand without excavation. The outcome of each simulation is the behavior of the chloride concentration in a monitoring well placed 70 ft (20 m) downgradient of the edge of the brine release (Figs. 3-6). Table 2 presents the maximum chloride concentrations in the monitoring well for each of the

four remediation strategies. The maximum chloride concentration in the monitoring well does not exceed 250 ppm in the simulations when the width of the brine release is 9 ft (3 m). Only when more conservative estimates are used for the width of the spill and the thickness of the aquifer does the maximum chloride concentration exceed 250 ppm during about 15 years with natural remediation (R1) and about 5 years after capping with one foot of clean compacted loamy sand (R3). The maximum concentrations for R1 and R3 are, respectively, 363 and 295 ppm.

The computer simulations demonstrate that the differences in maximum chloride concentrations among the four remediation strategies are rather small. Moreover, all the predicted maximum chloride concentrations are low. Therefore, natural remediation appears to be an attractive strategy to deal with the environmental consequences of the January 2004 brine release at Eidson Station.

Table 2. Maximum chloride concentrations (ppm) simulated in a monitoring well 20 m down gradient of the brien release after implementation of four remediation strategies. [Aquifer characteristics are typical for Ogallala Aquifer: ground water flux 2.1 cm/day, ambient chloride content 100 ppm, and porosity 0.25.]

Release Width	Aquifer Thickness	Maximum Cl Conc. Under Remediation Strategies			
		Natural	Excav. & Refill	Cap 1 ft	Cap 3 ft
		R1	R2	R3	R4
m	m	ppm	ppm	ppm	ppm
3	10	178	132	143	133
3	30	127	111	115	111
10	10	363	208	295	250
10	30	192	137	167	151

Figure 1. Simulated chloride distribution in profile (line) four months after one spill with height 18 cm (1.5 ft) and chloride concentration 200,000 ppm. Measured chloride distribution (dots) in test hole B-2.

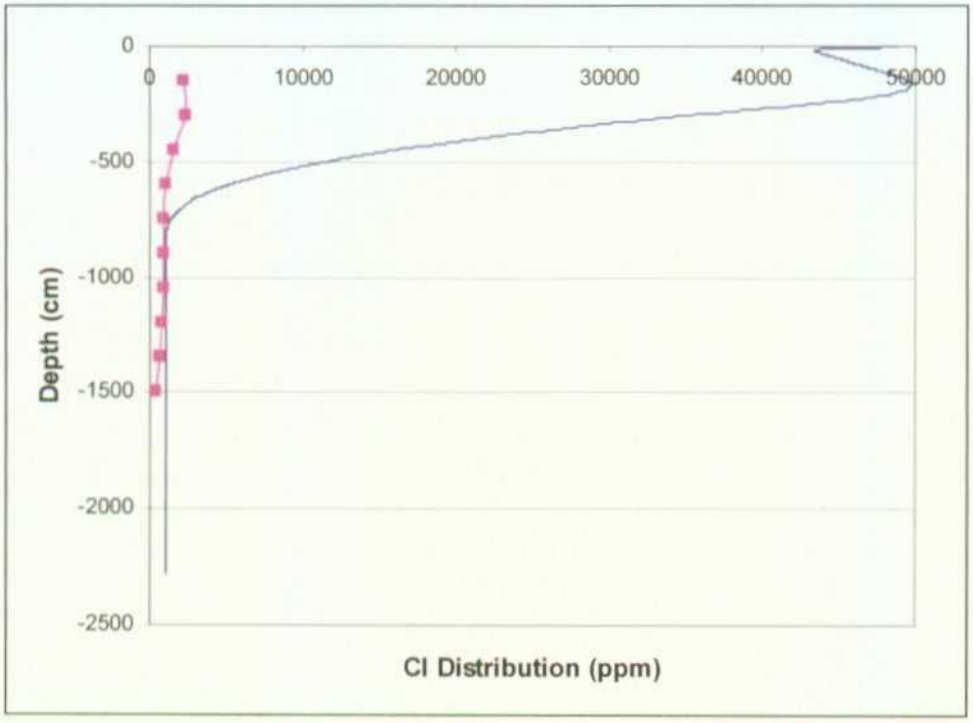


Figure 2. Simulated chloride distribution in profile (line) after four spills with total height 18 cm (1.5 ft) over a six year period and chloride concentration 200,000 ppm. Measured chloride distribution (dots) in test hole B-2.

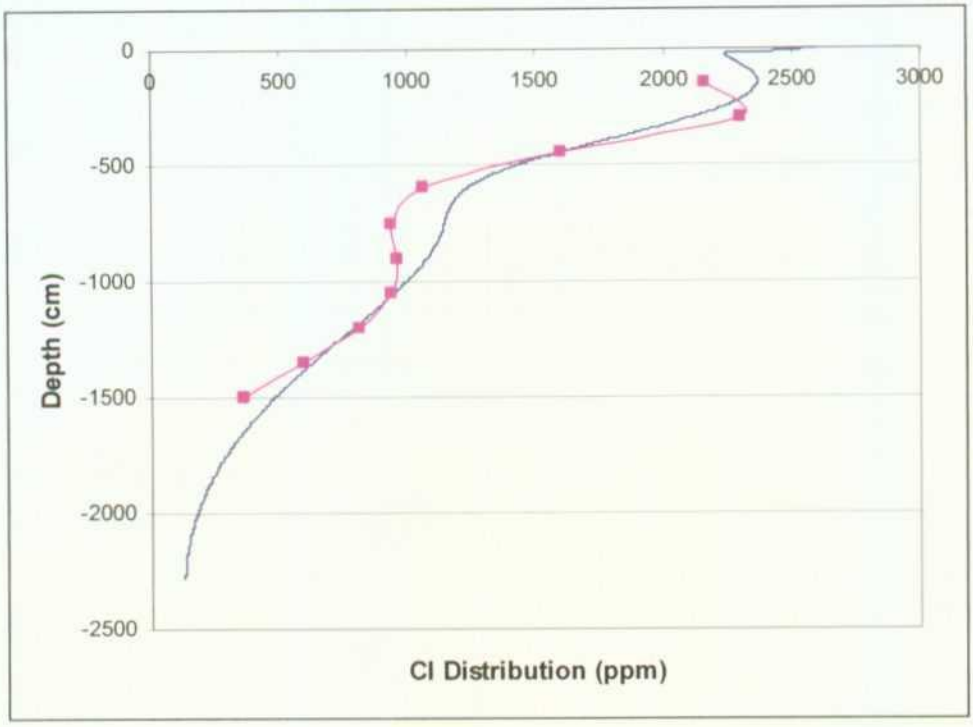
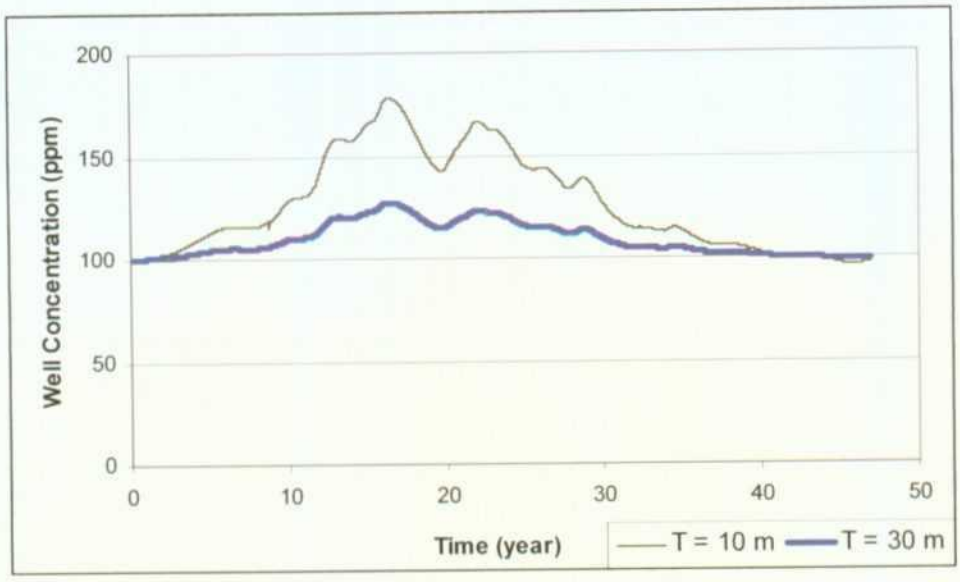


