

**1R - 0263**

**REPORTS**

**DATE:**

**2008**



**Whole Earth Environmental, Inc.**

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

1R263

January 17, 2008

NMOCD  
1220 South St. Francis Dr.  
Sante Fe, NM 88241

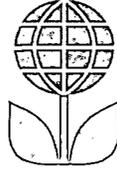
Attn: Glenn von Gonten

Dear Glenn:

Enclosed, please find a copy of the Burro Pipeline Annual Report for 2007. Whole Earth Environmental, Inc. acquired Burro Pipeline Corporation in may of last year. We are hopeful to begin a more aggressive remediation approach than has been possible in the past and the individual site descriptions contained within this report reflect these desires.

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 1960s.

### **Site History**

Tipperary Corporation's activities within the area consisted of commercial brine collection and disposal system (Burro Pipeline) and a series of at least thirty-six 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 remaining assets of Tipperary Corporation that included the environmental liabilities associated with the ten former production pits, the Lane Salt Lake Facility, and a previously closed production station, Satellite 4.

In May, 2007 Whole Earth Environmental, Inc. acquired Burro Pipeline Corporation from Santos, USA, Inc. The property assets of Burro Pipeline consist solely of the equipment associated with the recovery and monitoring of the eight environmental defects described within this report.

### **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 owned by Transrepublic, Inc. and operated by Phoenix Hydrocarbons. All sites under active remediation have seen dramatic declines in criteria contaminants and each have predictable times to final closure.



## EXECUTIVE SUMMARY

### **Location**

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### **Site History**

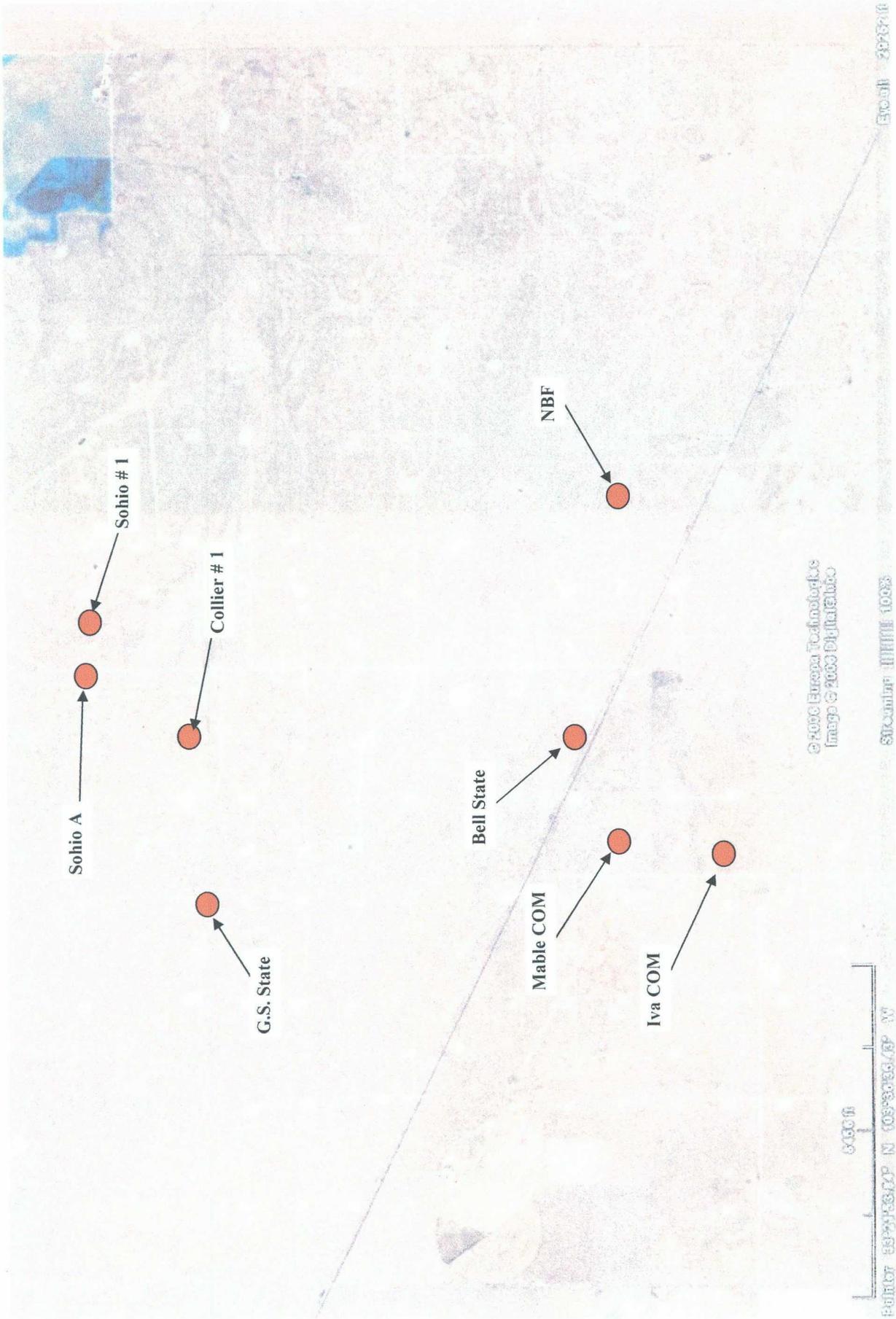
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### **Remediation Activities**

