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08/30/2011

Animas Environmental Services, LLC

624 E. Comanche . Farmington, NM 87401 . Tel 505-564-2281 . Fax 505-324-2022 . www.animasenvironmental.com

August 30, 2011

Glenn von Gonten New Mexico Oil Conservation Division 1220 S. St. Francis Drive Santa Fe, New Mexico 87505

RE: 3rd Quarter 2011 Groundwater Monitoring Report for Williams Four Corners,
LLC, Sammons #2 Pipeline December 2009 Release, Flora Vista, San Juan County
New Mexico

Dear Mr. von Gonten:

Animas Environmental Services, LLC (AES), on behalf of Williams Four Corners, LLC, has prepared this 3rd Quarter Groundwater Monitoring Report for the Sammons #2 Pipeline December 2009 Release in accordance with New Mexico Oil Conservation Division (NMOCD) and New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) regulations. The subject site is located near Flora Vista, San Juan County, New Mexico.

A third quarterly groundwater monitoring and sampling event was completed August 11, 2011, in accordance with a workplan previously prepared by AES and dated March 3, 2011. The workplan was submitted to the NMOCD for review prior to implementing the proposed scope of work.

1.0 Site Information

1.1 Site Location

The general project area is located in a rural area approximately 0.1 mile east of County Road 3000 on private property owned by Ms. Helen Clark. The spill location is located approximately 140 feet southeast of a wetland area that is adjacent to the Animas River. The project area is described legally as within the SE¼ NE¼ Section 32, T30N, R12W, in Flora Vista, San Juan County, New Mexico. Longitude and latitude were recorded as being N36°46′18.240″ and W108°06′54.540″. A topographic site location map is included as Figure 1, and a General Site Plan is presented as Figure 2.



1.2 Spill History

On December 3, 2009, trenching operations during routine pipeline replacement activities uncovered petroleum hydrocarbon contaminated soils. Williams was in the process of replacing an in-service 2-inch diameter natural gas pipeline with a new 4-inch diameter natural gas pipeline. The pipeline connects the Sammons 2 well locations, which are owned by Conoco Phillips. The volume of natural gas condensate released into the surrounding environment and the length of time that the 2-inch diameter pipeline was leaking are unknown.

Initial remedial activities were completed between December 7 and 17, 2009, and included excavation of approximately 1,884 cubic yards of petroleum contaminated soil (PCS) and removal of 1,122 barrels (bbls) of petroleum contaminated groundwater. Petroleum contaminated soil and groundwater were transported to Industrial Ecosystems, Inc. (IEI) on Crouch Mesa, San Juan County, for disposal. Soil excavation and removal activities were documented in the *Remedial Activities Report for Sammons #2 Pipeline 2009 Spill*, prepared by AES and dated January 11, 2010.

Six 1-inch diameter groundwater monitoring wells were installed and sampled at the site in April 2010. Analytical results from groundwater samples collected during the April 2010 sampling event showed benzene concentrations exceeded the New Mexico Water Quality Control Commission (WQCC) standard of 10 μ g/L in one well, MW-1 (11 μ g/L). The remaining wells had benzene, toluene, ethylbenzene, and xylene (BTEX) concentrations either below laboratory detection limits or well below applicable WQCC standards.

Diesel and motor oil range organics were below laboratory detection limits for all wells sampled. Low level gasoline range organics (GRO) were detected in MW-2, MW-4, MW-5, and MW-6. Based on the laboratory results, AES recommended continued quarterly groundwater monitoring at the site for at least a year.

Groundwater investigation details are included within the *Site Investigation Report* prepared by AES and dated May 5, 2010. Subsequent quarterly groundwater monitoring events were conducted in July 2010, October 2010, and January 2011, with quarterly monitoring reports submitted in August 2010, November 2010, and February 2011 and May 2011.

2.0 Groundwater Monitoring and Sampling August 2011

On August 11, 2011, groundwater monitoring and sampling activities were conducted by AES. Work was completed in accordance with the workplan prepared by AES and dated March 3, 2011, and also in accordance with U.S. Environmental Protection Agency (USEPA) Environmental Response Team's Standard Operating Procedures (SOPs), and applicable American Society of Testing and Materials (ASTM) standards.

2.1 Notification

AES notified Carol Cauthen of Williams and Nick Clark, land owner, via telephone before initiating sampling activities. AES also notified NMOCD via electronic mail prior to the scheduled field work. Dwayne Valdez of Williams was contacted on August 10, 2011, and provided access directions to Nathan Willis of AES.