Figure 3. Behavior of chloride concentration in down gradient monitoring well under scenario R1: natural restoration.

A. Spill Width 3 m



B. Spill Width 10 m

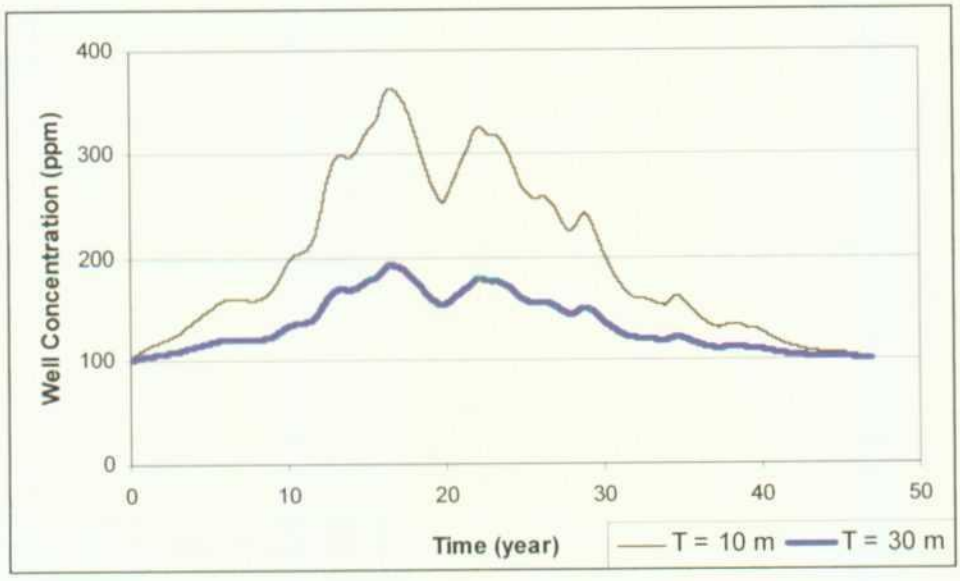
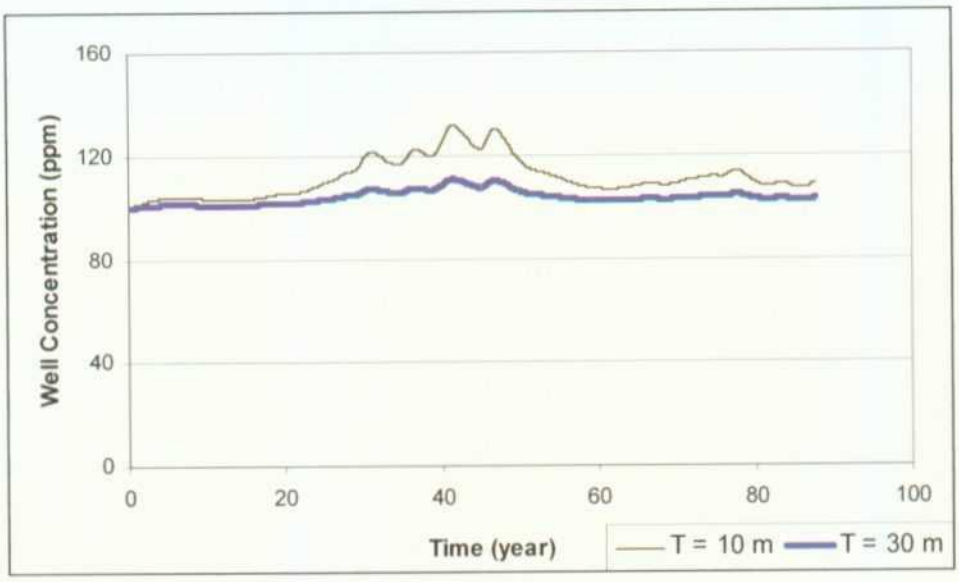


Figure 4. Behavior of chloride concentration in down gradient monitoring well under scenario R2: excavation of one foot of hard caliche, refill with one foot of clean compacted loamy sand.

