



New Mexico Salt Water Disposal Company

October, 2010 Brine Spill

1RP-2669

Remediation Plan

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

State of New Mexico
Energy Minerals and Natural Resources
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

RECEIVED

OCT 28 2010

Form C-141
Revised October 10, 2003

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

Release Notification and Corrective Action REVISED

Name of Company New Mexico Salt Water Disp. Co.		Contact James B. Read	
Address P. O. Box 1518, Roswell, NM 88202		Telephone No. 575-622-3770 ext. 310	
Facility Name Pipeline		Facility Type Pipeline	
Surface Owner State of New Mexico		Mineral Owner	
		Lease No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
M	15	10S	34E	330	South	330	West	Lea

Latitude Longitude

NATURE OF RELEASE

Type of Release Produced Water	Volume of Release + 1200 bbls	Volume Recovered 1200 bbls
Source of Release Tank	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? Geoff Leking	Occurred: Weekend Discovered: 10/03/2010 P.M.
By Whom? James B. Read	Date and Hour 10/04/2010	
Was a Watercourse Reached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
Leak in Pipeline probably due to weather in area. Rain, lightning and increment weather in area.
Drain pipeline, recovered water.

Describe Area Affected and Cleanup Action Taken.*
Water immediately recovered and drain pipeline. Determining lateral and vertical extent of impacted soil. Will submit remediation plan to OCD for approval and further action.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: <i>James B. Read</i>		OIL CONSERVATION DIVISION	
Printed Name: James B. Read <i>Butch Barajas</i>		Approved by <i>Geoffrey Leking</i>	
Title: Agent		Approval Date: 10/28/10 Expiration Date: 12/28/10	
E-mail Address: jbro@brightok.net		Conditions of Approval: DELIVERATE TO CLEAN + 1. SUBMIT FINAL C-141 BY 12/29/10.	
Date: 10/22/2010 Phone: 575-622-3770		Attached <input type="checkbox"/> IRP-12-10-2669	

