

1R - 0267

REPORTS

DATE:

2005



Whole Earth Environmental, Inc.

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

November 7, 2005

Santos USA Corporation
10111 Richmond
Suite 500
Houston, TX 77042

Attn: Tony Jones

Dear Tony:

Enclosed, please find an overview of the status of the remaining environmental defects within the Tipperary Bagley Field along with a brief summary of the remediation activities undertaken by Tipperary over the past ten years.

Thank you again for the opportunity of working with you on this especially challenging project.

Warmest personal regards,

Mike Griffin
President
Whole Earth Environmental, Inc.



Executive Summary

Location

The Bagley Field is located approximately twenty miles west of Tatum, Lea County, New Mexico on State lands. The surrounding terrain is essentially featureless with no surface streams or significant topographical variation present. The area is described as semi-arid with a net pan evaporation / precipitation value of -78" per year.

Land Use

The land surface is primarily used for the grazing of cattle; however extensive oil and gas operations have been present since the 1960's.

Site History

Tipperary Corporation's activities within the area consisted of a commercial brine collection and disposal system (Burro Pipeline) and a series of at least thirty-six oil wells. The production wells were sold to Phoenix Hydrocarbons in 2002 with Tipperary retaining the environmental liability relating to ten production pits. Two of the pits have been closed in accordance with NMOCD rules and eight sites remain under active remediation. In October 2005, Santos USA Corporation purchased the former Tipperary Burro Saltwater Disposal System along with certain environmental liabilities associated with the ten former production pits, the Lane Salt Lake Facility and a previously closed production station: Satellite 4.

Remediation Activities

Of the eight remaining pit sites, four are under active remediation. Three sites are equipped with windmills and one is equipped with an electric submersible pump. In each case, the contaminated groundwater is pumped from the aquifer directly into the Burro Disposal System. All sites under active remediation have seen dramatic declines in criteria contaminants and each have predictable times to final closure.

Of the four remaining sites, Burro Pipeline proposes to conduct further investigations to include the installation of several temporary monitor wells to better define plume sources, geometry, and the most efficient active remediation plan. Details of the proposed investigations are included with the individual well sections of this report.

Burro anticipates completing the budgeting process for these investigations by January 31st, 2006 and will submit a detailed investigation plan to the NMOCD by February 15th, 2006.



Burro Pipeline

Bagley Field Pit Remediation Project

Monitor Well Testing Summary

Well Name	Benzene	Chlorides
Iva		
Source Well	0.533	1330
MW-1	0.000	92
MW-2	0.000	52

Mable		
Source Well	?	?
MW-1	1.080	45.1
MW-2	0.000	135
MW-3	0.000	187

Bell State		
MW-1	0.025	312
MW-2	0.012	485
MW-3	0.056	169
MW-4	0.000	797
MW-5	0.000	214
MW-6	0.664	191

NBF		
MW-1	0.007	94
MW-2	0.074	76
MW-3	0.485	99
MW-4	0.014	49
MW-5	0.006	55
MW-6	0.010	50

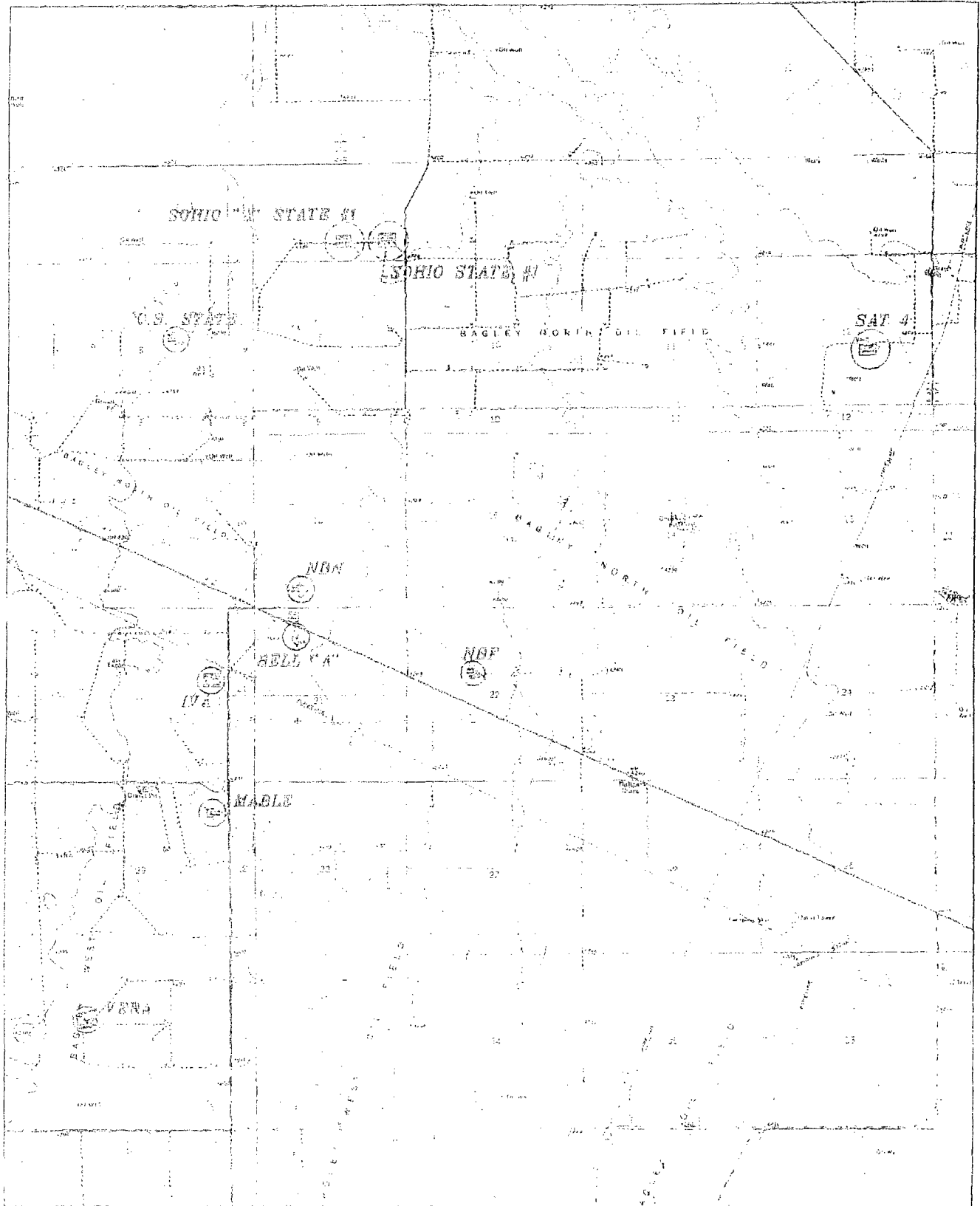
Sohio 1		
MW-1	1.250	2310
MW-2	0.704	1520
MW-3	3.230	2970
MW-4	0.001	39.1
MW-5	0.001	928
MW-6	0.001	185
MW-7	0.001	45
MW-8	0.001	912

Well Name	Benzene	Chlorides
Sohio A		
MW-1	0.000	287
MW-2	0.004	3420
MW-3	0.056	5620
MW-4	0.000	316
MW-5	0.013	6739
MW-6	0.000	2550
MW-7	0.163	8680
MW-8	0.000	1920
MW-9	0.000	4390
MW-10	0.000	9640

G.S. State		
Source Well	0.413	1750
MW-1	1.580	204
MW-2	0.003	35
MW-3	0.000	206
MW-4	0.000	191
MW-5	0.001	368

Collier		
Source Well	?	?
MW-1	0.020	2680
MW-2	0.000	1800
MW-3	0.001	8430
MW-4	0.000	845
MW-5	0.000	36
MW-6	0.000	30

WHOLE EARTH ENVIRONMENTAL, INC.