2.2 Groundwater Monitor Well Monitoring and Sampling

AES personnel completed groundwater monitoring and sampling of the wells on August 11, 2011. Groundwater samples were collected with new disposable bailers from a total of six monitor wells and transferred into appropriate sample containers, labeled accordingly, and documented on Water Sample Collection Forms.

Prior to sample collection, water quality measurements were recorded and included depth to groundwater, pH, temperature, conductivity, dissolved oxygen (DO), and oxidation reduction potential (ORP). Depth to groundwater was measured with a Keck Water Level Indicator, and water quality data was measured with a YSI Water Quality Meter. Samples were shipped in insulated coolers containing ice at less than 6 °C via Greyhound bus to Hall Environmental Analytical Laboratory (Hall) in Albuquerque, New Mexico.

2.2.1 Laboratory Analyses - Groundwater

All groundwater analytical samples were analyzed for BTEX per USEPA Method 8021.

2.2.2 Measurement Data

Depths to groundwater varied across the site and were observed to range from 1.33 feet below top of casing (TOC) in MW-5 to 2.68 feet below TOC in MW-1. The groundwater gradient was calculated to be approximately 0.01 ft/ft to the northwest, which is consistent with previous site data. Note that the site is considered to be groundwater under the direct influence (GUDI) of the Animas River.

Following depth to water measurement, each well was purged with a disposable bailer until recorded temperature, pH, conductivity, and DO measurements were stabilized. All

data was recorded onto Water Sample Collection Forms. Groundwater temperature ranged from 15.31°C to 22.41°C, and conductivity ranged from 0.683 mS to 1.657 mS. DO ranged from 0.12 mg/L in MW-04 to 0.92 mg/L in MW-1, and pH ranged from 6.70 to 7.05. Although DO was recorded during field activities, it should be noted that due to the use of bailers, the accuracy of dissolved oxygen measurements is limited. Depth to groundwater measurements and water quality data are summarized in Table 1, and groundwater elevation contours are presented in Figure 2. Water Sample Collection forms are presented in Appendix A.

2.2.3 Groundwater Analytical Results

Analytical results from groundwater samples collected during the August 2011 sampling event showed that BTEX concentrations were reported below the laboratory detection limits and applicable WQCC regulatory limits in all monitor wells (MW-1 through MW-6). Groundwater analytical laboratory reports are presented in Appendix A.

3.0 Conclusion and Recommendations

AES personnel conducted groundwater monitoring and sampling at the location of the Sammons #2 Pipeline December 2009 Release in August 2011. Depths to groundwater varied across the site and were observed to exist at about 1.33 to 2.68 feet below TOC, and groundwater gradient was calculated to be approximately 0.01 ft/ft to the northwest, which is consistent with previous site data.

Groundwater analytical results showed that contaminants of concern (BTEX) were below applicable WQCC standards. Dissolved phase benzene concentrations in MW-2 have remained below the WQCC standard for five consecutive quarters. Remaining wells, MW-1, MW-3, MW-4, MW-5, and MW-6 have remained below applicable WQCC standards for six consecutive quarters.

Based on the presented information and in accordance with per the subject workplan, AES will continue quarterly sampling for two additional events for MW-1, MW-3, MW-4, MW-5, and MW-6. This will ensure compliance of having eight consecutive quarters of groundwater contaminant concentrations below WQCC standards. Additionally, MW-2 will be sampled for an additional three quarters to ensure eight consecutive quarters below WQCC standards. The next sampling event is tentatively scheduled for November 2011.

If you have any questions regarding site conditions or this report, please do not hesitate to contact Tami Ross or Elizabeth McNally at (505) 564-2281.

Sincerely,

Tami C. Ross, CHMM

Project Manager

Elizabeth McNally, P.E.

New Mexico Registration #15799

Attachments:

Tables

Table 1. Groundwater Measurement and Water Quality Data

Table 2. Groundwater Analytical Results

Figures

Figure 1. Topographic Site Location Map

Figure 2. General Site Plan and Groundwater Elevations, August 2011

Figure 3. Groundwater Analytical Results, August 2011

Appendix A

Water Sample Collection Forms

Groundwater Analytical Laboratory Reports

cc: Mr. Brandon Powell

New Mexico Oil Conservation Division

1000 Rio Brazos Road Aztec, New Mexico 87410

Mr. Mark Potochnik Williams - Midstream

188 CR 4900

Bloomfield, NM 87413

Mr. Nick Clark 719 Otten Street Aztec, NM 87410

Files:2011/Williams/Sammons#2/Groundwater/Reports/3rd Qtr Investigation Report 083011