* Attach Additional Sheets If Necessary

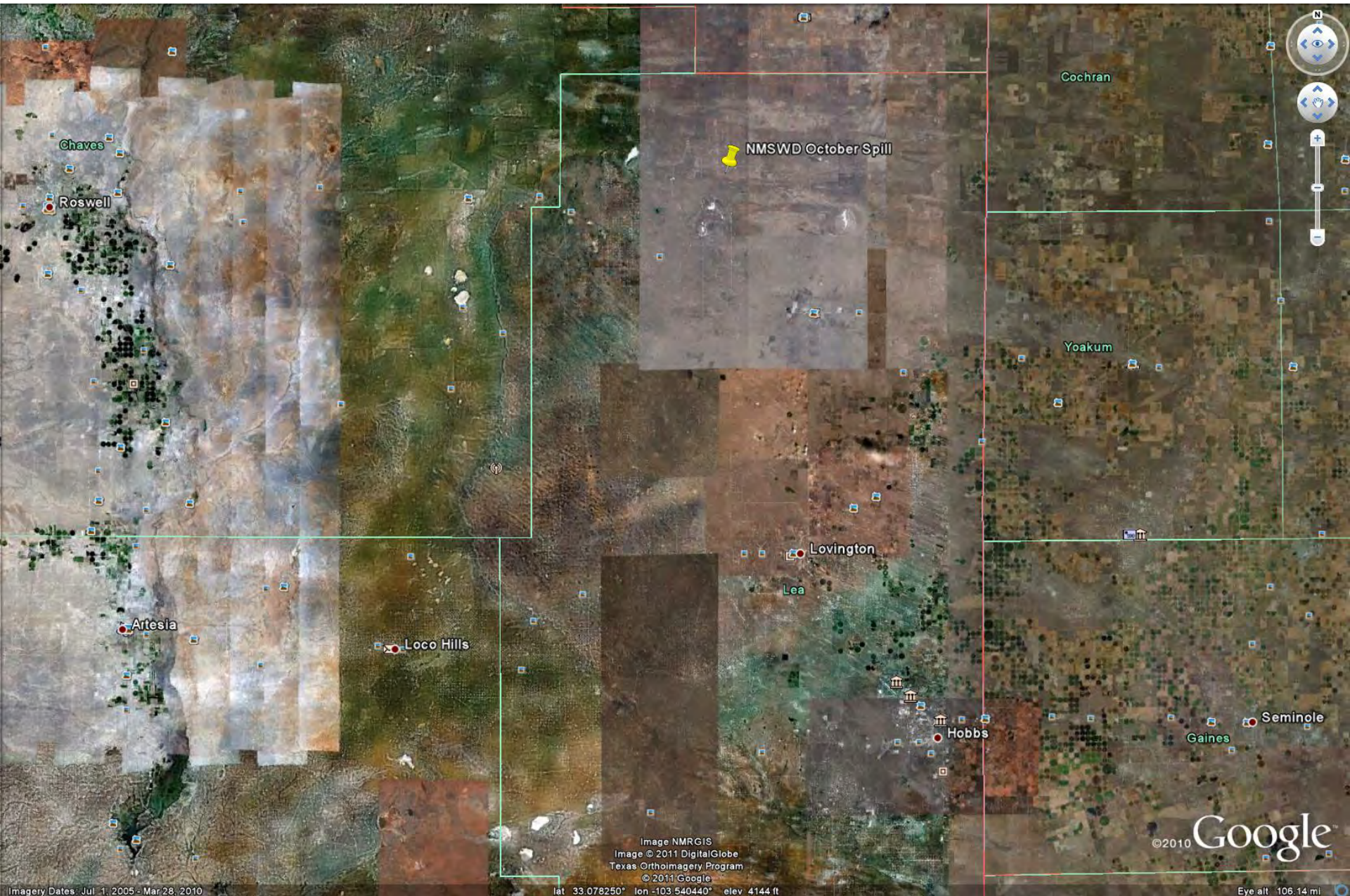


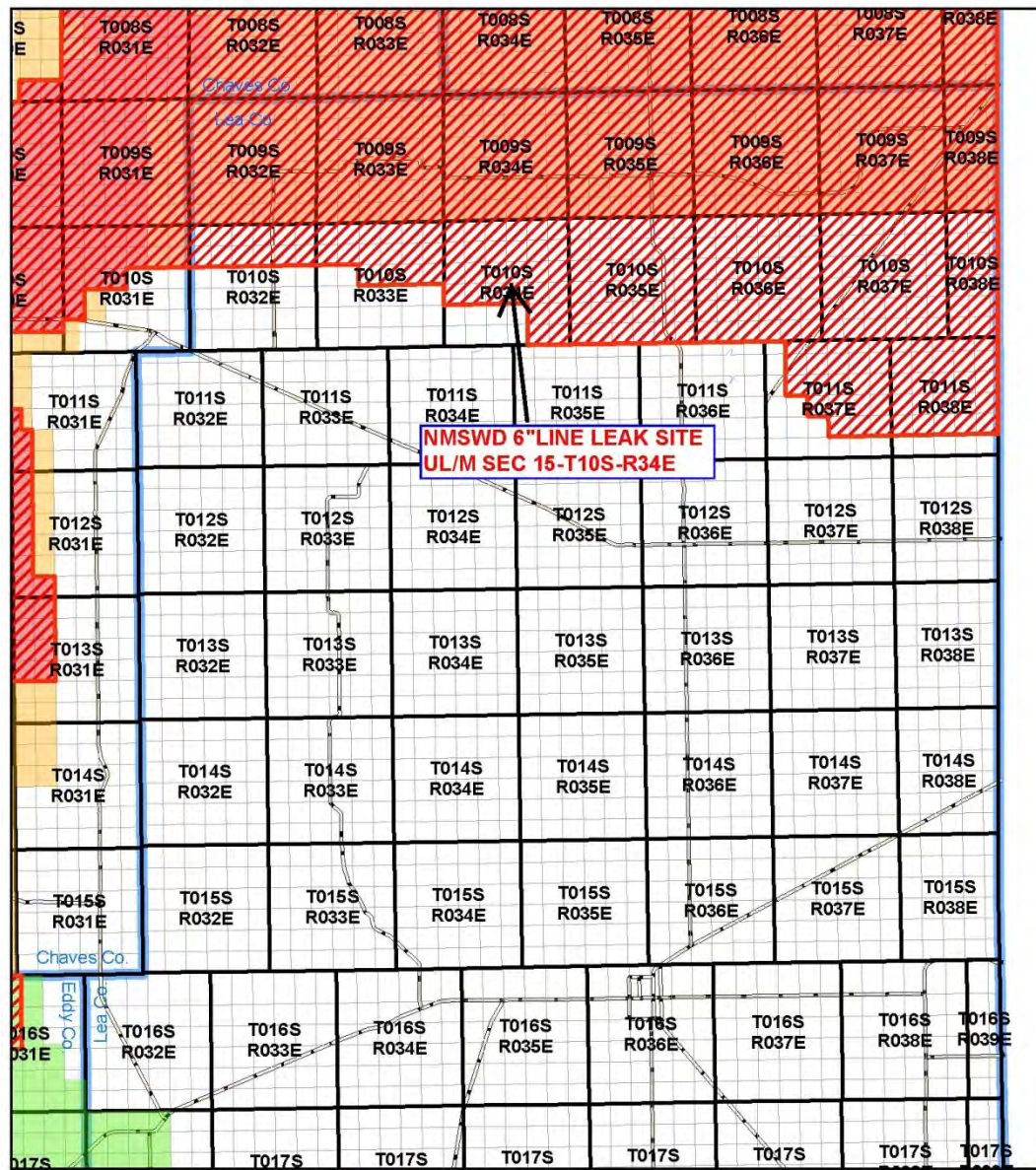
Image NMRGIS
Image © 2011 DigitalGlobe
Texas Orthoimagery Program
© 2011 Google