4000 0 4000 8000

EXHIBIT 9

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

W.O. Number: 9352

Drawn By: K. GOAD

Date: 10-21-99

Disk: KJG #122 - WE9352.DWG

NOT AFFECTED
P-12 M-GRIFFIN
KIM-0-1
LADIE SALT LARKE

Order No	Amd #	Applicant	Facility	Notes	Initial Permit	Reviewer	County	Contact
260	0	TIPPERARY OIL & GAS CORP	BELL STATE "A"	wp-2/25/08-sold to Phoenix-Tipperary retained Envr Liability-Tipperary sold asssts to Santos USA Corp. incl Envr Liability, WholeEarth aquired Burro Pipeline system previously owned by Tipperary..	A	Von Gonten Lea		Mike Griffin- 281-394-2050
261	0	TIPPERARY OIL & GAS CORP	COLLIER #1	wp-2/25/08-sold to Phoenix-Tipperary retained Envr Liability-Tipperary sold asssts to Santos USA Corp. incl Envr Liability, WholeEarth aquired Burro Pipeline system previously owned by Tipperary..	A	Von Gonten Lea		Mike Griffin- 281-394-2050 AF-32
262	0	TIPPERARY OIL & GAS CORP	GULF STATE #1	wp-2/25/08-sold to Phoenix-Tipperary retained Envr Liability-Tipperary sold asssts to Santos USA Corp. incl Envr Liability, WholeEarth aquired Burro Pipeline system previously owned by Tipperary..	A	Von Gonten Lea		Mike Griffin- 281-394-2050
263	0	TIPPERARY OIL & GAS CORP	IVA COM #1	wp-2/25/08-sold to Phoenix-Tipperary retained Envr Liability-Tipperary sold asssts to Santos USA Corp. incl Envr Liability, WholeEarth aquired Burro Pipeline system previously owned by Tipperary..	A	Von Gonten Lea		Mike Griffin- 281-394-2050
264	0	TIPPERARY OIL & GAS CORP	MABEL COM #1	wp-2/25/08-sold to Phoenix-Tipperary retained Envr Liability-Tipperary sold asssts to Santos USA Corp. incl Envr Liability, WholeEarth aquired Burro Pipeline system previously owned by Tipperary..	A	Von Gonten Lea		Mike Griffin- 281-394-2050
265	0	TIPPERARY OIL & GAS CORP	NORTH BAGLEY FIELD PITS	wp-2/25/08-sold to Phoenix-Tipperary retained Envr Liability-Tipperary sold asssts to Santos USA Corp. incl Envr Liability, WholeEarth aquired Burro Pipeline system previously owned by Tipperary..	A	Von Gonten Lea		Mike Griffin- 281-394-2050
266	0	TIPPERARY OIL & GAS CORP	SATELLITE #4	wp-2/25/08-sold to Phoenix-Tipperary retained Envr Liability-Tipperary sold asssts to Santos USA Corp. incl Envr Liability, WholeEarth aquired Burro Pipeline system previously owned by Tipperary..	C	Von Gonten Lea		Mike Griffin- 281-394-2050
267	0	TIPPERARY OIL & GAS CORP	SOHIO STATE #1	wp-2/25/08-sold to Phoenix-Tipperary retained Envr Liability-Tipperary sold asssts to Santos USA Corp. incl Envr Liability, WholeEarth aquired Burro Pipeline system previously owned by Tipperary..	A	Von Gonten Lea		Mike Griffin- 281-394-2050
268	0	TIPPERARY OIL & GAS CORP	SOHIO STATE "A"	wp-2/25/08-sold to Phoenix-Tipperary retained Envr Liability-Tipperary sold asssts to Santos USA Corp. incl Envr Liability, WholeEarth aquired Burro Pipeline system previously owned by Tipperary..	A	Von Gonten Lea		Mike Griffin- 281-394-2050
269	0	TIPPERARY OIL & GAS CORP	STATE NBF #1	wp-2/25/08-sold to Phoenix-Tipperary retained Envr Liability-Tipperary sold asssts to Santos USA Corp. incl Envr Liability, WholeEarth aquired Burro Pipeline system previously owned by Tipperary..	A	Von Gonten Lea		Mike Griffin- 281-394-2050
270	0	TIPPERARY OIL & GAS CORP	STATE NBN #1	wp-2/25/08-sold to Phoenix-Tipperary retained Envr Liability-Tipperary sold asssts to Santos USA Corp. incl Envr Liability, WholeEarth aquired Burro Pipeline system previously owned by Tipperary..	C	Von Gonten Lea		Mike Griffin- 281-394-2050
271	0	TIPPERARY OIL & GAS CORP	VERA #1	wp-2/25/08-sold to Phoenix-Tipperary retained Envr Liability-Tipperary sold asssts to Santos USA Corp. incl Envr Liability, WholeEarth aquired Burro Pipeline system previously owned by Tipperary..	C	Von Gonten Lea		Mike Griffin- 281-394-2050



Sohio 1

The site presently consists of eight monitor wells with no active recovery in progress. All wells adjacent to the pit show high benzene and chloride concentrations with little sign of abatement. Monitor wells 1, 2 and three all contain free product and chloride concentrations up to eleven times the standard. The chlorides will continue to remain within the aquifer indefinitely without active remediation.

We recommend that we investigate methods to begin the active remediation of this site. We further recommend that we continue to test all wells until such time as significant improvement is affected.