A. Spill Width 3 m



B. Spill Width 10 m

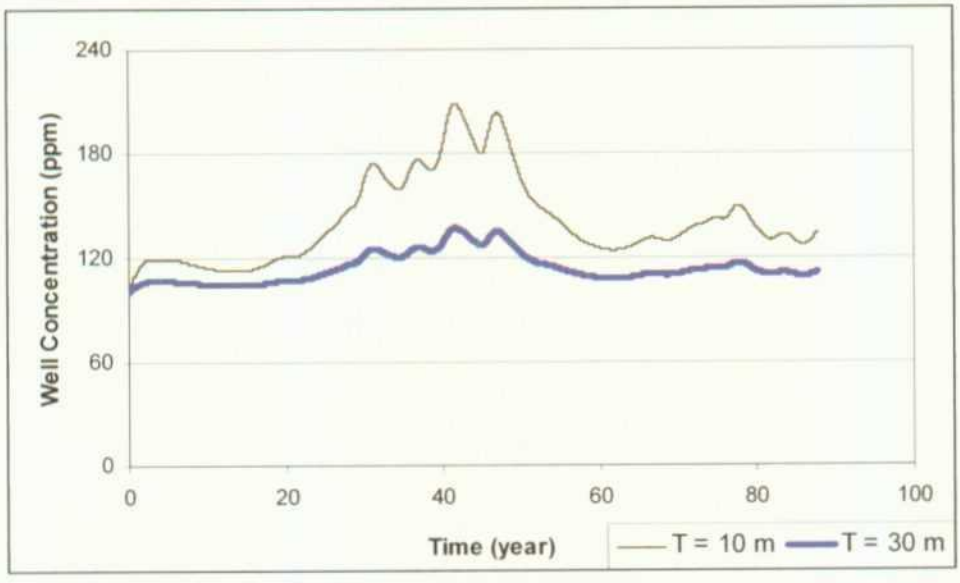
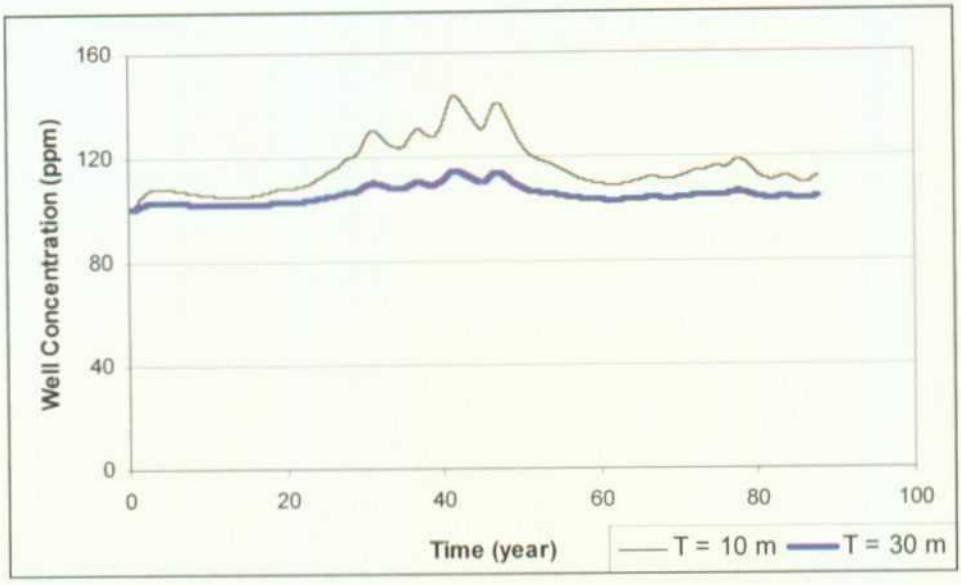


Figure 5. Behavior of chloride concentration in down gradient monitoring well under scenario R3: cap release site with one foot of clean compacted loamy sand.

A. Spill Width 3 m



B. Spill Width 10 m

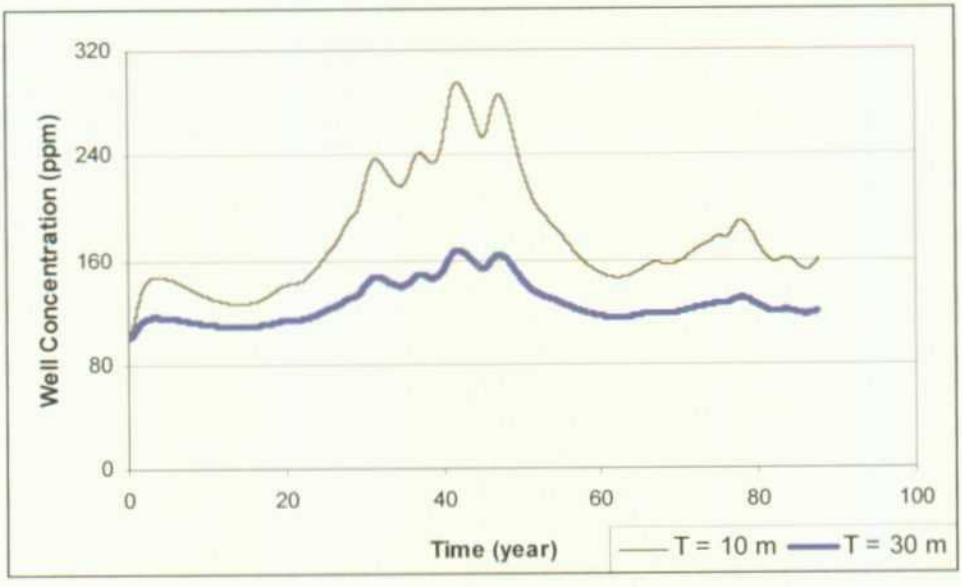
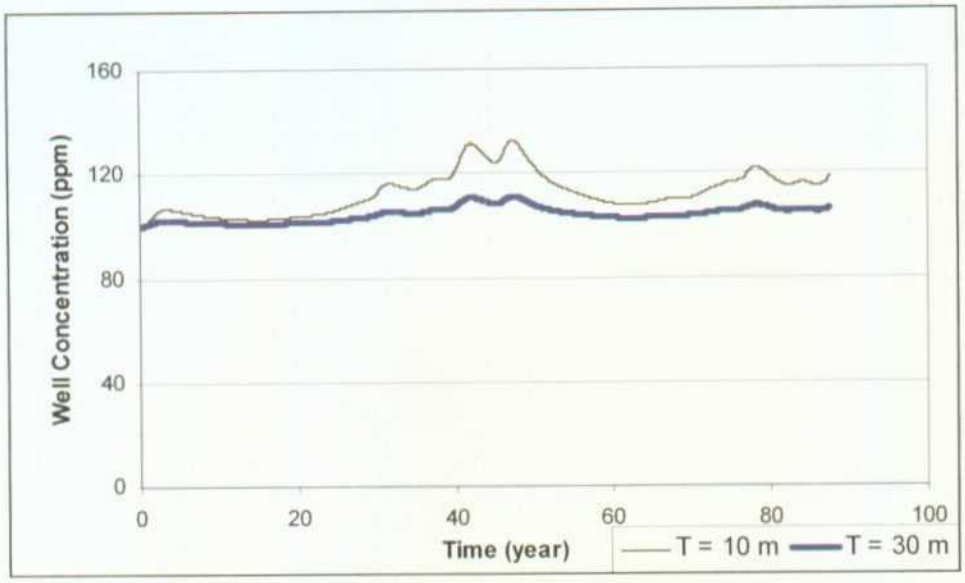
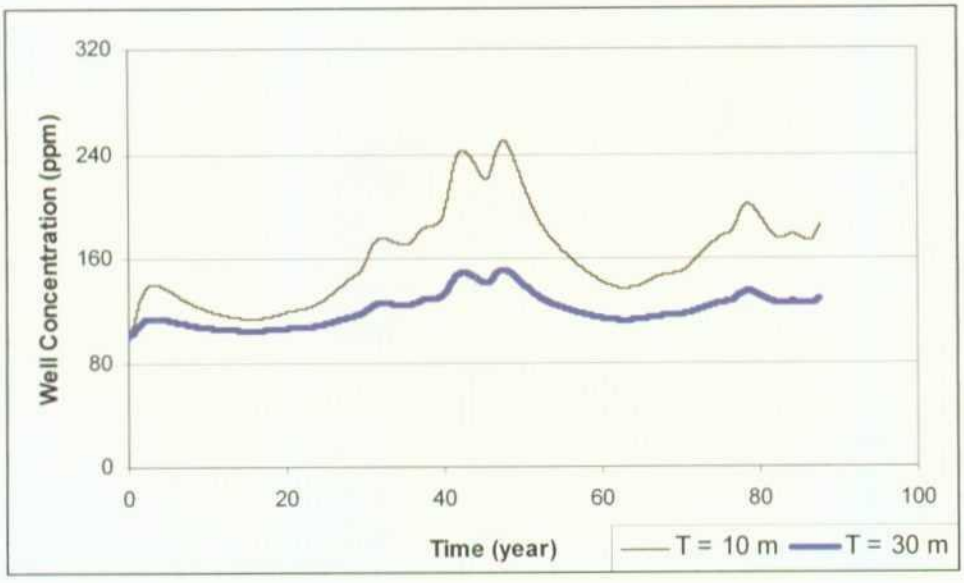