©2010 Google

Imagery Dates: Jul 1, 2005 - Mar 28, 2010

lat 33.078250° lon -103.540440° elev 4144 ft

Eye alt 106.14 mi



LPC Timing Area 2011

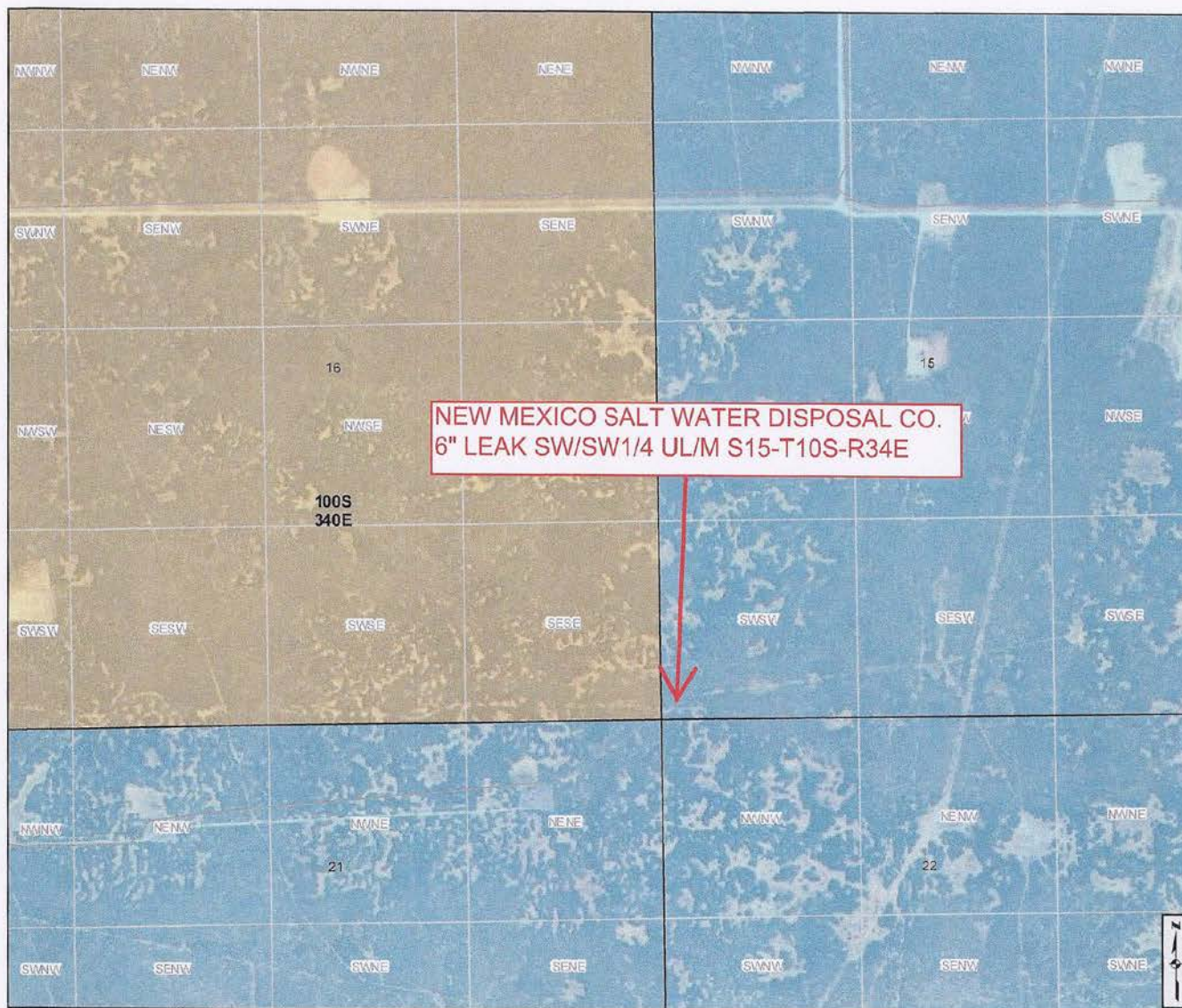
Northern Map

F

- | | | | |
|--|--------------|--|------------------------------------|
| | LPC Timing | | Core Management Area |
| | NM Townships | | Primary Population Area |
| | NM Sections | | Habitat Evaluation Areas |
| | Major Roads | | Sparse & Scattered Population Area |
| | NM Counties | | Isolated Population Area |

This Timing Restriction Map
only applies to Carlsbad FO





Cartographic Features

- City, Town or Village
- County Seat
- County Boundary
- SLO District Office
- SLO District Boundary
- Land Grant
- Interstate Highway
- US Highway
- NM Highway
- Local Road or Street

Federal Surface Management

- Bureau of Land Management
- Bureau of Reclamation
- Department of Agriculture
- Department of Defense
- Department of Energy
- USDA Forest Service
- Fish and Wildlife Service
- Bureau Indian Affairs
- National Park Service
- Valles Caldera National Preserve

State Trust Lands

- Surface Estate
- Subsurface Estate
- Surface and Subsurface Estate

Lease Types

- Oil and Gas Lease
- Agricultural Lease
- Commercial Lease
- Minerals Lease

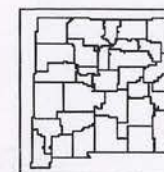
New Mexico State Land Office Trust Land Status

0 0.0350 0.07 0.14 0.21 0.28 Miles

Universal Transverse Mercator Projection, Zone 13
1983 North American Datum

The New Mexico State Land Office assumes no responsibility or liability for, or in connection with, the accuracy, reliability or use of the information provided here, in State Land Office data layers or any other data layer.