10:21:2005 11:33



10.21.2005 11:34

20166
20~01

0~1113

80431

011111

20167

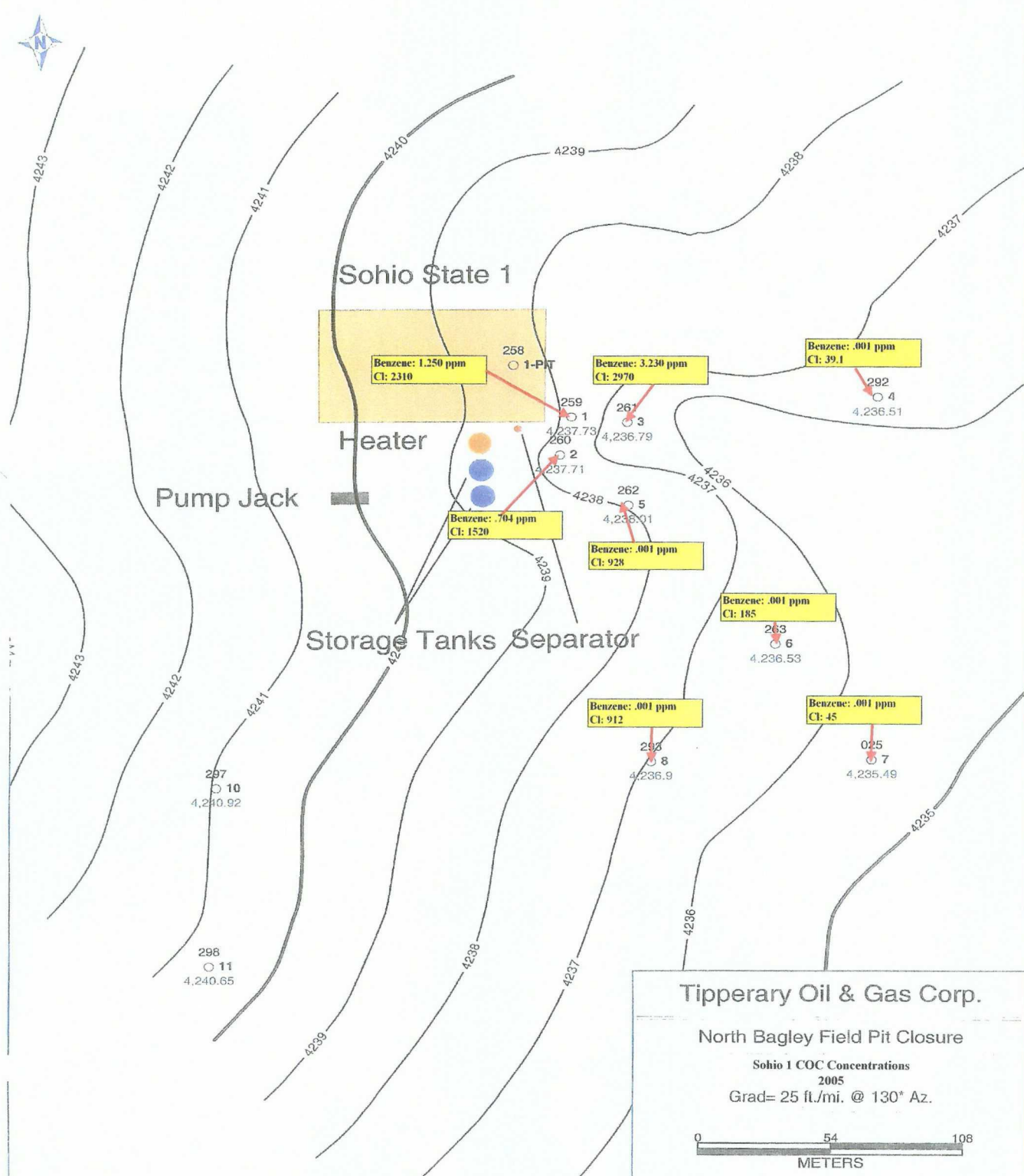
20~02

0~1113

10.21.2005 11:35



10.21.2005 11:36





Sohio 1

Monitor Well Bailing Log

Sohio 1 MW #1

Lat: N33° 23.3627'
Long. W103° 36.2156'
Surf. Elev. 4283.31 Ft.

As Drilled	As Measured
------------	-------------

Date: 8/29/1997
Top of Water 50 Ft.
Bottom of Bore 60 Ft.

Date:	1/23/04	10/21/05		
Top of Water	45.90	45.60		Ft.
Bottom of Bore	60.00	59.80		Ft.
Bore Volume	2.27	2.29		Gal.
LPNL Top	54.00	54.00		Ft.
LPNL Bottom	58.50	58.50		Ft.
DPNL Top	NA	NA		Ft.
DPNL Bottom	NA	NA		Ft.
Min. Bailing Vol.	6.82	6.87		Gal.
Actual Bailing Vol.	20.00	15.00		Gal.

Comments



Sohio 1

Monitor Well Bailing Log

Sohio 1 MW #2

Lat: N33° 23.364
Long. W103° 36.734
Surf. Elev. Ft.

As Drilled	As Measured
------------	-------------

Date: 10/1/1997
Top of Water 48.58 Ft.
Bottom of Bore 60 Ft.

Date:	1/23/04	10/21/05			
Top of Water	45.90	45.40			Ft.
Bottom of Bore	60.00	59.90			Ft.
Bore Volume	2.27	2.34			Gal.
LPNL Top	54.00	54.00			Ft.
LPNL Bottom	58.50	58.50			Ft.
DPNL Top	NA	NA			Ft.
DPNL Bottom	NA	NA			Ft.
Min. Bailing Vol.	6.82	7.02			Gal.
Actual Bailing Vol.	20.00	15.00			Gal.

Comments



Sohio 1

Monitor Well Bailing Log

Sohio 1 MW #3

Lat: N33° 23.3706'
Long. W103° 36.7147'
Surf. Elev. 4283.59 Ft.

North 870017.8648
East 761533.6827

As Drilled	As Measured
------------	-------------

Date: 9/29/1997
Top of Water 49.37 Ft.
Bottom of Bore 60 Ft.

Date:	1/23/04	10/21/05		
Top of Water	46.80	45.50		Ft.
Bottom of Bore	58.20	58.10		Ft.
Bore Volume	1.84	2.03		Gal.
LPNL Top	54.00	54.00		Ft.
LPNL Bottom	58.50	58.50		Ft.
DPNL Top	NA	NA		Ft.
DPNL Bottom	NA	NA		Ft.
Min. Bailing Vol.	5.52	6.10		Gal.
Actual Bailing Vol.	20.00	15.00		Gal.

Comments



Sohio 1

Monitor Well Bailing Log

Sohio 1 MW #4

Lat: N33° 23.3761
Long. W103° 36.6493
Surf. Elev. 4283 Ft.

As Drilled	As Measured
------------	-------------

Date: 6/13/2003
Top of Water 44.6 Ft.
Bottom of Bore 60 Ft.

Date:	1/23/04	10/21/05		
Top of Water	46.20	46.20		Ft.
Bottom of Bore	57.40	57.60		Ft.
Bore Volume	1.81	1.84		Gal.
LPNL Top	54.00	54.00		Ft.
LPNL Bottom	58.50	58.50		Ft.
DPNL Top	NA	NA		Ft.
DPNL Bottom	NA	NA		Ft.
Min. Bailing Vol.	5.42	5.52		Gal.
Actual Bailing Vol.	20.00	15.00		Gal.

Comments



Sohio 1

Monitor Well Bailing Log

Sohio 1 MW #5

Lat: _____
Long. _____
Surf. Elev. _____

As Drilled	As Measured
------------	-------------

Date: 3/16/1999
Top of Water 40 Ft.
Bottom of Bore 51 Ft.

Date:	1/23/04	10/21/05			
Top of Water	45.20	45.70			Ft.
Bottom of Bore	56.20	56.10			Ft.
Bore Volume	1.77	1.68			Gal.
LPNL Top	54.00	54.00			Ft.
LPNL Bottom	58.50	58.50			Ft.
DPNL Top	NA	NA			Ft.
DPNL Bottom	NA	NA			Ft.
Min. Bailing Vol.	5.32	5.03			Gal.
Actual Bailing Vol.	20.00	15.00			Gal.

Comments



Sohio 1

Monitor Well Bailing Log

Sohio 1 MW #6

Lat: _____
Long. _____
Surf. Elev. _____ Ft.

As Drilled	As Measured
------------	-------------

Date: 8/9/1999
Top of Water 45.31 Ft.
Bottom of Bore 67 Ft.