Figure 6. Behavior of chloride concentration in down gradient monitoring well under scenario R4: cap release site with three feet of clean compacted loamy sand.

A. Spill Width 3 m



B. Spill Width 10 m



References

Native, R. and D.A. Smith. 1987. Hydrogeology and Geochemestry of the Ogallala Aquifer, Southern High Plains. Journal of Hydrology, Volume 91, 217-253 p.

Nicholson. A., Jr. and A. Clebsch, jr. 1961. Geology and Ground Water Conditions in Southern Lea County, New Mexico. U.S. Geological Survey Ground-Water Report 6. New Mexico Bureau of Mines and Mineral Resources, Socorro, New Mexico, 123 p.

Samani, Z.A. and M. Pessarakli. 1986. Estimating Potential Crop Evapotranspiration with Minimum Data in Arizona, Transactions of the ASAE Vol.29, No 2,pp.522-524.

Šimůnek, J., M. Šejna, and M. Th. van Genuchten, The HYDRUS-1D software package for simulating the one-dimensional movement of water, heat, and multiple solutes in variably-saturated media. Version 2.0, *IGWMC - TPS - 70,* International Ground Water Modeling Center, Colorado School of Mines, Golden, Colorado, 202pp., 1998.

Protocol

This section contains a copy of PR-34, the proposed remediation method for the Eidson Station spill.

Remediation Protocol
Gandy Corporation
Eidson Station Brine Spill

1.0 Purpose

This protocol is to provide a detailed outline of the steps to be employed in the remediation of a brine spill area located in Lea, New Mexico.

2.0 Scope

This protocol is site specific for the Eidson Station remediation project.

3.0 Preliminary

Prior to any field operations, Whole Earth Environmental shall conduct the following activities:

3.1 Client Review

3.1.1 Whole Earth shall meet with cognizant personnel within Gandy and the NMOCD to review this protocol and make any requested modifications or alterations.

3.1.2 Changes to this protocol will be documented and submitted for final review by Gandy and the NMOCD prior to the initiation of actual field work.

4.0 Safety

4.1 Prior to work on the site, Whole Earth shall obtain the location and phone numbers of the nearest emergency medical treatment facility. We will review all safety related issues with the appropriate Apache personnel, sub-contractors and exchange phone numbers.

4.2 A tailgate safety meeting shall be held and documented each day. All sub-contractors must attend and sign the daily log-in sheet.

4.3 Anyone allowed on to location must be wearing sleeved shirts, steel toed boots, and long pants. Each vehicle must be equipped with two way communication capabilities.

4.4 Prior to any excavation, New Mexico One Call will be notified. The One Call notification number will be included within the closure report. If lines are discovered within the area to be excavated they shall be marked with pin flags on either side of the line at maximum five foot intervals.

5.0 Remediation Procedure

5.1 The soils adjacent to State Highway 238 identified as having elevated chloride concentrations will be covered to a minimum depth of 3' above existing elevations with high clay content topsoils and compacted with a vibro-roller or other suitable device to form a more impermeable layer atop the existing plume.

5.2 The Hobbs branch of the OCD will be notified to witness the final compaction.

5.3 A water monitoring well will be advanced at a site approximately 70' down-gradient from test hole a-4. The well will be constructed using 2" PVC casing and will have a minimum of 5' of slotted screen above the water table and 10' of slotted screen below the top of the water.

5.4 The well will be tested on an annual basis for the presence and concentrations of chlorides for a minimum of five years. If such concentrations meet NMWQCC standards, Gandy Corporation will request final closure and plugging of the well.

6.0 Closure Report

6.1 At the conclusion of the project, Whole Earth shall prepare a closure report which contains the following minimum information:

- Photographs of the location prior to remediation
- Photographs of the location at time of final closure
- Plat map showing the location of the monitor well
- Copies of this protocol and all testing procedures
- Laboratory analyses of the tested fluids
- Boring logs and well construction details

Procedures

This section contains copies of the detailed field testing, sample collection and transportation procedures employed on the Eidson spill investigation.

QP-12

WHOLE EARTH ENVIRONMENTAL
QUALITY PROCEDURE

Procedure for Soil Sample Preparation: Moisture Weight Percentage

Completed By: Approved By: Effective Date: / /

1.0 Purpose

This procedure outlines the methods to be employed in preparing samples to be tested for electrical conductivity and cation exchange capacities.

2.0 Scope

This procedure shall be followed when preparing any electrical conductivity, (EC), or cation exchange capacity, (CEC), testing.

3.0 Procedure

3.1 Field collection of all soil samples shall be in plastic containers. Samples may be stored for a maximum of five days prior to processing.

3.2 Homogenize sample thoroughly. Test for hydrophobic characteristics as follows:

a. examine for visible globs of oil or grease
b. press soil sample to determine if it compresses into a damp mass
c. test to determine if the sample stains filter paper

If the sample exhibits hydrophobic characteristics, prepare in accordance with 3.3.2 below. Otherwise, prepare in accordance with 3.3.1.

3.3.1 Weigh 120 +/- 0.1g sample into tared crucible and dry at 105^0 C for 1 hour. Cool and reweigh. Repeat until weight difference is less than 1% value.

3.3.2 Weigh 120 +/- 0.1 g sample into tared crucible and dry in oven at 250^0 C for one hour. Cool and heat with propane torch until sample just begins to smoke. Maintain gradual heating until smoke dissipates (approximately 1/2 hour). **DO NOT ALLOW THE SAMPLE TO CATCH FIRE OR EXCEED 390^0 C.** Cool and reweigh. Grind to pass 2mm sieve.