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 June 30, 2007 and will submit a detailed investigation plan to the NMOCD by September 15, 2007.



Order No.	Amnd #	Applicant	Facility	Notes	Intental Permi	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 acquired Burro Pipeline system previously owned by Tipperary.	A	Von Gonten Lea	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 acquired Burro Pipeline system previously owned by Tipperary.	A	Von Gonten Lea	Lea	Mike Griffin- 281-394-2050 AP-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 acquired Burro Pipeline system previously owned by Tipperary.	A	Von Gonten Lea	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 acquired Burro Pipeline system previously owned by Tipperary.	A	Von Gonten Lea	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 acquired Burro Pipeline system previously owned by Tipperary.	A	Von Gonten Lea	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 acquired Burro Pipeline system previously owned by Tipperary.	A	Von Gonten Lea	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 acquired Burro Pipeline system previously owned by Tipperary.	C	Von Gonten Lea	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 acquired Burro Pipeline system previously owned by Tipperary.	A	Von Gonten Lea	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 acquired Burro Pipeline system previously owned by Tipperary.	A	Von Gonten Lea	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 acquired Burro Pipeline system previously owned by Tipperary.	A	Von Gonten Lea	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 acquired Burro Pipeline system previously owned by Tipperary.	C	Von Gonten Lea	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 acquired Burro Pipeline system previously owned by Tipperary.	C	Von Gonten Lea	Lea	Mike Griffin- 281-394-2050