TABLE 1

SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA Williams Four Corners #2 Pipeline December 2009 Release

Flora Vista, San Juan County, New Mexico

20-Apr-10 2.43 20-Jul-10 2.05 28-Oct-10 1.95 28-Oct-10 1.95 25-Jan-11 3.21 27-Apr-11 1.97 11-Aug-11 2.68 25-Jan-11 1.74 27-Apr-11 0.95 25-Jan-11 1.34 11-Aug-11 1.36 20-Apr-10 1.56 25-Jan-11 1.95 11-Aug-11 1.95 20-Apr-10 1.66 25-Jan-11 1.95 20-Apr-10 1.69 20-Apr-10 1.61 20-Apr-10 1.64 25-Jan-11 1.95 20-Apr-10 1.84 28-Oct-10 1.84 28-Oct-10 1.84 28-Oct-10 1.84	Surveyed	GW Elev.	Temperature	Conductivity	00		ORP
20-Apr-10 2.43 20-Jul-10 2.05 28-Oct-10 1.95 25-Jan-11 3.21 27-Apr-11 1.97 11-Aug-11 2.68 25-Jan-11 1.74 27-Apr-11 0.95 11-Aug-11 1.34 11-Aug-11 1.56 20-Apr-10 1.66 28-Oct-10 1.66 28-Oct-10 1.66 25-Jan-11 1.61 11-Aug-11 1.95 27-Apr-11 1.61 27-Apr-11 1.61 27-Apr-11 1.61 27-Apr-11 1.61 27-Apr-11 1.61 27-Apr-11 1.61 27-Apr-11 1.84	TOC (ft)	(L)	(c)	(mS)	(mg/L)	Н	(mV)
20-Jul-10 2.05 28-Oct-10 1.95 25-Jan-11 3.21 27-Apr-11 1.97 11-Aug-11 2.68 20-Jul-10 0.91 20-Apr-10 1.11 20-Apr-11 0.95 11-Aug-11 1.34 27-Apr-11 1.56 20-Jul-10 1.56 28-Oct-10 1.66 28-Oct-10 1.66 28-Oct-10 1.69 27-Apr-11 1.95 27-Apr-11 1.95 20-Jul-10 1.44 28-Oct-10 1.44 28-Oct-10 1.44 28-Oct-10 1.89 20-Jul-10 1.44 28-Oct-11 1.84	5427.26	5424.83	10.19	4.392	0.43	7.05	35.1
28-Oct-10 1.95 25-Jan-11 3.21 27-Apr-11 1.97 11-Aug-11 2.68 20-Apr-10 1.11 20-Jul-10 0.92 25-Jan-11 1.74 27-Apr-11 1.34 11-Aug-11 1.56 20-Jul-10 1.56 25-Jan-11 2.36 25-Jan-11 1.61 11-Aug-11 1.61 27-Apr-11 1.61 27-Apr-10 1.44 28-Oct-10 1.44 28-Oct-10 1.84 28-Oct-10 1.84	5427.26	5425.21	14.75	1.108	1.76	7.14	2.68-
25-Jan-11 3.21 27-Apr-11 1.97 11-Aug-11 2.68 20-Jul-10 0.91 28-Oct-10 0.92 27-Apr-11 1.74 27-Apr-11 0.95 11-Aug-11 1.56 28-Oct-10 1.66 28-Oct-10 1.66 28-Oct-10 1.66 25-Jan-11 1.95 27-Apr-11 1.95 27-Apr-11 1.61 11-Aug-11 1.95 20-Jul-10 1.44 28-Oct-10 1.44 28-Oct-10 1.84	5427.26	5425.31	11.84	3.797	0.67	7.03	-71.0
27-Apr-11 1.97 11-Aug-11 2.68 20-Apr-10 1.11 20-Jul-10 0.91 28-Oct-10 0.92 25-Jan-11 1.74 27-Apr-11 0.95 11-Aug-11 1.34 20-Jul-10 1.56 28-Oct-10 1.66 28-Oct-10 1.66 27-Apr-11 1.61 11-Aug-11 1.95 20-Jul-10 1.44 28-Oct-10 1.84 28-Oct-10 1.84	5427.26	5424.05	6.45	3.357	2.77	7.40	-13.8
11-Aug-11 2.68 20-Apr-10 1.11 20-Jul-10 0.91 28-Oct-10 0.92 25-Jan-11 1.74 27-Apr-11 0.95 11-Aug-11 1.34 20-Apr-10 1.56 28-Oct-10 1.66 25-Jan-11 2.36 27-Apr-11 1.61 11-Aug-11 1.61 20-Apr-10 1.69 20-Apr-10 1.89 20-Jul-10 1.44 28-Oct-10 1.84	5427.26	5425.29	10.16	3.472	3.92	7.12	-6.7
20-Apr-10 1.11 20-Jul-10 0.91 28-Oct-10 0.92 25-Jan-11 1.74 27-Apr-11 0.95 11-Aug-11 1.34 20-Jul-10 1.56 28-Oct-10 1.66 25-Jan-11 1.61 11-Aug-11 1.95 20-Jul-10 1.44 28-Oct-10 1.89 20-Jul-10 1.44 28-Oct-10 1.89 20-Jul-10 1.44 28-Oct-10 1.84	5427.26	5424.58	15.31	0.885	0.92	6.98	-111.0
20-Apr-10 1.11 20-Jul-10 0.91 28-Oct-10 0.92 25-Jan-11 1.74 27-Apr-11 0.95 11-Aug-11 1.34 20-Jul-10 1.56 25-Jan-11 2.36 27-Apr-11 1.61 11-Aug-11 1.61 27-Apr-10 1.59 20-Jul-10 1.44 28-Oct-10 1.39 20-Jul-10 1.44 28-Oct-10 1.39 27-Apr-11 1.44							