3.4 Report percent moisture to three significant figures as follows:

Moisture % = [(W - D)/D] X 100
W = wet sample weight
D = dry sample weight

3.5 References

Diagnosis and Improvement of Saline and Alkali Soils; U.S. Salinity Laboratory Staff, Agriculture Handbook No. 60; 1954

Deuel & Holliday, Soil Remediation for the Petroleum Extraction Industry; Houston, Tx. 1993.

QP-13

WHOLE EARTH ENVIRONMENTAL
QUALITY PROCEDURE

Procedure for Preparing a Paste Extraction

Completed By:	Approved By:	Effective Date: / /

1.0 Purpose

This procedure defines the methods to be employed in preparing a paste extraction to be analyzed for conductivity and exchangeable cations.

2.0 Scope

This procedure shall be used in all electrical Conductivity (EC) and Cation Exchange Capacity (CEC) tests.

3.0 Procedure

3.1 All samples shall be prepared in accordance with QP-12.

3.2 Weigh 100 +/- 0.1g soil sample into tared sample reservoir of filter assembly. Add deionized reagent water to fill pores, stirring gently with plastic stirrer to achieve saturation. The solid/water mixture is consolidated occasionally by tapping the container on the workbench. At saturation the surface of the mixture glistens and flows slightly when tipped. Let stand for one hour. The mixture should not stiffen or puddle; add more sample or water as required and allow to stand for one additional hour.

3.3 Analyze paste extract directly for EC and pH.

3.4 Connect filter assembly to vacuum assembly and filter extract until air begins to pass through filter. Analyze directly for Na, Ca, Mg, K.

QP-77

WHOLE EARTH ENVIRONMENTAL
QUALITY PROCEDURE

Procedure for Obtaining Soil Samples for Transportation to a Laboratory

Completed By: Approved By: Effective Date: / /

1.0 Purpose

This procedure outlines the methods to be employed when obtaining soil samples to be taken to a laboratory for analysis.

2.0 Scope

This procedure is to be used when collecting soil samples intended for ultimate transfer to a testing laboratory.

3.0 Preliminary

3.1 Obtain sterile sampling containers from the testing laboratory designated to conduct analyses of the soil. The shipment should include a Certificate of Compliance from the manufacturer of the collection bottle or vial and a Serial Number for the lot of containers. Retain this Certificate for future documentation purposes.

3.2 If collecting TPH, BTEX, RCRA 8 metals, cation / anions or O&G, the sample jar may be a clear 4 oz. container with Teflon lid. If collecting PAH's, use an amber 4 oz. container with Teflon lid.

4.0 Chain of Custody

4.1 Prepare a Sample Plan. The plan will list the number, location and designation of each planned sample and the individual tests to be performed on the sample. The sampler will check the list against the available inventory of appropriate sample collection bottles to insure against shortage.

4.2 Transfer the data to the Laboratory Chain of Custody Form. Complete all sections of the form except those that relate to the time of delivery of the samples to the laboratory.

4.3 Pre-label the sample collection jars. Include all requested information except time of collection. (Use a fine point Sharpie to insure that the ink remains on the label). Affix the labels to the jars.

5.0 Sampling Procedure

5.1 Go to the sampling point with the sample container. If not analyzing for ions or metals, use a trowel to obtain the soil. Do not touch the soil with your bare hands. Use new latex gloves with each sample to help minimize any cross-contamination.

5.2 Pack the soil tightly into the container leaving the top slightly domed. Screw the lid down tightly. Enter the time of collection onto the sample collection jar label.

5.3 Place the sample directly on ice for transport to the laboratory.

5.4 Complete the Chain of Custody form to include the collection times for each sample. Deliver all samples to the laboratory.

6.0 Documentation

6.1 The testing laboratory shall provide the following minimum information:

A. Client, Project and sample name.
B. Signed copy of the original Chain of Custody Form including data on the time the sample was received by the lab.
C. Results of the requested analyses
D. Test Methods employed
E. Quality Control methods and results

Laboratory Analytical Results

This section contains copies of the Chains of Custody and detailed laboratory analytical results for a series of investigatory boreholes in and around the Eidson Station brine spill plume.

Gandy Corporation
Eidson Station
E.C. / Chloride Correlation
Laboratory Analytical Summary

Test Hole A-1		
Depth	E.C.	Chloride
5'	0.83	ND
10'	0.50	
15'	0.48	
20'	0.46	

Test Hole A-2		
Depth	E.C.	Chloride
5'	0.45	21.3
10'	0.55	ND
15'	0.91	ND

Test Hole A-3		
Depth	E.C.	Chloride
5'	1.75	164.0
10'	1.26	85.1
15'	1.23	63.8
20'	1.75	128.0

Test Hole A-4		
Depth	E.C.	Chloride
5'	8.93	**1,280.0**
10'	14.42	**2,660.0**
15'	10.64	**2,370.0**
20'		
25'	4.31	**1,830.0**

Test Hole A-5		
Depth	E.C.	Chloride
5'	2.90	468.0
10'	2.36	213.0
15'	1.90	239.0

Test Hole A-6		
Depth	E.C.	Chloride
5'	2.57	276.0
10'	1.97	354.0
15'	1.43	213.0
20'	1.27	128.0

Test Hole A-7		
Depth	E.C.	Chloride
5'	1.35	98.2
10'	1.02	90.0
15'	0.53	53.2
20'	0.47	ND

Test Hole B-1		
Depth	E.C.	Chloride
5'	0.58	35.4
10'	0.42	ND
15'	0.56	ND
20'	0.47	ND

Test Hole B-2		
Depth	E.C.	Chloride
5'	11.75	2160
10'	10.62	2300
15'	9.36	1600
20'	6.58	1060
25'	3.87	936
30'	3.93	957
35'	2.58	936
40'	2.23	808
45'	2.78	596
50'	2.76	**362**

Test Hole B-3		
Depth	E.C.	Chloride
5'	9.02	
10'	0.45	

Test Hole C-1		
Depth	E.C.	Chloride
5'	0.79	ND
10'	0.61	ND
15'	0.48	ND
20'	0.51	**ND**

Test Hole C-2		
Depth	E.C.	Chloride
5'	15.25	
10'	2.81	
15'	0.44	**170**

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Mike Griffin

WHOLE EARTH ENVIRONMENTAL

2103 Arbor Cove

Katy, TX 77494

Project: Eidson Sta.