NOT BEHOLD FACILITY  
 AP-32  
 M-1-1  
 LADIE SALT LAKE

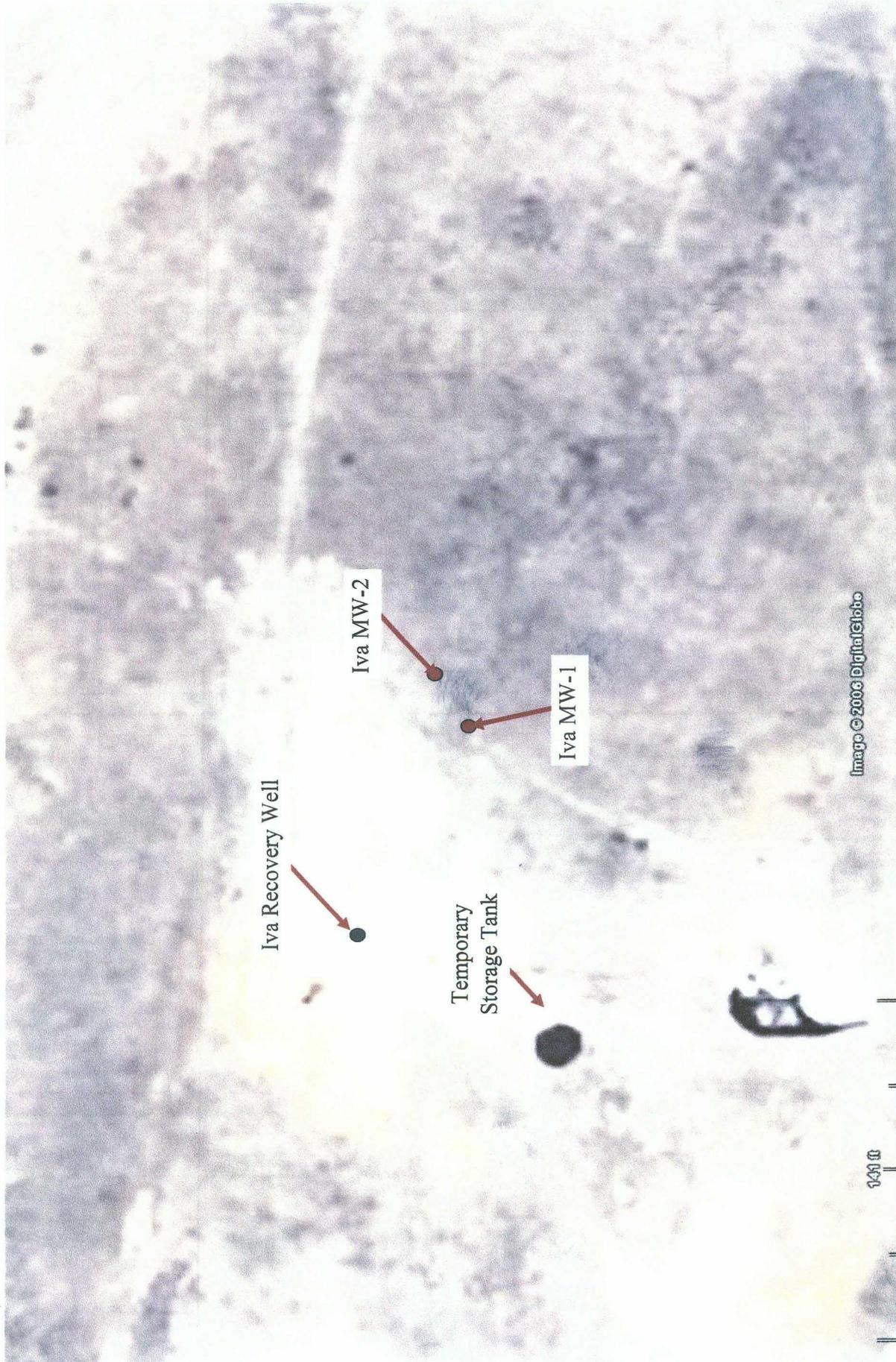


## **Iva COM**

The Iva site consists of one recovery and two monitor wells. The recovery well continues to show reductions in BTEX over the four years of operations with the latest results being less than 5% of the initial concentrations. We estimate that the source well recovered approximately 20,000 gallons of fluid in 2007 with approximately 1/2 of 1 percent being hydrocarbon fractions.

The two outlying delineation wells continue to show essentially non-detectable concentrations of BTEX and chloride concentrations of less than 100 ppm.

We plan to convert the windmill to a downhole electrical pump system by the beginning of the third quarter of this year in order to increase the pumped fluid volumes and shorten the length of time to achieve closure.