20-Jul-10 0.91 28-Oct-10 0.92 25-Jan-11 1.74 27-Apr-11 0.95 11-Aug-11 1.34 20-Jul-10 1.56 28-Oct-10 1.66 28-Oct-10 1.66 27-Apr-11 1.61 11-Aug-11 1.95 20-Apr-10 1.44 28-Oct-10 1.44 28-Oct-10 1.44 28-Oct-10 1.39 27-Apr-11 1.84	5424.98	5423.87	10.37	1.670	0.20	7.39	-132.7
28-Oct-10 0.92 25-Jan-11 1.74 27-Apr-11 0.95 11-Aug-11 1.34 20-Jul-10 1.56 28-Oct-10 1.66 25-Jan-11 2.36 27-Apr-11 1.61 11-Aug-11 1.95 20-Jul-10 1.44 28-Oct-10 1.39 20-Jul-10 1.44 28-Oct-10 1.39 27-Apr-11 1.84	5424.98	5424.07	19.09	0:6:0	1.84	7.26	6.66-
25-Jan-11 1.74 27-Apr-11 0.95 11-Aug-11 1.34 20-Apr-10 1.77 20-Jul-10 1.66 25-Jan-11 2.36 27-Apr-11 1.61 11-Aug-11 1.59 20-Jul-10 1.44 28-Oct-10 1.39 20-Jul-10 1.44 28-Oct-11 1.84	5424.98	5424.06	11.52	0.719	0.22	7.45	-103.5
27-Apr-11 0.95 11-Aug-11 1.34 20-Apr-10 1.77 20-Jul-10 1.56 28-Oct-10 1.66 25-Jan-11 2.36 27-Apr-11 1.61 11-Aug-11 1.59 20-Jul-10 1.44 28-Oct-10 1.39 27-Apr-11 1.84	5424.98	5423.24	4.55	1.621	2.20	7.59	8.99-
11-Aug-11 1.34 20-Apr-10 1.77 20-Jul-10 1.56 28-Oct-10 1.66 25-Jan-11 2.36 27-Apr-11 1.61 11-Aug-11 1.95 20-Apr-10 1.59 20-Jul-10 1.44 28-Oct-10 1.39 27-Apr-11 1.84	5424.98	5424.03	69'6	1.659	1.76	7.31	-102.5
20-Apr-10 1.77 20-Jul-10 1.56 28-Oct-10 1.66 25-Jan-11 2.36 27-Apr-11 1.61 11-Aug-11 1.95 20-Apr-10 1.59 20-Jul-10 1.44 28-Oct-10 1.39 27-Apr-11 1.84	5424.98	5423.64	17.21	0.753	0.24	7.05	-144.7
20-Apr-10 1.77 20-Jul-10 1.56 28-Oct-10 1.66 25-Jan-11 2.36 27-Apr-11 1.61 11-Aug-11 1.95 20-Apr-10 1.59 20-Jul-10 1.44 28-Oct-10 1.39 27-Apr-11 1.84							
20-Jul-10 1.56 28-Oct-10 1.66 25-Jan-11 2.36 27-Apr-11 1.61 11-Aug-11 1.95 20-Apr-10 1.59 20-Jul-10 1.44 28-Oct-10 1.39 27-Apr-11 1.40	5425.44	5423.67	9.73	2.005	0.24	7.21	0.69-
28-Oct-10 1.66 25-Jan-11 2.36 27-Apr-11 1.61 11-Aug-11 1.95 20-Apr-10 1.59 20-Jul-10 1.44 28-Oct-10 1.39 25-Jan-11 1.84	5425.44	5423.88	17.89	0.842	1.52	7.22	9'58-
25-Jan-11 2.36 27-Apr-11 1.61 11-Aug-11 1.95 20-Apr-10 1.59 20-Jul-10 1.44 28-Oct-10 1.39 25-Jan-11 1.84	5425.44	5423.78	12.61	0.670	0.18	7.43	-108.4
27-Apr-11 1.61 11-Aug-11 1.95 20-Apr-10 1.59 20-Jul-10 1.44 28-Oct-10 1.39 27-Apr-11 1.84	5425.44	5423.08	6.13	1.438	1.70	7.63	-63.5
11-Aug-11 1.95 20-Apr-10 1.59 20-Jul-10 1.44 28-Oct-10 1.39 25-Jan-11 1.84 27-Apr-11 1.40	5425.44	5423.83	10.70	1.481	1.80	7.34	-111.5
20-Apr-10 1.59 20-Jul-10 1.44 28-Oct-10 1.39 25-Jan-11 1.84 27-Apr-11 1.40	5425.44	5423.49	17.42	0.683	0.22	7.03	-127.2
20-Apr-10 1.59 20-Jul-10 1.44 28-Oct-10 1.39 25-Jan-11 1.84 27-Apr-11 1.40							
20-Jul-10 1.44 28-Oct-10 1.39 25-Jan-11 1.84 27-Apr-11 1.40	5424.38	5422.79	9.60	2.174	0.22	7.29	-88.4
28-Oct-10 1.39 25-Jan-11 1.84 27-Apr-11 1.40	5424.38	5422.94	16.39	1.061	1.29	7.17	2.78-
25-Jan-11 1.84 27-Apr-11 1.40	5424.38	5422.99	14.48	1.026	0.22	7.28	-111.1
27-Apr-11 1.40	5424.38	5422.54	6.88	1.465	2.55	7.52	-56.2
11 A. G 11	5424.38	5422.98	11.21	1.560	1.40	7.35	-136.8
IVIVY-4 11-AUB-11 1.// 3424.3	5424.38	5422.61	17.12	0.960	0.12	96.9	-135.2