Project Number: None Given

Location: Lea County, NM

Lab Order Number: 4E12004

Report Date: 05/13/04

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Sta.	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	05/13/04 12:15

ANALYTICAL REPORT FOR SAMPLES

Sample ID		Laboratory ID	Matrix	Date Sampled	Date Received
A-4 @ 10'	14.42	4E12004-01	Soil	05/07/04 00:00	05/12/04 09:45
A-6 @ 20'	1.27	4E12004-02	Soil	05/07/04 00:00	05/12/04 09:45
A-7 @ 20'	.47	4E12004-03	Soil	05/07/04 00:00	05/12/04 09:45
B-2 @ 50'	2.76	4E12004-04	Soil	05/07/04 00:00	05/12/04 09:45
C-1 @ 20'	.51	4E12004-05	Soil	05/07/04 00:00	05/12/04 09:45
C-2 @ 15'	.76	4E12004-06	Soil	05/07/04 00:00	05/12/04 09:45

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Sta.	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	05/13/04 12:15

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-4 @ 10' (4E12004-01) Soil									
Chloride	**2660**	20.0	mg/kg Wet	2	EE41301	05/12/04	05/12/04	SW 846 9253	
A-6 @ 20' (4E12004-02) Soil									
Chloride	**128**	20.0	mg/kg Wet	2	EE41301	05/12/04	05/12/04	SW 846 9253	
A-7 @ 20' (4E12004-03) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EE41301	05/12/04	05/12/04	SW 846 9253	
B-2 @ 50' (4E12004-04) Soil									
Chloride	**362**	20.0	mg/kg Wet	2	EE41301	05/12/04	05/12/04	SW 846 9253	
C-1 @ 20' (4E12004-05) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EE41301	05/12/04	05/12/04	SW 846 9253	
C-2 @ 15' (4E12004-06) Soil									
Chloride	**170**	20.0	mg/kg Wet	2	EE41301	05/12/04	05/12/04	SW 846 9253	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Roland K Tuttle

Quality Assurance Review

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Sta.	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	05/13/04 12:15

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE41301 - General Preparation (WetChem)										
Blank (EE41301-BLK1)				Prepared & Analyzed: 05/12/04						
Chloride	ND	20.0	mg/kg Wet							
Matrix Spike (EE41301-MS1)	**Source: 4E07012-02**			Prepared & Analyzed: 05/12/04						
Chloride	1510	20.0	mg/kg Wet	500	1020	98.0	80-120			
Matrix Spike Dup (EE41301-MSD1)	**Source: 4E07012-02**			Prepared & Analyzed: 05/12/04						
Chloride	1500	20.0	mg/kg Wet	500	1020	96.0	80-120	0.664	20	
Reference (EE41301-SRM1)				Prepared & Analyzed: 05/12/04						
Chloride	*5050*		mg/kg	*5000*		*101*	80-120			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Roland K. Tuttle

Quality Assurance Review

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Roland K Tuttle

Quality Assurance Review

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Mike Griffin

WHOLE EARTH ENVIRONMENTAL

2103 Arbor Cove

Katy, TX 77494

Project: Eidson Sta.

Project Number: None Given

Location: Lea County, NM

Lab Order Number: 4E20002

Report Date: 05/24/04

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Sta.	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	05/24/04 12:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
A-1@ 5'	4E20002-01	Soil	05/08/04 00:00	05/20/04 09:45
A-2 @ 5'	4E20002-05	Soil	05/08/04 00:00	05/20/04 09:45
A-2 @ 10'	4E20002-06	Soil	05/08/04 00:00	05/20/04 09:45
A-2 @ 15'	4E20002-07	Soil	05/08/04 00:00	05/20/04 09:45
A-3 @ 5'	4E20002-08	Soil	05/08/04 00:00	05/20/04 09:45
A-3 @ 10'	4E20002-09	Soil	05/08/04 00:00	05/20/04 09:45
A-3 @ 15'	4E20002-10	Soil	05/08/04 00:00	05/20/04 09:45
A-3 @ 20'	4E20002-11	Soil	05/08/04 00:00	05/20/04 09:45
A-4 @ 5'	4E20002-12	Soil	05/08/04 00:00	05/20/04 09:45
A-4 @ 15'	4E20002-13	Soil	05/08/04 00:00	05/20/04 09:45
A-4 @ 25'	4E20002-14	Soil	05/08/04 00:00	05/20/04 09:45
A-5 @ 5'	4E20002-15	Soil	05/08/04 00:00	05/20/04 09:45
A-5 @ 10'	4E20002-16	Soil	05/08/04 00:00	05/20/04 09:45
A-5 @ 15'	4E20002-17	Soil	05/08/04 00:00	05/20/04 09:45
A-6 @ 5'	4E20002-18	Soil	05/08/04 00:00	05/20/04 09:45
A-6 @ 10'	4E20002-19	Soil	05/08/04 00:00	05/20/04 09:45
A-6 @ 15'	4E20002-20	Soil	05/08/04 00:00	05/20/04 09:45
A-7 @ 5'	4E20002-22	Soil	05/08/04 00:00	05/20/04 09:45
A-7 @ 10'	4E20002-23	Soil	05/08/04 00:00	05/20/04 09:45
A-7 @ 15'	4E20002-24	Soil	05/08/04 00:00	05/20/04 09:45
B-1 @ 5'	4E20002-25	Soil	05/08/04 00:00	05/20/04 09:45
B-1 @ 10'	4E20002-26	Soil	05/08/04 00:00	05/20/04 09:45
B-1 @ 15'	4E20002-27	Soil	05/08/04 00:00	05/20/04 09:45
B-1 @ 20'	4E20002-28	Soil	05/08/04 00:00	05/20/04 09:45
B-2 @ 5'	4E20002-29	Soil	05/08/04 00:00	05/20/04 09:45
B-2 @ 10'	4E20002-30	Soil	05/08/04 00:00	05/20/04 09:45
B-2 @ 15'	4E20002-31	Soil	05/08/04 00:00	05/20/04 09:45
B-2 @ 20'	4E20002-32	Soil	05/08/04 00:00	05/20/04 09:45
B-2 @ 25'	4E20002-33	Soil	05/08/04 00:00	05/20/04 09:45
B-2 @ 30'	4E20002-34	Soil	05/08/04 00:00	05/20/04 09:45
B-2 @ 35'	4E20002-35	Soil	05/08/04 00:00	05/20/04 09:45
B-2 @ 40'	4E20002-36	Soil	05/08/04 00:00	05/20/04 09:45

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Sta.	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	05/24/04 12:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
B-2 @ 45'	4E20002-37	Soil	05/08/04 00:00	05/20/04 09:45
C-1 @ 5'	4E20002-38	Soil	05/08/04 00:00	05/20/04 09:45
C-1 @ 10'	4E20002-39	Soil	05/08/04 00:00	05/20/04 09:45
C-1 @ 15'	4E20002-40	Soil	05/08/04 00:00	05/20/04 09:45
C-2 @ 10'	4E20002-42	Soil	05/08/04 00:00	05/20/04 09:45

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Roland K. Tuttle

Quality Assurance Review

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Sta.	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	05/24/04 12:59

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-1@ 5' (4E20002-01) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-2 @ 5' (4E20002-05) Soil									
Chloride	**21.3**	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-2 @ 10' (4E20002-06) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-2 @ 15' (4E20002-07) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-3 @ 5' (4E20002-08) Soil									
Chloride	**164**	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-3 @ 10' (4E20002-09) Soil									
Chloride	**85.1**	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-3 @ 15' (4E20002-10) Soil									
Chloride	**63.8**	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-3 @ 20' (4E20002-11) Soil									
Chloride	**128**	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-4 @ 5' (4E20002-12) Soil									
Chloride	**1280**	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Roland K. Tuttle