Iva Recovery Well

Iva MW-2

Iva MW-1

Temporary Storage Tank

Image © 2006 DigitalGlobe

Streaming 100%

Eye alt 400 ft

141 ft

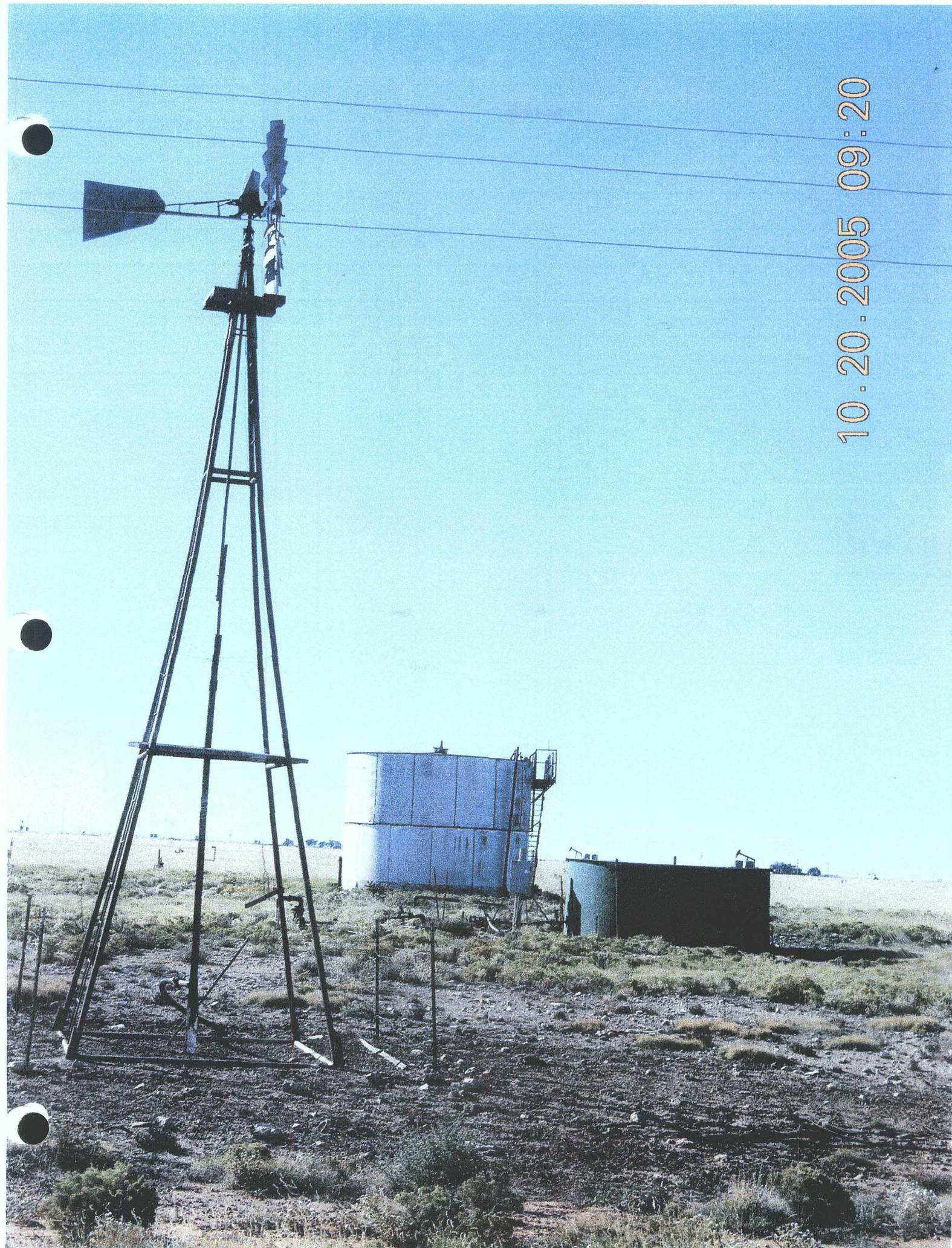
Point 33°21'10.57" N 103°37'44.62" W



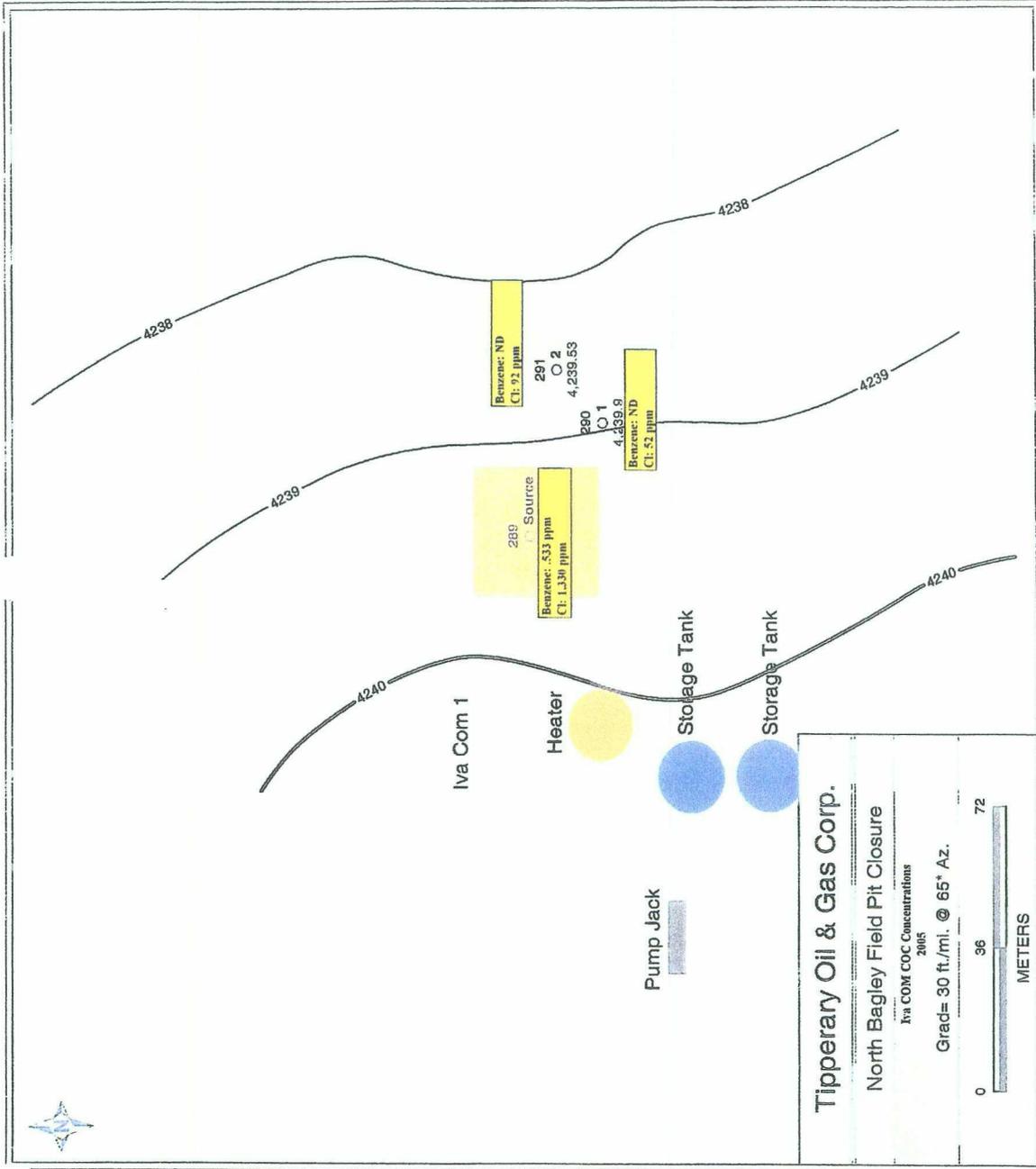


**Burro Pipeline  
Iva COM Recovery Well # 1  
Section 20H T-11S R-33E  
Lea County, NM**

Year	Estimated Groundwater Recovery (bbls.)	Estimated Product Recovery (Bbls.)
1997	250	1.3
1998	500	2.5
1999	500	2.5
2000	500	2.5
2001	500	2.5
2002	500	2.5
2003	500	2.5
2004	500	2.5
2005	500	2.5
2006	500	2.5
2007	500	2.5



10.20.2005 09:20





10.20.2005 09:28



10-20-2005 09:22



10.20.2005 09:27





Iva

## Monitor Well Bailing Log

Iva MW #1

Lat: 33° 21.174'  
 Long. 103° 37.753'  
 Surf. Elev. 4298.4

As Drilled	As Measured
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Date: 8/14/1997  
 Top of Water 54.9 Ft.  
 Bottom of Bore 60 Ft.

	Date:	1/23/04	9/29/04	10/21/05	1/11/07	11/7/07	
Top of Water		52.20	52.50	52.50	52.20	52.20	Ft.
Bottom of Bore		63.20	63.20	63.20	63.10	63.30	Ft.
Bore Volume		1.77	1.73	1.73	1.76	1.79	Gal.
LPNL Top		NA	NA	NA	NA	NA	Ft.
LPNL Bottom		NA	NA	NA	NA	NA	Ft.
DPNL Top		NA	NA	NA	NA	NA	Ft.
DPNL Bottom		NA	NA	NA	NA	NA	Ft.
Min. Bailing Vol.		5.32	5.18	5.18	5.27	5.19	Gal.
Actual Bailing Vol.		15.00	10.00	15.00	10.00	10.00	Gal.