Quarterly Monitoring Report August 30, 2011

Animas Environmental Services, LLC.

TABLE 1
SUMMARY OF GROUNDWATER MEASUREMENT AND WATER QUALITY DATA Williams Four Corners #2 Pipeline December 2009 Release

-	San Juan County, New Mexico	
	Flora Vista, San Juan County, I	

Well ID	Date	Depth to	Surveyed	GW Elev.	Temperature	Conductivity	00		ORP
	Sampled	Water (ft)	TOC (ft)	(tt)	(c)	(mS)	(mg/r)	Н	(mV)
MW-5	20-Apr-10	1.00	5424.17	5423.17	88.6	3.140	0.21	7.37	-102.6
MW-5	20-Jul-10	98.0	5424.17	5423.31	20.50	1.440	1.03	86.9	-93.5
MW-5	28-Oct-10	0.75	5424.17	5423.42	15.62	1.650	0:30	7.09	-91.7
MW-5	25-Jan-11	1.32	5424.17	5422.85	6.15	1.707	2.94	7.49	-53.3
MW-5	27-Apr-11	0.84	5424.17	5423.33	10.69	1.948	0.73	7.22	-111.1
MW-5	11-Aug-11	1.33	5424.17	5422.84	18.48	1.647	0.16	6.75	-127.8
MW-6	20-Apr-10	1.04	5424.91	5423.87	11.09	2.277	0.22	7.28	-113.6
9-WW	20-Jul-10	0.89	5424.91	5424.02	21.57	1.399	1.06	6.93	-82.3
9-WW	28-Oct-10	0.68	5424.91	5424.23	11.93	1.482	0.21	7.12	9.68-
9-MW	25-Jan-11	1.51	5424.91	5423.40	4.67	1.726	6.51	7.47	-30.9
9-WW	27-Apr-11	0.81	5424.91	5424.10	11.76	1.662	2.38	7.20	-96.5
MW-6	11-Aug-11	1.43	5424.91	5423.48	22.41	1.657	09:0	6.70	-121.0

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TABLE 2
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Williams Four Corners #2 Pipeline December 2009 Release