Date:	1/23/04	10/21/05			
Top of Water	44.60	44.80			Ft.
Bottom of Bore	60.10	60.00			Ft.
Bore Volume	2.50	2.45			Gal.
LPNL Top	54.00	54.00			Ft.
LPNL Bottom	58.50	58.50			Ft.
DPNL Top	NA	NA			Ft.
DPNL Bottom	NA	NA			Ft.
Min. Bailing Vol.	7.50	7.35			Gal.
Actual Bailing Vol.	20.00	15.00			Gal.

Comments



Sohio 1

Monitor Well Bailing Log

Sohio 1 MW #7

Lat: _____
Long. _____
Surf. Elev. _____ Ft.

As Drilled	As Measured
------------	-------------

Date: 6/5/2002
Top of Water 50 Ft.
Bottom of Bore 60 Ft.

Date:	1/23/04	10/21/05			
Top of Water	43.50	43.80			Ft.
Bottom of Bore	56.20	56.10			Ft.
Bore Volume	2.05	1.98			Gal.
LPNL Top	54.00	54.00			Ft.
LPNL Bottom	58.50	58.50			Ft.
DPNL Top	NA	NA			Ft.
DPNL Bottom	NA	NA			Ft.
Min. Bailing Vol.	6.15	5.95			Gal.
Actual Bailing Vol.	20.00	15.00			Gal.

Comments



Sohio 1

Monitor Well Bailing Log

Sohio 1 MW #8

Lat: N33⁰ 23.285
Long. W103⁰ 36.710
Surf. Elev. 4280 Ft.

As Drilled	As Measured
-------------------	--------------------

Date: 6/13/2003
Top of Water 44.6 **Ft.**
Bottom of Bore 60 **Ft.**

Date:	1/23/04	10/21/05		
Top of Water	43.20	43.50		Ft.
Bottom of Bore	57.60	57.60		Ft.
Bore Volume	2.32	2.27		Gal.
LPNL Top	54.00	54.00		Ft.
LPNL Bottom	58.50	58.50		Ft.
DPNL Top	NA	NA		Ft.
DPNL Bottom	NA	NA		Ft.
Min. Bailing Vol.	6.97	6.82		Gal.
Actual Bailing Vol.	20.00	15.00		Gal.

Comments

**Monitor Well # 1
Sohio State # 1
Sampling Results**

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX
12483	09/05/97	2.559	1.148	0.243	1.257	0.081	1.338	5.288
13186	12/03/97	2.148	0.062	0.173	0.930	0.313	1.243	3.626
14066	03/23/98	1.301	0.113	0.209	0.490	0.179	0.669	2.292
14665	06/25/98	1.313	0.113	0.206	0.611	0.180	0.791	2.423
15597	10/01/98	2.541	0.108	0.182	0.167	0.098	0.265	3.096
16604	01/06/99	1.000	0.067	0.156	0.214	0.095	0.309	1.532
17437	04/01/99	2.340	0.067	0.168	0.203	0.100	0.303	2.878
18595	07/14/99	2.340	0.110	0.243	0.343	0.136	0.479	3.172
20601	10/06/99	2.040	0.255	0.157	0.261	0.200	0.461	2.913
22762	01/08/00	2.350	0.520	0.187	0.586	0.329	0.915	3.972
25154	04/18/00	2.360	0.263	0.195	0.421	0.216	0.637	3.455
28441	07/20/00	1.860	0.099	0.132	0.391	0.186	0.577	2.668
31508	09/26/00	1.620	0.036	0.127	0.308	0.109	0.417	2.200
36143	01/05/01	2.430	0.011	0.153	0.251	0.089	0.340	2.934
38931	04/05/01	2.080	0.031	0.179	0.342	0.074	0.416	2.706
0101098-15	07/07/01	2.200	0.010	0.190	0.455	0.052	0.507	2.907
0101642-15	09/26/01	2.150	0.131	0.189	0.510	0.137	0.647	3.117
0202619-15	02/15/02	3.850	1.340	1.060	5.000	2.200	7.200	13.450
0203001-15	03/30/02	1.830	0.203	0.059	0.335	0.014	0.349	2.441
0203602-15	06/15/02	2.060	0.192	0.076	0.496	0.138	0.634	2.962
0204815-18	10/19/02	0.471	0.087	0.099	0.327	0.158	0.485	1.142
0205349-17	01/04/03	1.940	0.367	0.367	1.540	0.774	2.314	4.988
0306249-18	04/17/03	0.628	0.108	0.024	0.552	0.290	0.842	1.602
0306733-01	06/18/03	0.992	0.072	0.144	0.490	0.198	0.688	1.896
0307790-33	10/30/03	1.720	1.190	1.010	4.830	1.930	6.760	10.680
4A26012-01	01/24/04	4.900	5.080	5.390	31.700	18.100	49.800	65.170
4J04011-01	10/01/04	155.000	75.300	145.000	882.000	459.000	1341.000	1716.300
5J24012-01	10/21/05	1.250	0.265	0.387	2.270	0.691	2.961	4.863

Monitor Well # 2
Sohio State # 1
Sampling Results

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX
12723	10/02/97	0.799	0.128	0.141	0.628	0.292	0.920	1.988
13187	12/03/97	1.409	0.053	0.116	0.536	0.192	0.728	2.306
14051	03/23/98	1.101	0.108	0.130	0.376	0.148	0.524	1.863
14671	06/25/98	1.111	0.138	0.118	0.379	0.174	0.553	1.920
15601	10/01/98	0.872	0.105	0.071	0.242	0.129	0.371	1.419
16587	01/06/99	0.876	0.193	0.094	0.339	0.163	0.502	1.665
17438	04/01/99	1.350	0.092	0.079	0.248	0.138	0.386	1.907
18605	07/14/99	1.010	0.205	0.146	0.482	0.240	0.722	2.083
20615	10/06/99	1.150	0.206	0.289	0.304	0.176	0.480	2.125
22790	01/08/00	1.870	0.353	0.221	0.782	0.429	1.211	3.655
25155	04/18/00	1.770	0.209	0.176	0.616	0.344	0.960	3.115
28446	07/20/00	1.280	0.203	0.150	0.546	0.294	0.840	2.473
31509	09/26/00	1.300	0.291	0.165	0.610	0.324	0.934	2.690
36143	01/05/01	1.420	0.036	0.140	0.428	0.287	0.715	2.311
38932	04/05/01	1.490	0.038	0.199	0.606	0.348	0.954	2.681
0101098-16	07/07/01	1.220	0.017	0.166	0.583	0.303	0.886	2.289
1010642-16	09/26/01	1.030	0.035	0.035	0.381	0.198	0.489	1.589
0202619-16	02/15/02	2.470	0.007	0.381	1.760	0.013	1.773	4.631
0203001-16	03/30/02	2.700	0.149	0.025	1.270	0.072	1.342	4.216
0203602-16	06/15/02	1.310	0.149	0.031	0.694	0.185	0.879	2.369
0204815-19	10/19/02	0.830	0.081	0.010	0.332	0.015	0.347	1.268
0205349-18	01/04/03	1.880	0.010	0.160	0.783	0.910	0.793	2.843
0306249-19	04/17/03	1.780	0.045	0.120	0.833	0.066	0.899	2.844
0306733-02	06/18/03	0.435	0.013	0.055	0.184	0.022	0.206	0.709
0307790-34	10/30/03	1.120	0.007	0.162	0.644	0.014	0.658	1.947
4A26012-02	01/24/04	2.530	0.009	0.368	1.610	0.034	1.644	4.551
4J04011-02	10/01/04	1.470	0.013	0.193	1.680	0.022	1.702	3.378
5J24012-02	10/21/05	0.704	0.010	0.178	0.284	0.010	0.294	1.186