### Comments

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### Iva Source Well

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX	Chlorides
17428	04/01/99	2.050	4.150	0.902	5.500	3.800	9.300	25.702	
18590	07/14/99	4.460	6.850	1.240	8.160	5.570	13.730	26.280	
20605	10/06/99	1.670	1.800	0.126	1.420	1.030	2.450	6.046	
22774	01/08/00	2.350	3.760	0.458	3.210	1.910	5.120	11.688	
25164	04/13/00	1.430	1.510	0.176	1.520	1.100	2.620	5.736	
28464	07/20/00	1.000	0.815	0.104	0.866	0.676	1.542	3.461	
31494	09/26/00	0.865	0.495	0.080	0.833	0.636	1.469	2.909	
36195	01/10/01	0.533	0.168	0.015	0.067	0.044	0.111	0.827	
38917	04/05/01	0.666	0.599	0.141	1.050	0.824	1.874	3.280	
0101098-01	07/07/01	0.371	0.252	0.075	0.577	0.474	1.051	1.749	
0101642-01	09/26/01	0.430	0.204	0.048	0.486	0.359	0.845	1.527	
0202619-01	02/15/02	0.701	0.437	0.102	0.723	0.579	1.302	2.542	
0001112-02	03/30/02	0.593	0.096	0.403	0.913	0.670	1.583	2.675	
0203577-01	06/06/02	0.257	0.048	0.142	0.488	0.376	0.864	1.311	
0204815-01	10/19/02	0.411	0.043	0.080	0.487	0.380	0.867	1.401	
0205349-01	01/04/03	0.770	0.272	0.073	0.627	0.390	1.017	2.132	
0306249-01	04/17/03	0.566	0.174	0.017	0.681	0.486	1.167	1.924	
0306733-17	06/20/03	0.314	0.125	0.042	0.390	0.288	0.678	1.159	
0307790-20	10/30/03	0.301	0.076	0.037	0.317	0.210	0.527	0.941	
4J04007-01	10/01/04	0.533	0.145	0.055	0.608	0.453	1.061	1.794	
7A15012-01	01/11/07	0.623	0.243	0.132	1.03	0.699	1.729	2.727	1380
H13643-1	11/05/07	0.875	0.223	0.153			1.720	2.971	940

**Monitor Well # 1  
Iva COM  
Sampling Results**

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX	Chlorides
12475	09/05/97	0.001	0.001	0.001	0.002	0.007	0.009	0.012	
13182	12/03/97	0.004	0.003	0.001	0.009	0.008	0.017	0.025	
14057	03/23/98	0.003	0.003	0.001	0.007	0.008	0.015	0.022	
14657	06/25/98	0.006	0.005	0.002	0.008	0.009	0.017	0.030	
15590	10/01/98	0.004	0.004	0.002	0.006	0.007	0.013	0.023	
16595	01/06/99	0.003	0.001	0.001	0.002	0.004	0.006	0.011	
20597	10/06/99	0.001	0.001	0.001	0.001	0.001	0.002	0.005	
22767	01/08/00	0.002	0.002	0.001	0.003	0.002	0.005	0.010	
25165	04/13/00	0.001	0.006	0.005	0.015	0.007	0.022	0.034	
28439	07/20/00	0.001	0.001	0.004	0.018	0.008	0.026	0.032	
31503	09/26/00	0.001	0.003	0.006	0.020	0.008	0.028	0.038	
36133	01/05/01	0.001	0.004	0.006	0.014	0.007	0.021	0.032	
38918	04/05/05	0.001	0.001	0.001	0.001	0.001	0.002	0.005	
0101098-02	07/07/01	0.001	0.001	0.003	0.008	0.002	0.010	0.015	
0101642-02	09/26/01	0.001	0.001	0.001	0.003	0.001	0.004	0.007	
0202619-02	02/15/02	0.001	0.001	0.004	0.012	0.004	0.016	0.022	
0203001-02	03/30/02	0.003	0.001	0.012	0.004	0.004	0.008	0.024	
0203577-02	06/06/02	0.001	0.001	0.001	0.001	0.001	0.002	0.005	
0204815-02	10/19/02	0.001	0.001	0.001	0.001	0.001	0.002	0.005	
4J04007-02	10/01/04	0.001	0.001	0.001	0.001	0.001	0.002	0.005	
5J24001-01	10/21/05	0.001	0.001	0.001	0.001	0.001	0.002	0.005	
7A15021-02	01/11/07	0.001	3.310	0.010	0.010	0.010	0.020	3.341	68
H13643-2	11/05/07	0.001	0.001	0.001			0.002	0.005	24