Quality Assurance Review

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Sta.	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	05/24/04 12:59

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-4 @ 15' (4E20002-13) Soil									
Chloride	**2370**	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-4 @ 25' (4E20002-14) Soil									
Chloride	**1830**	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-5 @ 5' (4E20002-15) Soil									
Chloride	**468**	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-5 @ 10' (4E20002-16) Soil									
Chloride	**213**	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-5 @ 15' (4E20002-17) Soil									
Chloride	**239**	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-6 @ 5' (4E20002-18) Soil									
Chloride	**276**	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-6 @ 10' (4E20002-19) Soil									
Chloride	**354**	20.0	mg/kg Wet	2	EE42403	05/21/04	05/22/04	SW 846 9253	
A-6 @ 15' (4E20002-20) Soil									
Chloride	**213**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
A-7 @ 5' (4E20002-22) Soil									
Chloride	**98.2**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	

Environmental Lab of Texas

Roland K Tuttle

Quality Assurance Review

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Sta.	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	05/24/04 12:59

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
A-7 @ 10' (4E20002-23) Soil									
Chloride	**90.0**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
A-7 @ 15' (4E20002-24) Soil									
Chloride	**53.2**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
B-1 @ 5' (4E20002-25) Soil									
Chloride	**35.4**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
B-1 @ 10' (4E20002-26) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
B-1 @ 15' (4E20002-27) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
B-1 @ 20' (4E20002-28) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
B-2 @ 5' (4E20002-29) Soil									
Chloride	**2160**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
B-2 @ 10' (4E20002-30) Soil									
Chloride	**2300**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
B-2 @ 15' (4E20002-31) Soil									
Chloride	**1600**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	

Roland K Tuttle

Quality Assurance Review

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Sta.	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	05/24/04 12:59

General Chemistry Parameters by EPA / Standard Methods

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
B-2 @ 20' (4E20002-32) Soil									
Chloride	**1060**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
B-2 @ 25' (4E20002-33) Soil									
Chloride	**936**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
B-2 @ 30' (4E20002-34) Soil									
Chloride	**957**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
B-2 @ 35' (4E20002-35) Soil									
Chloride	**936**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
B-2 @ 40' (4E20002-36) Soil									
Chloride	**808**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
B-2 @ 45' (4E20002-37) Soil									
Chloride	**596**	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
C-1 @ 5' (4E20002-38) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
C-1 @ 10' (4E20002-39) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	
C-1 @ 15' (4E20002-40) Soil									
Chloride	ND	20.0	mg/kg Wet	2	EE42404	05/21/04	05/22/04	SW 846 9253	

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Roland K. Tuttle

Quality Assurance Review

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Sta.	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	05/24/04 12:59

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE42403 - Water Extraction										
Blank (EE42403-BLK1)				Prepared: 05/21/04 Analyzed: 05/22/04						
Chloride	ND	20.0	mg/kg Wet							
Matrix Spike (EE42403-MS1)	**Source: 4E19005-01**			Prepared: 05/21/04 Analyzed: 05/22/04						
Chloride	22000	20.0	mg/kg Wet	500	21500	100	80-120			
Matrix Spike Dup (EE42403-MSD1)	**Source: 4E19005-01**			Prepared: 05/21/04 Analyzed: 05/22/04						
Chloride	22000	20.0	mg/kg Wet	500	21500	100	80-120	0.00	20	
Reference (EE42403-SRM1)				Prepared: 05/21/04 Analyzed: 05/22/04						
Chloride	5160		mg/kg	5000		103	80-120			
Batch EE42404 - Water Extraction										
Blank (EE42404-BLK1)				Prepared: 05/21/04 Analyzed: 05/22/04						
Chloride	ND	20.0	mg/kg Wet							
Matrix Spike (EE42404-MS1)	**Source: 4E20002-20**			Prepared: 05/21/04 Analyzed: 05/22/04						
Chloride	723	20.0	mg/kg Wet	500	213	102	80-120			
Matrix Spike Dup (EE42404-MSD1)	**Source: 4E20002-20**			Prepared: 05/21/04 Analyzed: 05/22/04						
Chloride	712	20.0	mg/kg Wet	500	213	99.8	80-120	1.53	20	
Reference (EE42404-SRM1)				Prepared: 05/21/04 Analyzed: 05/22/04						
Chloride	5000		mg/kg	5000		100	80-120			
Batch EE42405 - Water Extraction										
Blank (EE42405-BLK1)				Prepared: 05/21/04 Analyzed: 05/22/04						
Chloride	ND	20.0	mg/kg Wet							

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Roland K Tuttle

Quality Assurance Review

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

WHOLE EARTH ENVIRONMENTAL	Project: Eidson Sta.	Fax: (281) 394-2051
2103 Arbor Cove	Project Number: None Given	**Reported:**
Katy TX, 77494	Project Manager: Mike Griffin	05/24/04 12:59

General Chemistry Parameters by EPA / Standard Methods - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EE42405 - Water Extraction										
Matrix Spike (EE42405-MS1)	**Source: 4E20002-42**			Prepared: 05/21/04 Analyzed: 05/22/04						
Chloride	1360	20.0	mg/kg Wet	500	936	84.8	80-120			
Matrix Spike Dup (EE42405-MSD1)	**Source: 4E20002-42**			Prepared: 05/21/04 Analyzed: 05/22/04						
Chloride	1380	20.0	mg/kg Wet	500	936	88.8	80-120	1.46	20	
Reference (EE42405-SRM1)				Prepared: 05/21/04 Analyzed: 05/22/04						
Chloride	5000		mg/kg	5000		100	80-120			

Environmental Lab of Texas

The results in this report apply to the samples analyzed in accordance with the samples received in the laboratory.. This analytical report must be reproduced in its entirety, with written approval of Environmental Lab of Texas.