Monitor Well # 3
Sohio State # 1
Sampling Results

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX
12724	10/02/97	1.276	0.614	0.206	0.553	0.684	1.237	3.333
13188	12/03/97	2.063	0.178	0.118	0.091	0.001	0.092	2.361
14052	03/23/98	1.396	0.269	0.159	0.823	0.366	1.189	3.013
14672	06/25/98	1.357	0.272	0.131	0.589	0.252	0.841	2.601
15609	10/01/98	0.542	0.072	0.025	0.093	0.054	0.147	0.786
16588	01/06/99	1.100	0.247	0.107	0.415	0.203	0.618	2.072
18606	07/14/99	3.540	0.553	2.880	0.967	0.532	1.499	8.472
20616	10/06/99	2.470	0.486	0.660	0.594	0.444	1.038	4.654
22760	01/08/00	0.334	0.186	0.074	0.257	0.149	0.406	1.000
25156	04/18/00	3.100	3.110	0.723	4.829	2.950	7.770	14.703
28447	07/20/00	2.180	0.643	0.204	1.100	0.683	1.783	4.810
31510	09/26/00	2.460	0.432	0.201	0.929	0.544	1.464	4.557
36149	01/05/01	2.950	1.840	0.364	1.540	1.220	2.760	7.914
38933	04/05/01	1.410	0.179	0.095	0.449	0.306	0.755	2.439
0101098-17	07/07/01	1.100	0.077	0.082	0.364	0.257	0.621	1.880
0101642-17	09/26/01	2.810	2.220	0.554	3.150	1.650	4.800	10.384
0202619-17	02/15/02	1.870	1.350	0.453	2.490	1.479	3.960	7.633
0203001-17	03/30/02	2.520	0.967	2.230	5.190	2.970	8.160	13.877
0203602-17	06/15/02	3.200	0.719	2.520	4.370	2.380	6.750	13.189
0204815-20	10/19/02	1.450	0.317	0.920	1.810	0.994	2.804	5.491
0205349-19	01/04/03	1.580	2.730	1.910	14.300	6.980	21.280	27.500
0306249-20	04/17/03	1.010	0.714	0.199	1.440	0.746	2.186	4.109
0306733-03	06/18/03	2.340	1.500	0.534	2.540	1.360	3.900	8.274
0307790-35	10/30/03	1.670	2.800	3.550	19.600	3.920	22.920	30.940
4A26012-03	01/24/04	2.700	1.850	0.754	3.680	1.880	5.560	10.864
4J04011-03	10/01/04	1.300	0.992	0.887	13.000	8.960	21.960	25.139
5J24012-03	10/21/05	3.230	5.290	3.770	20.360	9.930	30.230	42.520

Sampling Results

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX
0306751-01	06/22/03	0.007	0.010	0.007	0.030	0.012	0.042	0.066
0307791-36	10/30/03	0.002	0.003	0.002	0.007	0.002	0.009	0.016
4A26012-04	01/24/04	0.001	0.001	0.001	0.001	0.001	0.002	0.005
4J04011-04	10/01/04	0.001	0.001	0.001	0.001	0.001	0.002	0.005
5J24012-05	10/21/05	0.001	0.001	0.001	0.001	0.001	0.002	0.005

Sampling Results

[illegible]

Sampling Results

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX
19165	08/13/99	0.001	0.001	0.001	0.001	0.001	0.002	0.005
20618	10/06/99	0.188	0.087	0.023	0.081	0.050	0.131	0.429
22776	01/08/00	0.086	0.095	0.024	0.164	0.063	0.167	0.372
25158	04/18/00	0.003	0.005	0.003	0.010	0.004	0.014	0.025
28459	07/20/00	0.080	0.100	0.028	0.133	0.075	0.208	0.416
31512	09/26/00	0.026	0.016	0.010	0.025	0.019	0.044	0.096
36161	01/05/01	0.036	0.030	0.009	0.036	0.026	0.062	0.137
38935	04/05/01	0.007	0.008	0.005	0.010	0.004	0.014	0.034
0101098-19	07/07/01	0.005	0.001	0.004	0.017	0.005	0.022	0.032
0101642-19	09/26/01	0.040	0.033	0.007	0.045	0.010	0.055	0.135
0202619-19	02/15/02	0.045	0.095	0.054	0.328	0.169	0.497	0.691
0203001-19	03/30/02	0.001	0.001	0.001	0.001	0.001	0.002	0.005
0203602-19	06/15/02	0.001	0.001	0.001	0.001	0.001	0.002	0.005
0204815-22	10/19/02	0.042	0.030	0.065	0.170	0.083	0.253	0.390
0205349-21	01/04/04	0.003	0.007	0.004	0.013	0.006	0.019	0.033
0306249-22	04/17/03	0.006	0.005	0.014	0.067	0.016	0.083	0.108
0306733-05	06/18/03	0.004	0.010	0.008	0.036	0.011	0.047	0.069
0307790-38	10/30/03	0.002	0.004	0.002	0.008	0.003	0.011	0.019
4A26012-06	01/24/04	0.001	0.001	0.001	0.001	0.001	0.002	0.005
4J04011-06	10/01/04	0.001	0.001	0.001	0.001	0.001	0.002	0.005
5J24012-06	10/21/05	0.001	0.001	0.001	0.001	0.001	0.002	0.005