**Monitor Well # 2  
Iva COM  
Sampling Results**

Lab. #	Sample Date	Benzene	Toluene	Ethylbenzene	m,p Xylene	o Xylene	Total Xylene	Total BTEX	Chlorides
12476	09/05/97	0.001	0.001	0.001	0.001	0.001	0.002	0.005	
13183	12/03/97	0.002	0.002	0.001	0.006	0.002	0.008	0.013	
14058	03/23/98	0.002	0.001	0.001	0.005	0.002	0.007	0.011	
15605	10/01/98	0.003	0.002	0.001	0.003	0.001	0.004	0.010	
16596	01/06/99	0.004	0.001	0.001	0.003	0.001	0.004	0.010	
20606	10/06/99	0.001	0.001	0.001	0.001	0.001	0.002	0.005	
22789	01/08/00	0.002	0.002	0.001	0.004	0.002	0.006	0.011	
25166	04/13/00	0.001	0.006	0.005	0.015	0.007	0.022	0.034	
28436	07/20/00	0.001	0.003	0.002	0.006	0.003	0.009	0.015	
31504	09/26/00	0.001	0.880	0.001	0.072	0.019	0.091	0.973	
36134	01/05/01	0.001	0.003	0.005	0.011	0.005	0.016	0.025	
38919	04/05/01	0.001	0.001	0.001	0.001	0.001	0.002	0.005	
0101098-03	07/07/01	0.001	0.001	0.002	0.006	0.001	0.007	0.011	
0101642-03	09/26/01	0.004	0.003	0.001	0.006	0.004	0.010	0.018	
0202619-03	02/15/02	0.001	0.001	0.002	0.008	0.002	0.010	0.014	
0204815-03	10/19/02	0.001	0.001	0.001	0.001	0.001	0.002	0.005	
4J04007-3	10/01/04	0.001	0.001	0.001	0.001	0.001	0.002	0.005	
5J24001-01	10/21/05	0.001	0.001	0.001	0.001	0.001	0.002	0.005	
7A15012-03	01/11/07	0.001	0.001	0.001	0.001	0.001	0.002	0.005	50.9
H13643-3	11/05/07	0.001	0.001	0.001			0.000	0.003	4.0

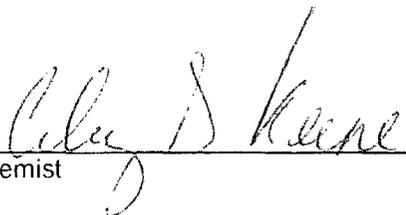
ANALYTICAL RESULTS FOR  
WHOLE EARTH ENVIRONMENTAL  
ATTN: MICHAEL C. GRIFFIN  
2103 ARBOR COVE  
KATY, TX 77494  
FAX TO: (281) 394-2051

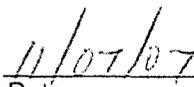
Receiving Date: 11/06/07  
Reporting Date: 11/07/07  
Project Owner: NOT GIVEN  
Project Name: IVA  
Project Location: NOT GIVEN

Sampling Date: 11/05/07  
Sample Type: GROUNDWATER  
Sample Condition: COOL & INTACT  
Sample Received By: SB  
Analyzed By: CK

LAB NUMBER	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		11/07/07	11/07/07	11/07/07	11/07/07
H13643-1	IVA COM SOURCE	0.875	0.223	0.153	1.72
H13643-2	IVA COM MW1	<0.001	<0.001	<0.001	<0.003
H13643-3	IVA COM MW2	<0.001	<0.001	<0.001	<0.003
Quality Control		0.110	0.104	0.104	0.319
True Value QC		0.100	0.100	0.100	0.300
% Recovery		110	104	104	106
Relative Percent Difference		0.9	0.9	<0.1	2.9

METHOD: EPA SW-846 8021B

  
\_\_\_\_\_  
Chemist

  
\_\_\_\_\_  
Date

H13643B WEE



ANALYTICAL RESULTS FOR  
 WHOLE ENVIRONMENTAL, INC.  
 ATTN: MICHAEL C. GRIFFIN  
 2103 ARBOR COVE  
 KATY, TX 77494  
 FAX TO: (281) 394-2051

Receiving Date: 11/06/07  
 Reporting Date: 11/07/07  
 Project Number: NOT GIVEN  
 Project Name: IVA  
 Project Location: NOT GIVEN

Sampling Date: 11/05/07  
 Sample Type: GROUNDWATER  
 Sample Condition: COOL & INTACT  
 Sample Received By: SB  
 Analyzed By: KS

LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/L)
H13643-1	IVA COM SOURCE	940
H13643-2	IVA COM MW1	24.0
H13643-3	IVA COM MW2	< 4.00
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1

METHOD: Standard Methods	4500-Cl <sup>-</sup> B
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*Kristen Supriobro*  
 Chemist

11/07/07  
 Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In the event that Cardinal is liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