Flora Vista, San Juan County, New Mexico

!! .=	Date	_		Ethyl-	Total	GRO	DRO	MRO
Well ID	Sampled	Benzene	Toluene	Benzene	Xylenes	(C6-C10)	(C10-C22)	(C22-C32)
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	(mg/L)	(mg/L)
Analytic	al Method	8260B/8021	8260B/8021	8260B/8021	8260B/8021	8015	8015	8015
WQ	CC Standard	10	750	750	620	NE	NE	NE
MW-1	20-Apr-10	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-1	20-Jul-10	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-1	28-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-1	25-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-1	27-Apr-11	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
MW-1	11-Aug-11	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
MW-2	20-Apr-10	11	<1.0	2.4	22	1.1	<1.0	<5.0
MW-2	20-Jul-10	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-2	28-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	25-Jan-11	2.6	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-2	27-Apr-11	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
MW-2	11-Aug-11	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
MW-3	20 4 = 10	-1.0	-1.0	.1.0	.1 5	.0.050	10	F 0
MW-3	20-Apr-10 20-Jul-10	<1.0 <1.0	<1.0 <1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-3	28-Oct-10	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-3	25-Uct-10 25-Jan-11	<1.0	<1.0	<1.0 <1.0	<2.0 <2.0	<0.050	<1.0	<5.0
MW-3	27-Apr-11	<1.0	<1.0	<1.0	<2.0	<0.050 NA	<1.0 NA	<5.0 NA
MW-3	11-Aug-11	<1.0	<1.0	<1.0	<2.0	NA NA	NA NA	NA NA
10100-3	II-Aug-II	<u> </u>	<u> </u>	<u> </u>	\2.0	IVA	INA	INA
MW-4	20-Apr-10	9.9	<1.0	<1.0	<1.5	0.074	<1.0	<5.0
MW-4	20-Jul-10	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-4	28-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	25-Jan- 11	2.5	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-4	27-Apr- 11	2.1	<1.0	<1.0	<2.0	NA	NA	NA
MW-4	11-Aug-11	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
MW-5	20-Apr-10	9.7	<1.0	<1.0	<1.5	0.055	<1.0	<5.0
MW-5	20-Jul-10	<1.0	<1.0	<1.0	<1.5	<0.050	<1.0	<5.0
MW-5	28-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	25-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-5	27-Apr-11	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
MW-5	11-Aug-11	<1.0	<1.0	<1.0	<2.0	NA	NA	NA
Bass C	20.4.42	4.0	1.5					
MW-6	20-Apr-10	4.6	<1.0	11	47	3.2	<1.0	<5.0
MW-6	20-Jul-10	<1.0	<1.0	<1.0	<1.5	0.079	<1.0	<5.0
MW-6	28-Oct-10	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	25-Jan-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	27-Apr-11	<1.0	<1.0	<1.0	<2.0	<0.050	<1.0	<5.0
MW-6	11-Aug-11	<1.0	<1.0	<1.0	<2.0	NA	NA	NA

TABLE 2 SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

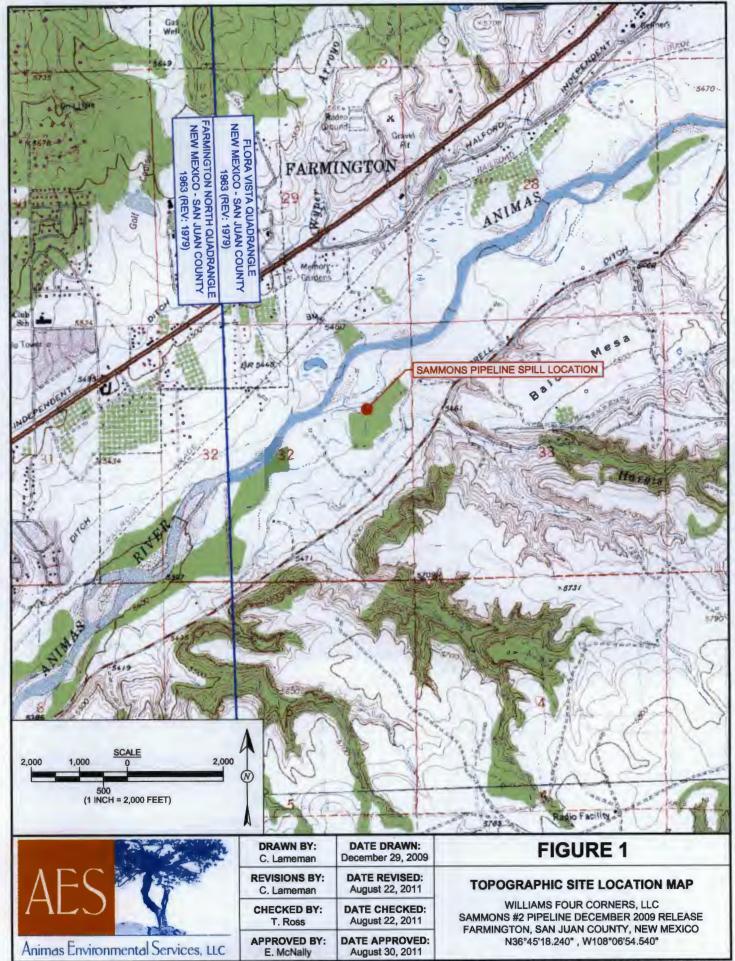
Williams Four Corners #2 Pipeline December 2009 Release Flora Vista, San Juan County, New Mexico