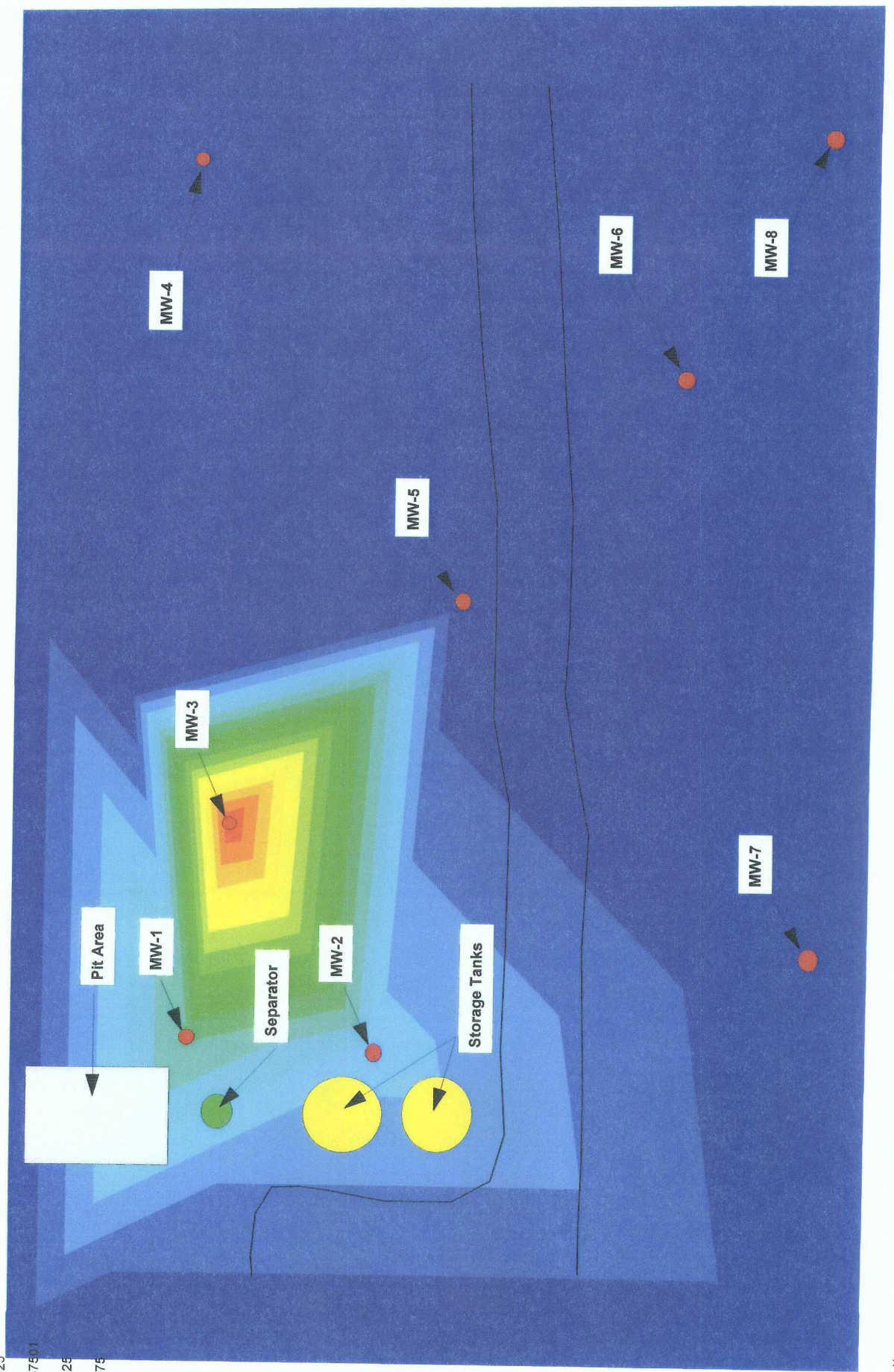
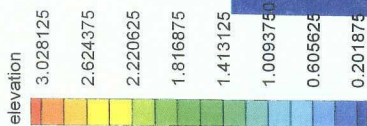
Sampling Results

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX
0203602-20	06/15/02	0.001	0.001	0.001	0.001	0.001	0.002	0.005
0204815-23	10/19/02	0.020	0.021	0.037	0.122	0.057	0.179	0.257
0205349-22	01/04/03	0.006	0.012	0.005	0.017	0.009	0.026	0.049
0306249-23	04/17/03	0.001	0.001	0.001	0.001	0.001	0.002	0.005
0306733-06	06/18/03	0.003	0.007	0.007	0.028	0.009	0.037	0.054
0307790-39	10/30/03	0.006	0.013	0.006	0.030	0.011	0.041	0.066
4A26012-07	01/24/04	0.001	0.001	0.001	0.001	0.001	0.002	0.005
4J04011-05	10/01/04	0.001	0.001	0.001	0.001	0.001	0.002	0.005
5J24012-07	10/21/05	0.001	0.001	0.001	0.001	0.001	0.002	0.005

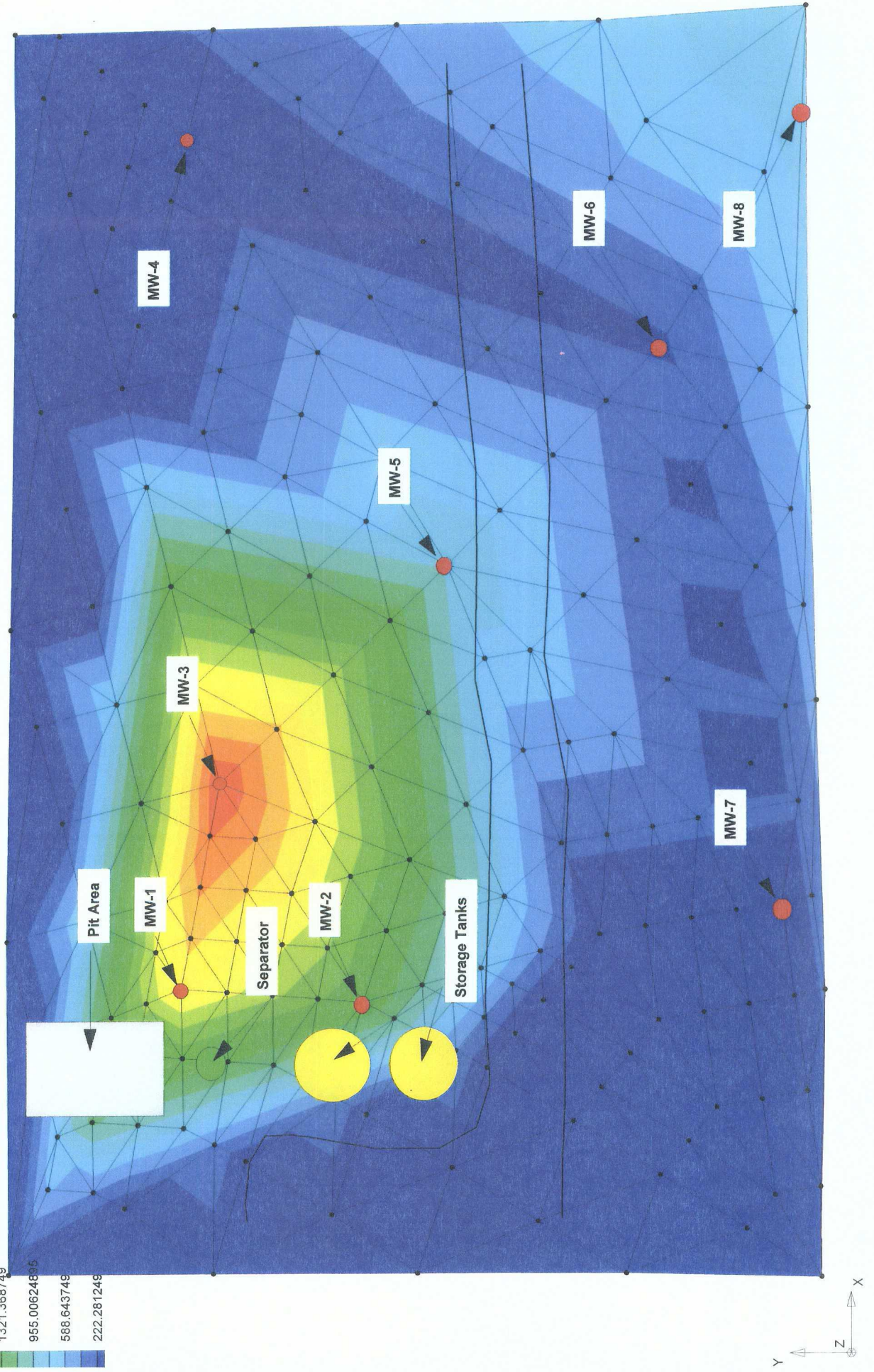
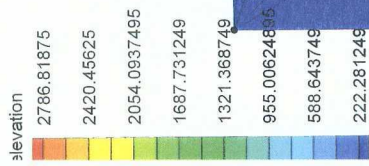
Sampling Results