Roland K Tuttle

Quality Assurance Review

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: M. Griffin
Company Name: Whole Earth Environmental, Inc.
Company Address: 2103 Arbor Cove
City/State/Zip: Katy, Tx. 77494
Telephone No: 281.394.2050
Fax No: 281.394.2050
Sampler Signature:

Project Name: Eidson Sta.
Project #:
Project Loc: Lea County, NM
PO #:

4E20002

plastic bags

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se (TCLP)	Volatiles (TCLP)	Semivolatiles (TCLP)	BTEX 80218/5030 (TCLP)	Chlorides (TOTAL)	S.A.R.	E.C.				RUSH TAT (Pre-Schedule)	Standard TAT
-01	A-1 @ 5'	05/08/04		1						X				X										X							
-02	A-1 @ 10' missing	05/08/04		1						X				X										X							
-03	A-1 @ 15' missing	05/08/04		1						X				X										X							
-04	A-1 @ 20' missing	05/08/04		1						X				X										X							
-05	A-2 @ 5'	05/08/04		1						X				X										X							
-06	A-2 @ 10'	05/08/04		1						X				X										X							
-07	A-2 @ 15'	05/08/04		1						X				X										X							
-08	A-3 @ 5'	05/08/04		1						X				X										X							
-09	A-3 @ 10'	05/08/04		1						X				X										X							
-10	A-3 @ 15'	05/08/04		1						X				X										X							
-11	(TMM) A-3 @ 20'	05/08/04		1						X				X										X							

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments:
21.5°C

Relinquished by:	Date	Time	Received by:	Date	Time
M. Griffin	5/19/2004	9:00 AM			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
Fed Ex	05-20-04	@0945	Jaime McMurray	05-20-04	0945

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: M. Griffin
Company Name: Whole Earth Environmental, Inc.
Company Address: 2103 Arbor Cove
City/State/Zip: Katy, Tx. 77494
Telephone No: 281.394.2050 Fax No: 281.394.2050
Sampler Signature:

Project Name: Eidson Sta.
Project #:
Project Loc: Lea County, NM
PO #:

HE20002

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers (plastic bag)	Preservative: Ice	Preservative: HNO_3	Preservative: HCl	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None	Preservative: Other (Specify)	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: TCLP: / TOTAL: TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	Chlorides	S.A.R.	E.C.				RUSH TAT (Pre-Schedule)	Standard TAT
-12	A-4 @ 5'	05/08/04		1						X				X										X							
-13	A-4 @ 15'	05/08/04		1						X				X										X							
-14	A-4 @ 25'	05/08/04		1						X				X										X							
-15	A-5 @ 5'	05/08/04		1						X				X										X							
-16	A-5 @ 10'	05/08/04		1						X				X										X							
-17	A-5 @ 15'	05/08/04		1						X				X										X							
-18	A-6 @ 5'	05/08/04		1						X				X										X							
-19	A-6 @ 10'	05/08/04		1						X				X										X							
-20	A-6 @ 15'	05/08/04		1						X				X										X							
-21	A-6 @ 20' missing	05/08/04		1						X				X										X							
-22 (Jm)																															

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments:
21.5°C

Relinquished by:	Date	Time	Received by:	Date	Time
M. Griffin	5/19/2004	9:00 AM			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
Fed Ex	05-20-04	0945	Jane McMurray	05-20-04	0945

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

rg 20.

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: M. Griffin
Company Name: Whole Earth Environmental, Inc.
Company Address: 2103 Arbor Cove
City/State/Zip: Katy, Tx. 77494
Telephone No: 281.394.2050 Fax No: 281.394.2050
Sampler Signature:

Project Name: Eidson Sta.
Project #:
Project Loc: Lea County, NM
PO #:

4E20002

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers (plastic bags)	Preservative: Ice	HNO3	HCl	NaOH	H2SO4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TCLP: TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	TOTAL: Chlorides	S.A.R.	E.C.				RUSH TAT (Pre-Schedule)	Standard TAT
-22	A-7 @ 5'	05/08/04		1						X				X										X							
-23	A-7 @ 10'	05/08/04		1						X				X										X							
-24	A-7 @ 15'	05/08/04		1						X				X										X							
-25	B-1 @ 5'	05/08/04		1						X				X										X							
-26	B-1 @ 10'	05/08/04		1						X				X										X							
-27	B-1 @ 15'	05/08/04		1						X				X										X							
-28	B-1 @ 20'	05/08/04		1						X				X										X							

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments:

	Date	Time		Date	Time
Relinquished by: M. Griffin	5/19/2004	9:00 AM	Received by:		
Relinquished by: Fed Ex	05-20-04	0945	Received by ELOT: Jane McMenus	05-20-04	0945

21.5 °C

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: M. Griffin
Company Name: Whole Earth Environmental, Inc.
Company Address: 2103 Arbor Cove
City/State/Zip: Katy, Tx. 77494
Telephone No: 281.394.2050 Fax No: 281.394.2050
Sampler Signature:

Project Name: Eidson Sta.
Project #:
Project Loc: Lea County, NM
PO #:

4E20002

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers (plastic bag)	Preservative: Ice	Preservative: HNO_3	Preservative: HCl	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None	Preservative: Other (Specify)	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se (TCLP)	Volatiles (TCLP)	Semivolatiles (TCLP)	BTEX 8021B/5030 (TOTAL)	Chlorides	S.A.R.	E.C.			RUSH TAT (Pre-Schedule)	Standard TAT
-29	B-2 @ 5'	05/08/04		1						X				X										X						
-30	B-2 @ 10'	05/08/04		1						X				X										X						
-31	B-2 @ 15'	05/08/04		1						X				X										X						
-32	B-2 @ 20'	05/08/04		1						X				X										X						
-33	B-2 @ 25'	05/08/04		1						X				X										X						
-34	B-2 @ 30'	05/08/04		1						X				X										X						
-35	B-2 @ 35'	05/08/04		1						X				X										X						
-36	B-2 @ 40'	05/08/04		1						X				X										X						
-37	B-2 @ 45'	05/08/04		1						X				X										X						

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments:
21.5°C

	Date	Time
Relinquished by: M. Griffin	5/19/2004	9:00 AM
Relinquished by: Fed Ex	05-20-04	0945

	Date	Time
Received by:		
Received by ELOT: Jana McMurry	05-20-04	0945

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: M. Griffin
Company Name Whole Earth Environmental, Inc.
Company Address: 2103 Arbor Cove
City/State/Zip: Katy, Tx. 77494
Telephone No: 281.394.2050 **Fax No:** 281.394.2050
Sampler Signature:

Project Name: Eidson Sta.
Project #:
Project Loc: Lea County, NM
PO #:

4E20002

Plastic Bag

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	Preservative: HNO_3	Preservative: HCl	Preservative: NaOH	Preservative: H_2SO_4	Preservative: None	Preservative: Other (Specify)	Matrix: Water	Matrix: Sludge	Matrix: Soil	Matrix: Other (specify):	Analyze For: TCLP: / TOTAL: TDS / CL / SAR / EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	Chlorides	S.A.R.	E.C.			RUSH TAT (Pre-Schedule)	Standard TAT
-38	C-1 @ 5	05/08/04		1						X				X										X						
-39	C-1 @ 10'	05/08/04		1						X				X										X						
-40	C-1 @ 15'	05/08/04		1						X				X										X						
-41	C-2 @ 5' missing	05/08/04		1						X				X										X						
-42	C-2 @ 10'	05/08/04		1						X				X										X						

Special Instructions:

Sample Containers Intact? Y N
Temperature Upon Receipt:
Laboratory Comments:
21.5 °C

	Date	Time
Relinquished by: M. Griffin	5/19/2004	9:00 AM
Relinquished by: Fed Ex	05-20-04	0945

	Date	Time
Received by:		
Received by ELOT: Jane McMurrey	05-20-04	0945