Land Office Geographic Information Center
logic@slo.state.nm.us



www.nmstatelands.org

Figure 1. New Mexico Salt Water Disposal Co. Leak Site

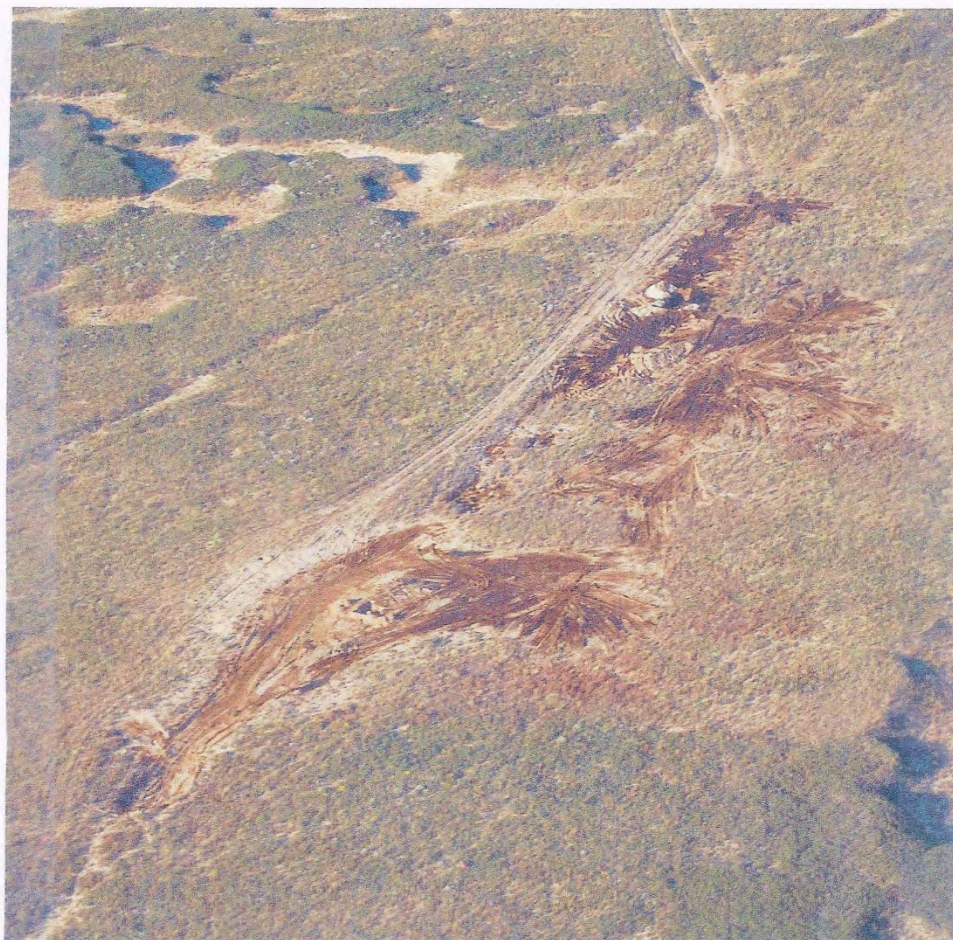


Figure 3. Aerial View of Stained Soil









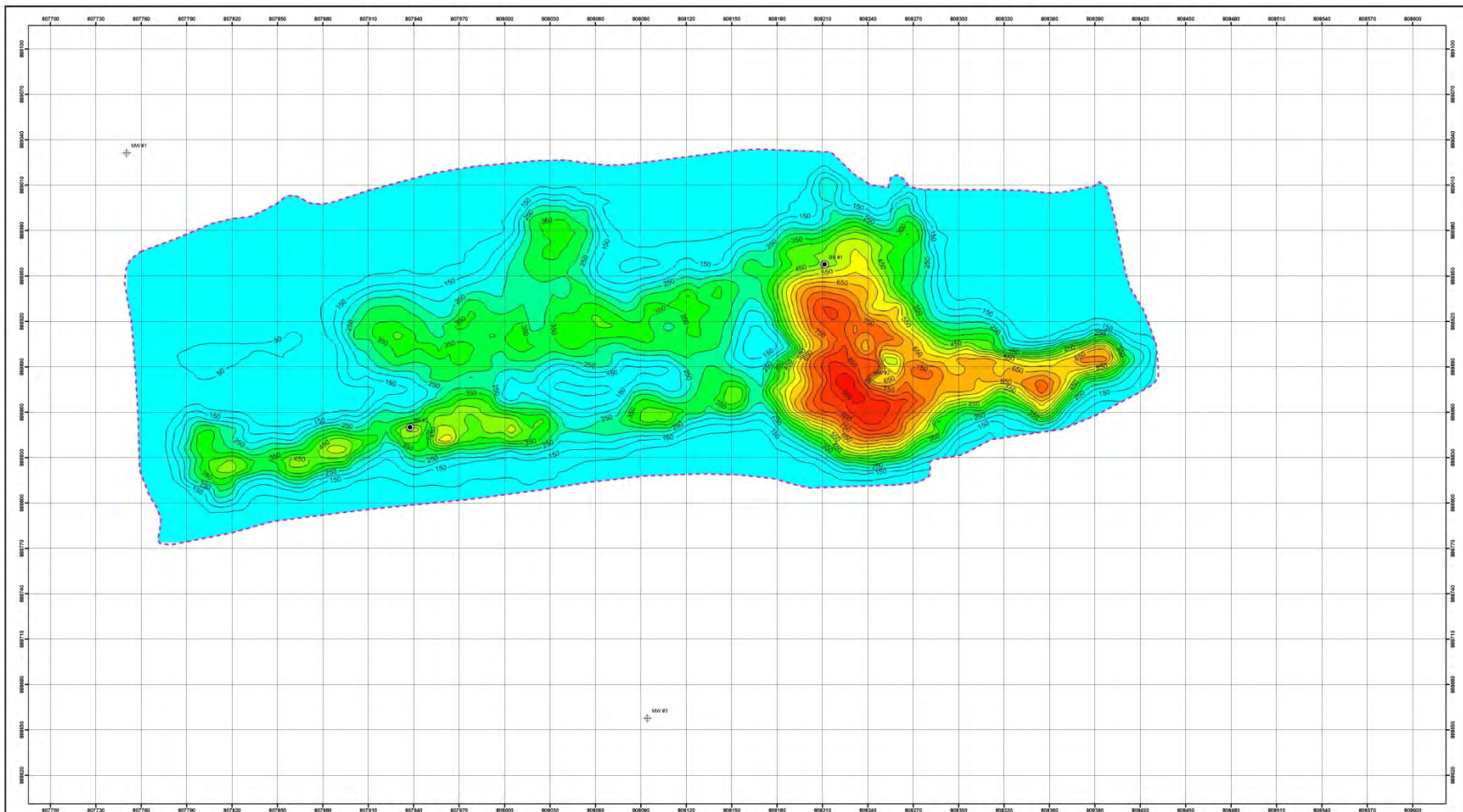












NOTES:

1. MAP PROJECTION PRESENTED IN NAD 1983, NEW MEXICO STATE PLANE EAST ZONE 3001.
2. DEPTH OF INVESTIGATION IS 0' TO 8'.

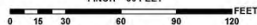