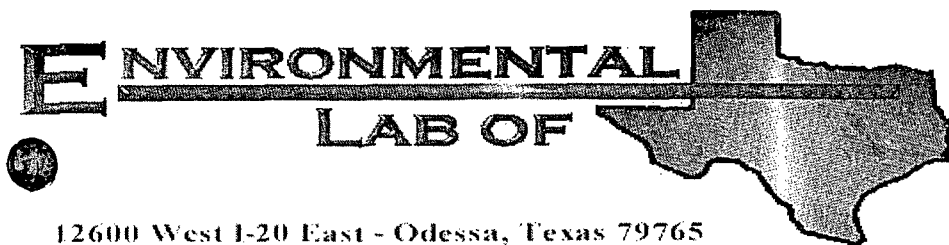
Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX
0306751-02	06/22/03	0.004	0.007	0.005	0.022	0.009	0.031	0.047
0307790-40	10/30/02	0.001	0.002	0.001	0.003	0.001	0.004	0.008
4A26012-08	01/24/04	0.001	0.001	0.001	0.001	0.001	0.002	0.005
4J04011-05	10/01/04	0.001	0.001	0.001	0.001	0.001	0.002	0.005
5J24012-08	10/21/05	0.001	0.001	0.001	0.001	0.001	0.002	0.005

Tipperary Corporation Sohio 1 Benzene Concentrations



Tipperary Corporation Sohio 1 Chloride Concentrations





12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Mike Griffin

WHOLE EARTH ENVIRONMENTAL

2103 Arbor Cove

Katy, TX 77494

Project: Sohio 1

Project Number: None Given

Location: Lea County, New Mexico

Lab Order Number: 5J24012

Report Date: 11/03/05

WHOLE EARTH ENVIRONMENTAL
2103 Arbor Cove
Katy TX, 77494

Project: Sohio 1
Project Number: None Given
Project Manager: Mike Griffin

Fax: (281) 394-2051

Reported:
11/03/05 09:48

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW #1	5J24012-01	Water	10/21/05 00:00	10/23/05 15:40
MW #2	5J24012-02	Water	10/21/05 11:55	10/23/05 15:40
MW #3	5J24012-03	Water	10/21/05 11:40	10/23/05 15:40
MW #4	5J24012-04	Water	10/21/05 11:30	10/23/05 15:40
MW #5	5J24012-05	Water	10/21/05 00:00	10/23/05 15:40
MW #6	5J24012-06	Water	10/21/05 11:20	10/23/05 15:40
MW #7	5J24012-07	Water	10/21/05 11:00	10/23/05 15:40
MW #8	5J24012-08	Water	10/21/05 11:10	10/23/05 15:40

WHOLE EARTH ENVIRONMENTAL
2103 Arbor Cove
Katy TX, 77494

Project: Sohio I
Project Number: None Given
Project Manager: Mike Griffin

Fax: (281) 394-2051

Reported:
11/03/05 09:48

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW #1 (5J24012-01) Water									
Benzene	1.25	0.100	mg/L	100	EJ52805	10/28/05	10/31/05	EPA 8021B	
Toluene	0.265	0.100	"	"	"	"	"	"	
Ethylbenzene	0.387	0.100	"	"	"	"	"	"	
Xylene (p/m)	2.27	0.100	"	"	"	"	"	"	
Xylene (o)	0.691	0.100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		96.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		104 %	80-120		"	"	"	"	

MW #2 (5J24012-02) Water

Benzene	0.704	0.0500	mg/L	50	EJ52805	10/28/05	10/31/05	EPA 8021B	
Toluene	J [0.0195]	0.0500	"	"	"	"	"	"	
Ethylbenzene	0.178	0.0500	"	"	"	"	"	"	
Xylene (p/m)	0.284	0.0500	"	"	"	"	"	"	
Xylene (o)	J [0.0439]	0.0500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		87.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		81.2 %	80-120		"	"	"	"	

MW #3 (5J24012-03) Water

Benzene	3.23	0.0500	mg/L	50	EJ52805	10/28/05	10/31/05	EPA 8021B	
Toluene	5.29	0.0500	"	"	"	"	"	"	
Ethylbenzene	3.77	0.0500	"	"	"	"	"	"	
Xylene (p/m)	20.3	0.0500	"	"	"	"	"	"	
Xylene (o)	9.93	0.0500	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		1230 %	80-120		"	"	"	"	S-04
Surrogate: 4-Bromofluorobenzene		177 %	80-120		"	"	"	"	S-04

MW #4 (5J24012-04) Water

Benzene	ND	0.00100	mg/L	1	EJ52805	10/28/05	10/31/05	EPA 8021B	
Toluene	J [0.000449]	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	J [0.000545]	0.00100	"	"	"	"	"	"	
Xylene (o)	J [0.000290]	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		85.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.0 %	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.

Page 2 of 8

WHOLE EARTH ENVIRONMENTAL
2103 Arbor Cove
Katy TX, 77494

Project: Sohio I
Project Number: None Given
Project Manager: Mike Griffin

Fax: (281) 394-2051

Reported:
11/03/05 09:48

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW #5 (5J24012-05) Water									
Benzene	ND	0.00100	mg/L	1	EJ52805	10/28/05	10/31/05	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		81.8 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.2 %	80-120		"	"	"	"	

MW #6 (5J24012-06) Water

Benzene	ND	0.0100	mg/L	10	EJ52805	10/28/05	11/01/05	EPA 8021B	
Toluene	ND	0.0100	"	"	"	"	"	"	
Ethylbenzene	ND	0.0100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.0100	"	"	"	"	"	"	
Xylene (o)	ND	0.0100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		101 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		82.5 %	80-120		"	"	"	"	

MW #7 (5J24012-07) Water

Benzene	ND	0.00100	mg/L	1	EJ52805	10/28/05	11/02/05	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		95.0 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		99.2 %	80-120		"	"	"	"	

MW #8 (5J24012-08) Water

Benzene	ND	0.00100	mg/L	1	EJ52805	10/28/05	10/31/05	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		85.5 %	80-120		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		80.5 %	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.

Page 3 of 8

WHOLE EARTH ENVIRONMENTAL
2103 Arbor Cove
Katy TX, 77494

Project: Sohio I
Project Number: None Given
Project Manager: Mike Griffin

Fax: (281) 394-2051

Reported:
11/03/05 09:48

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW #1 (5J24012-01) Water									
Chloride	2310	50.0	mg/L	100	EJ52605	10/25/05	10/26/05	EPA 300.0	
MW #2 (5J24012-02) Water									
Chloride	1520	25.0	mg/L	50	EJ52605	10/25/05	10/26/05	EPA 300.0	
MW #3 (5J24012-03) Water									
Chloride	2970	50.0	mg/L	100	EJ52605	10/25/05	10/26/05	EPA 300.0	
MW #4 (5J24012-04) Water									
Chloride	39.1	5.00	mg/L	10	EJ52605	10/25/05	10/26/05	EPA 300.0	
MW #5 (5J24012-05) Water									
Chloride	928	12.5	mg/L	25	EJ52605	10/25/05	10/26/05	EPA 300.0	
MW #6 (5J24012-06) Water									
Chloride	185	5.00	mg/L	10	EJ52605	10/25/05	10/26/05	EPA 300.0	
MW #7 (5J24012-07) Water									
Chloride	45.3	5.00	mg/L	10	EJ52606	10/25/05	10/26/05	EPA 300.0	
MW #8 (5J24012-08) Water									
Chloride	912	12.5	mg/L	25	EJ52606	10/25/05	10/26/05	EPA 300.0	