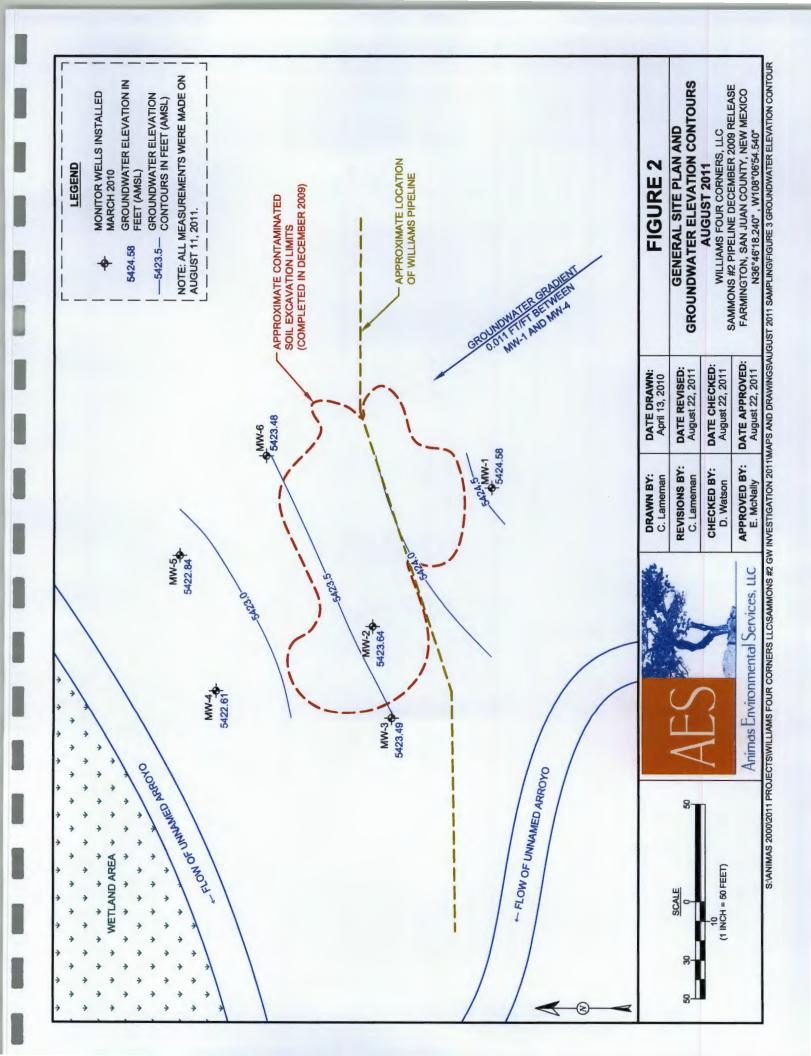
Well ID	Date Sampled	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	GRO (C6-C10)	DRO (C10-C22)	MRO (C22-C32)
		(μg/L)	(μg/L)	(μg/L)	(μg/L)	(mg/L)	(mg/L)	(mg/L)
Analytic	al Method	8260B/8021	8260B/8021	8260B/8021	8260B/8021	8015	8015	8015
wo	CC Standard	10	750	750	620	NE	NE	NE
Field Blank	22-Apr-10	<1.0	<1.0	<1.0	<1.5	NA	NA	NA