LEGEND

- BORE HOLE
- ⊕ MONITOR WELL
- EM38 SURVEY BOUNDARY



1 INCH = 30 FEET



WHOLE EARTH ENVIRONMENTAL

GEOPHYSICAL SUBSURFACE INVESTIGATION SURVEY

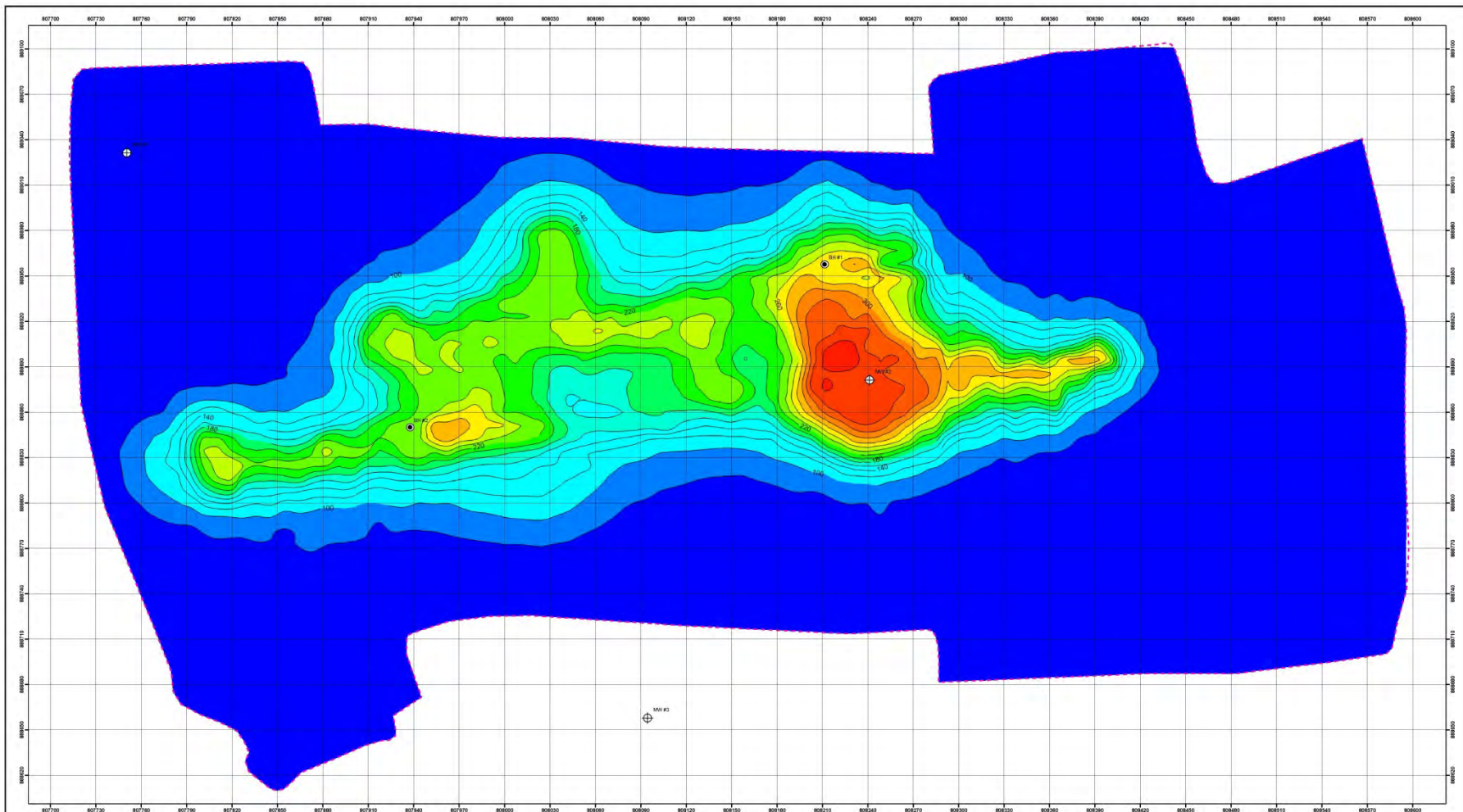
**NMSWD JOHNSON SPILL
CROSSROADS, NEW MEXICO**

EM-38 Salinity Contour Map

JAN. 2011

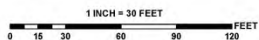


**10866 KATY HOCKLEY RD.
CYPRESS, TEXAS 77433
281-829-5700
www.emcgeophysics.com**



NOTES:

1. MAP PROJECTION PRESENTED IN NAD 1983, NEW MEXICO STATE PLANE EAST ZONE 3001.
2. DEPTH OF INVESTIGATION IS 0' TO 18'.



LEGEND

- BORE HOLE
- ⊕ MONITOR WELL
- EM31 SURVEY BOUNDARY



WHOLE EARTH ENVIRONMENTAL

GEOPHYSICAL SUBSURFACE INVESTIGATION SURVEY

**NMSWD JOHNSON SPILL
CROSSROADS, NEW MEXICO**

EM-31 Saninity Contour Map

JAN. 2011



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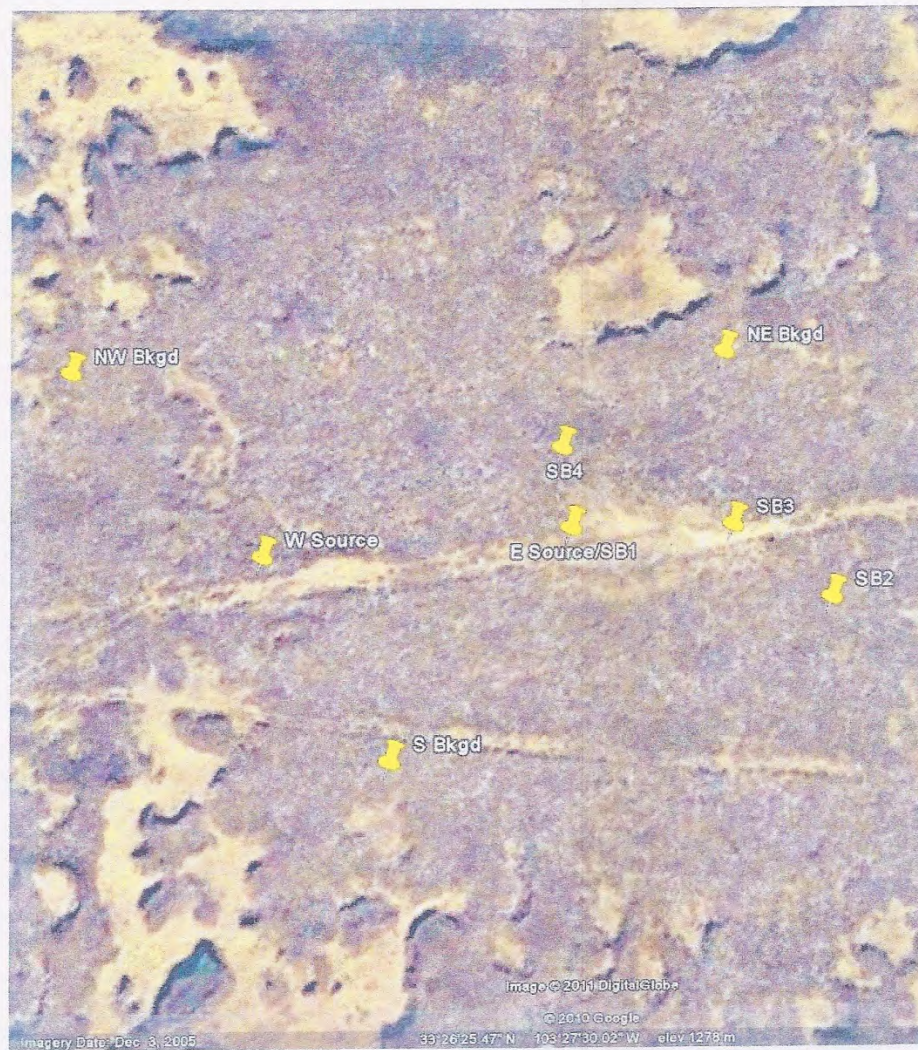