WHOLE EARTH ENVIRONMENTAL
2103 Arbor Cove
Katy TX, 77494

Project: Sohio 1
Project Number: None Given
Project Manager: Mike Griffin

Fax: (281) 394-2051

Reported:
11/03/05 09:48

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 EJ52805 - EPA 5030C (GC)

Blank (EJ52805-BLK1)

Prepared: 10/28/05 Analyzed: 10/31/05

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	32.3		ug/l	40.0		80.8	80-120			
Surrogate: 4-Bromofluorobenzene	33.6		"	40.0		84.0	80-120			

LCS (EJ52805-BS1)

Prepared: 10/28/05 Analyzed: 10/31/05

Benzene	0.0494	0.00100	mg/L	0.0500		98.8	80-120			
Toluene	0.0521	0.00100	"	0.0500		104	80-120			
Ethylbenzene	0.0516	0.00100	"	0.0500		103	80-120			
Xylene (p/m)	0.0972	0.00100	"	0.100		97.2	80-120			
Xylene (o)	0.0521	0.00100	"	0.0500		104	80-120			
Surrogate: a,a,a-Trifluorotoluene	35.3		ug/l	40.0		88.2	80-120			
Surrogate: 4-Bromofluorobenzene	41.1		"	40.0		103	80-120			

Calibration Check (EJ52805-CCV1)

Prepared: 10/28/05 Analyzed: 10/31/05

Benzene	47.1		ug/l	50.0		94.2	80-120			
Toluene	48.5		"	50.0		97.0	80-120			
Ethylbenzene	45.9		"	50.0		91.8	80-120			
Xylene (p/m)	87.0		"	100		87.0	80-120			
Xylene (o)	46.8		"	50.0		93.6	80-120			
Surrogate: a,a,a-Trifluorotoluene	32.2		"	40.0		80.5	80-120			
Surrogate: 4-Bromofluorobenzene	32.4		"	40.0		81.0	80-120			

Matrix Spike (EJ52805-MS1)

Source: 5J24005-04

Prepared: 10/28/05 Analyzed: 10/31/05

Benzene	0.0479	0.00100	mg/L	0.0500	0.000652	94.5	80-120			
Toluene	0.0498	0.00100	"	0.0500	ND	99.6	80-120			
Ethylbenzene	0.0482	0.00100	"	0.0500	ND	96.4	80-120			
Xylene (p/m)	0.0913	0.00100	"	0.100	ND	91.3	80-120			
Xylene (o)	0.0487	0.00100	"	0.0500	ND	97.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	34.4		ug/l	40.0		86.0	80-120			
Surrogate: 4-Bromofluorobenzene	33.2		"	40.0		83.0	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.

WHOLE EARTH ENVIRONMENTAL
2103 Arbor Cove
Katy TX, 77494

Project: Sohio 1
Project Number: None Given
Project Manager: Mike Griffin

Fax: (281) 394-2051

Reported:
11/03/05 09:48

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 EJ52805 - EPA 5030C (GC)

Matrix Spike Dup (EJ52805-MSD1)

Source: 5J24005-04

Prepared: 10/28/05 Analyzed: 10/31/05

Benzene	0.0479	0.00100	mg/L	0.0500	0.000652	94.5	80-120	0.00	20	
Toluene	0.0507	0.00100	"	0.0500	ND	101	80-120	1.40	20	
Ethylbenzene	0.0498	0.00100	"	0.0500	ND	99.6	80-120	3.27	20	
Xylene (p/m)	0.0938	0.00100	"	0.100	ND	93.8	80-120	2.70	20	
Xylene (o)	0.0504	0.00100	"	0.0500	ND	101	80-120	3.63	20	
Surrogate: a,a,a-Trifluorotoluene	33.2		ug/l	40.0		83.0	80-120			
Surrogate: 4-Bromofluorobenzene	34.4		"	40.0		86.0	80-120			

WHOLE EARTH ENVIRONMENTAL
2103 Arbor Cove
Katy TX, 77494

Project: Sohio 1
Project Number: None Given
Project Manager: Mike Griffin

Fax: (281) 394-2051

Reported:
11/03/05 09:48

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch EJ52605 - General Preparation (WetChem)									
Blank (EJ52605-BLK1)				Prepared: 10/25/05 Analyzed: 10/26/05					
Chloride	ND	0.500	mg/L						
LCS (EJ52605-BS1)				Prepared: 10/25/05 Analyzed: 10/26/05					
Chloride	8.28		mg/L	10.0		82.8 80-120			
Calibration Check (EJ52605-CCV1)				Prepared: 10/25/05 Analyzed: 10/26/05					
Chloride	8.19		mg/L	10.0		81.9 80-120			
Duplicate (EJ52605-DUP1)		Source: 5J24004-06		Prepared: 10/25/05 Analyzed: 10/26/05					
Chloride	46.0	5.00	mg/L		50.5		9.33	20	
Batch EJ52606 - General Preparation (WetChem)									
Blank (EJ52606-BLK1)				Prepared: 10/25/05 Analyzed: 10/26/05					
Chloride	ND	0.500	mg/L						
LCS (EJ52606-BS1)				Prepared: 10/25/05 Analyzed: 10/26/05					
Chloride	8.45		mg/L	10.0		84.5 80-120			
Calibration Check (EJ52606-CCV1)				Prepared: 10/25/05 Analyzed: 10/26/05					
Chloride	8.83		mg/L	10.0		88.3 80-120			
Duplicate (EJ52606-DUP1)		Source: 5J24012-07		Prepared: 10/25/05 Analyzed: 10/26/05					
Chloride	46.5	5.00	mg/L		45.3		2.61	20	

WHOLE EARTH ENVIRONMENTAL
2103 Arbor Cove
Katy TX, 77494

Project: Sohio I
Project Number: None Given
Project Manager: Mike Griffin

Fax: (281) 394-2051

Reported:
11/03/05 09:48

Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

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: 11-03-05

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director
LaTasha Cornish, Chemist
Sandra Sanchez, Lab Tech.

This material is intended only for the use of the individual (s) or entity to whom it is addressed, and may contain information that is privileged and confidential.

If you have received this material in error, please notify us immediately at 432-563-1800.

Project Manager: M. Griffin

Project Name: Sohio 1

Company Name Whole Earth Environmental, Inc.

Project #:

Company Address: 2103 Arbor Cove

Project Loc: Lea County, New Mexico

City/State/Zip: **Katy, Texas 77494**

PO#:

Telephone No: (281) 394-2050

Fax No: (281) 394-2051

Sampler Signature: *D. A. Glueck*

[illegible]

Phone: 432-563-1800
Fax: 432-563-1713

Project Manager: M. Griffin

Company Name

Whole Earth Environmental, Inc.

Company Address: 2103 Arbor Cove

City/State/Zip: Katy, Texas 77494

Telephone No: (281) 394-2050

Sampler Signature:

Fax No: (281) 394-2051

D. J. Quack

Project Name: Sohio 1

Project #:

Project Loc: Lea County, New Mexico

井口

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

[illegible]