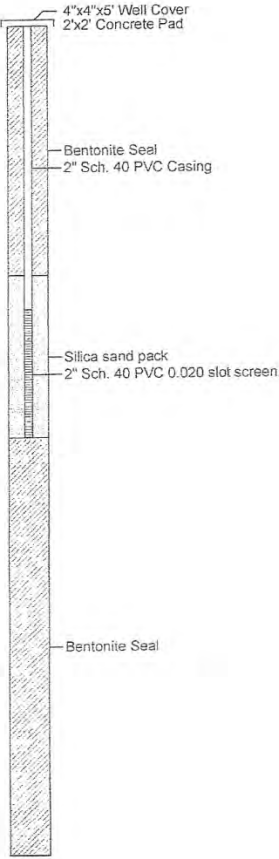



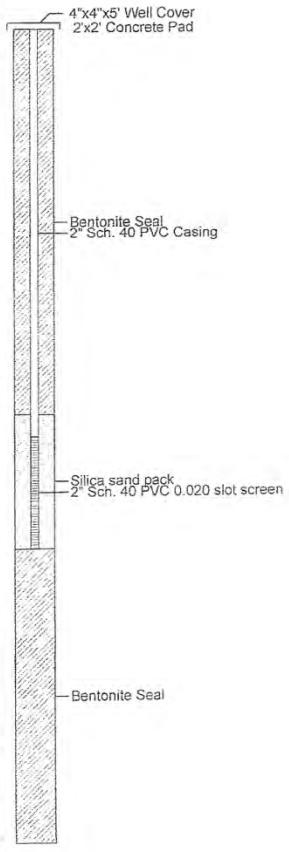
Figure 6. Soil Boring Locations Map



EAST LEAK SOURCE WELL


				Log of Boring East 2" Monitor Well	
Whole Earth Environmental, Inc. 2103 Arbor Cove Katy TX 77494 Contact: Mike Griffin Job#: CROSSRD.DRL.10				Drill Start : 12/08/10 (07:00) Drill End : 12/08/10 (13:30) Boring Location : East side of spill Site Location : NMSWD, Crossroads Auger Type : 3 1/4 Hollow	Logged By : Mort Bates
Depth in Feet	GRAPHIC	USCS	Sample	DESCRIPTION	East 2" MW
0		SP		Oily sand, loose, tan, damp	
5				Caliche, firm, tan, reddish tan, damp	
10				Caliche, hard, grayish white, dry	
15				Caliche, firm, tan, dry	
20					
25					
30					
35		SP		Sand, loose, tan, dry	
40		CL		Sandy clay, loose, reddish tan, damp	
42		GW		Sandy gravel, loose, tan, wet	
45		SS		Sandstone, firm, tan, wet	
47				Clay, stiff, tan, damp	
50		CL		Clay, stiff, yellowish tan, damp	
55					
60					
65		CL		Clay, stiff, gray, damp	
70					
75					
80		CL		Free phase oil at 92'	
85					
90					
95					
100				Total Depth 97'	

NORTHWEST BACKGROUND WELL

				Log of Boring West Background Well	
Whole Earth Environmental, Inc. 2103 Arbor Cove Katy TX 77494 Contact: Mike Griffin Job#: CROSSRD.DRL 10				Drill Start : 12/08/10 (14:00) Drill End : 12/09/10 (16:30) Boring Location : NW of spill 200'± Site Location : NMSWD, Crossroads Auger Type : 3/4 Hollow	Logged By : Mort Bates
Depth in Feet	GRAPHIC	USCS	Sample	DESCRIPTION	
0				Sand, loose, tan, dry	
5		SP		Caliche, firm, white, dry	
10					
15					
20		SP			
25					
30					
35				Sandstone, firm, reddish tan, dry	
40		SS			
45					
50		SS		Sandstone, firm, yellow, dry	
55		SS		Sandstone, hard, yellowish tan, dry	
60		SS		Sandstone, firm, yellowish tan, wet	
65				Clay, stiff, yellowish brown, moist	
70		CL			
75					
80				Clayey sand, stiff, grayish black, damp	
85					
90					
95		SC			
100					
105					
110				Total Depth 110'	
115					

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NORTHEAST BACKGROUND BORING

				Log of Boring East Background Well	
Whole Earth Environmental, Inc. 2103 Arbor Cove Katy TX 77494 Contact: Mike Griffin Job#: CROSSRD.DRL.10				Drill Start: 12/11/10 (10:30) Drill End: 12/14/10 (16:30) Boring Location: NE of spill 200'± Site Location: NMSWD, Crossroads Auger Type: 3 1/4" Hollow	Logged By: Mort Bates
Depth in Feet	GRAPHIC	USCS	Sample	DESCRIPTION	
0		SP		Sand, loose, tan, dry	
5					
10				Caliche, hard, tan and white, dry	
15					
20					
25					
30					
35				Sandstone, firm, tan, dry	
40		SS			
45		SS		Sandstone, firm, damp	
50				Clay, stiff, yellow, damp	
55					
60		CL			
65					
70					
75					
80		CL		Clay, stiff, gray, damp	
85					
90					
95		CL		Clay, stiff, dark gray, damp	
100				Total Depth 100'	
105					

East Background Well

Bentonite Seal

WEST LEAK SOURCE BORING

				Log of Boring West Side Leak Test Hole	
Whole Earth Environmental, Inc. 2103 Arbor Cove Katy TX 77494 Contact: Mike Griffin Job#: CROSSRD.DRL 10				Drill Start : 12/12/10 (11:30) Drill End : 12/30/10 (15:00) Boring Location : West side of leak area Site Location : NMSWD, Crossroads Auger Type : Air rotary	Logged By : Mort Bates
Depth in Feet	GRAPHIC	USCS	Sample	DESCRIPTION	West Side Leak Test Hole
0		SP		Poorly graded sand, loose, tan and black, damp	
5				Caliche, firm, tan, dry	
10					
15					
20					
25					
30					
35		SP		Poorly graded sand, loose, tan, damp	
40					
45		SS		Sandstone, firm, tan, damp	
50		SS		Sandstone, firm, yellowish tan, wet	
55		GW		Sand and gravel, loose, yellow, wet	
60				Sandy clay, soft, yellowish tan, wet	
65		CL		Clay, stiff, yellow, moist	
70		CL		Clay, stiff, yellowish brown, dry	
75		CL			
80		LS		Limestone with clay, firm, gray, dry	
85		LS		Limestone, hard, gray, dry	
90					
95				Clay, firm, gray, dry	
100		CL			
105					
110				Total Depth 110'	
115					


Neat cement in annular

8" steel casing cemented from 66' back to land surface

Bentonite seal to surface inside casing

7 7/8" open hole with bentonite seal to total depth

SOUTH BACKGROUND WELL

				Log of Boring Down Gradient Well	
Whole Earth Environmental, Inc. 2103 Arbor Cove Katy TX 77494 Contact: Mike Griffin Job#: CROSSRD.DRL.10				Drill Start : 12/15/10 (07:30) Drill End : 12/16/10 (12:00) Boring Location : South of spill 200'± Site Location : NMSWD, Crossroads Auger Type : 3 1/4" Hollow	Logged By : Mort Bates
Depth in Feet	GRAPHIC	USCS	Sample	DESCRIPTION	Down Gradient Well
0		SP		Sand, loose, tan, dry	4"x4"x5' Well Cover 2'x2' Concrete Pad
5				Caliche, firm, white, dry	
10				Caliche, hard, white, dry	Bentonite Seal
15					2" Sch. 40 PVC Casing
20					
25					
30				Clayey sand, loose, tan to yellow, dry	Silica sand pack
35		SC			2" Sch. 40 PVC 0.020 slot screen
40					
45		SC		Clayey sand, loose, tan to yellow, moist	
50				Clayey sand, firm, yellow, wet	
55					
60					
65		SC			
70					Bentonite Seal
75					
80					
85				Clay, stiff, grayish black, damp	
90		CL			
95					
100				Total Depth 100'	
105					

12-21-2010 C:\Users\perry\Documents\Whole Earth\Crossroads\Down Iner



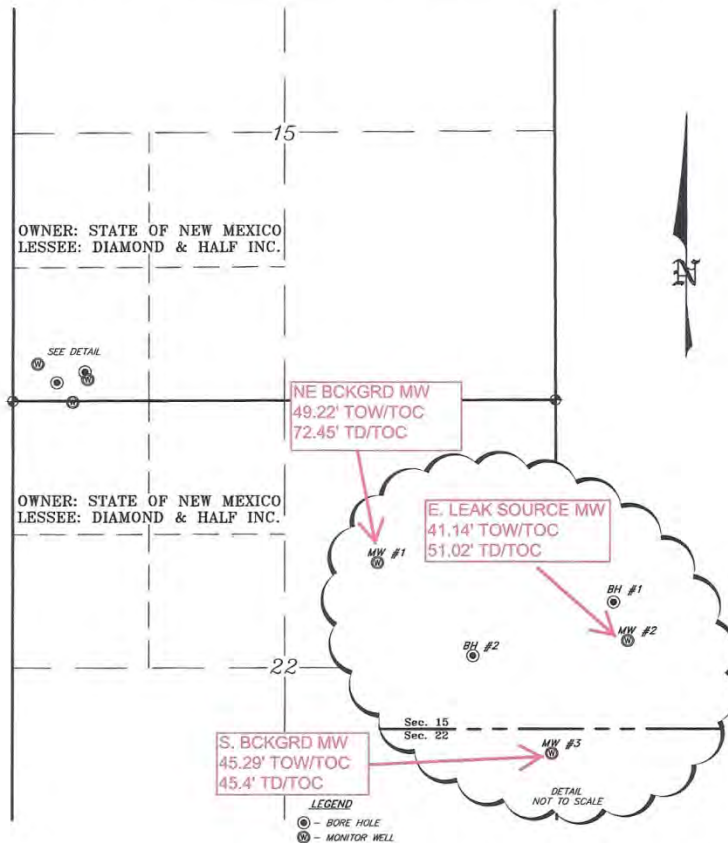
Disposal Option Distances					
Total Affected Area	70,000	Sq. Ft.			
Significantly Impacted Area	40,000	Sq. Ft.			
Excavate All to 4'	10,370	Cu. Yds.			
Excavate Significant to 4'	5,926	Cu. Yds.			
Distance to Gandy/Marley	43.04	Miles			
Truckloads All	519	44,634	Miles	9,000	Gal. Diese
Truckloads Significant	296	25,505	Miles		
Earth Circumference		24,901	Miles		



**Overall Site
View to East**



SECTIONS 15&22, TOWNSHIP 10 SOUTH, RANGE 34 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.



ALL COORDINATES ARE BASED ON NMSPCE (NAD83)

NAME	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEVATION NO. SIDE PVC	ELEVATION CONCRETE	ELEVATION GROUND
MW #1	N889031.293	E807750.318	N33°26'26.84"	W103°27'35.95"	4212.2'	4210.0'	4209.5'
MW #2	N888881.297	E808241.098	N33°26'25.31"	W103°27'30.17"	4207.9'	4205.9'	4205.4'
MW #3	N888657.623	E808094.439	N33°26'23.11"	W103°27'31.92"	4209.5'	4207.1'	4206.6'
BH #1	N888957.647	E808211.471	N33°26'26.07"	W103°27'30.51"			4206.5'
BH #2	N888949.976	E807937.402	N33°26'25.03"	W103°27'33.76"			4207.5'

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED
FROM FIELD NOTES OF AN ACTUAL SURVEY AND
MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND
SURVEYS AS SPECIFIED BY THIS STATE.

GARY L. JONES N.M. P.S. No. 7977
TEXAS P.L.S. No. 5074

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 23995 Drawn By: K. GOAD

Date: 01-17-2011 Disk: KJG - 23995MW.DWG

100 0 100 100

WHOLE EARTH ENVIROMENTAL, INC.

REF: MONITOR WELLS & BORE HOLES

MONITOR WELLS LOCATED IN

SECTIONS 15&22, TOWNSHIP 10 SOUTH, RANGE 34 EAST,
N.M.P.M., LEA COUNTY, NEW MEXICO.

Survey Date: 01-10-2011 Sheet 1 of 1 Sheets