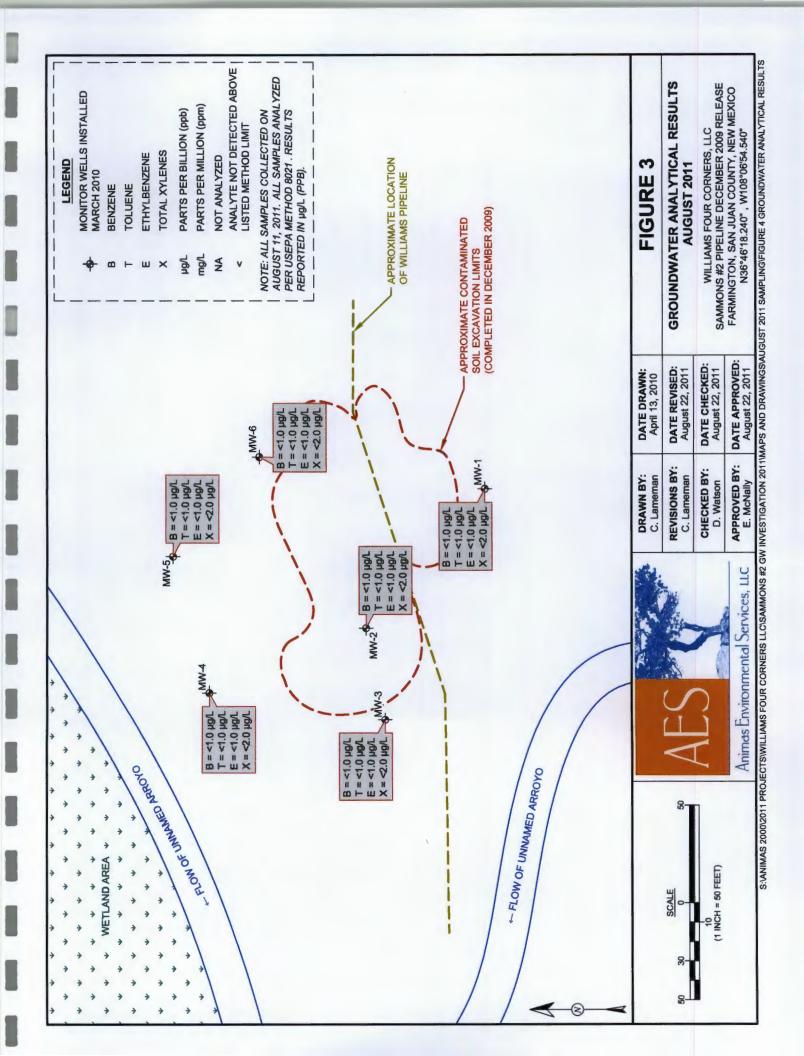
Notes:

< - Analyte below laboratory detection limit

NA - Not Analyzed
NE - Not Established







DEPTH TO GROUNDWATER MEASUREMENT FORM

Animas Environmental Services

624 E. Comanche, Farmington NM 87401 Tel. (505) 564-2281 Fax (505) 324-2022

Groundwater Monitoring Project: Site:

Williams Sammons #2 Pipeline Spill

Location: Flora Vista, San Juan County, New Mexico

Tech: N. WILLIS Project No.: ÁES 091204 Date: 8-11-11

Time: 1149

Form: 1 of 1

Well I.D.	Time	Depth to NAPL (ft.)	Depth to Water (ft.)	NAPL Thickness (ft.)	Notes / Observations
MW-1	1209		2.68		
MW-2	1246		1.34		
MW-3	1315		1.95		
MW-4	1344		1.77		
MW-5	1417		1.33		
MW-6	1449		1.43		
					1
					*
					3
				144	
					```
		į			

Wells measured with KECK water level or KECK interface tape, decontaminated between each well measurement.

MON	ITORING W	ELL SAMPL	ING REC	ORD	Α	nimas Environme	ental Services		
Mon	itor Well No:	MW	-1		6	624 E. Comanche, Farm	ington NM 87401		
""				_		Tel. (505) 564-2281 Fax			
Site:	Williams San	nmons #2 Pipelir	ne Spill		1	Project No.: AES 0912			
		San Juan County		ico	-	Date: 8-//			
Project:	Groundwater	Monitoring and	Sampling		-	Arrival Time: 1149	<del></del>		
Sampling	g Technician:	N. W	1445			Air Temp: 82°F	<u> </u>		
Purg	e / No Purge:	Purg	е	_	T.O	.C. Elev. (ft): 542 ell Depth (ft): 5.	7.26		
	Diameter (in):			_	Total We	ell Depth (ft): 5	.9		
Initi	al D.T.W. (ft):	- 10	Time:			_(taken at initial gauging			
	m D.T.W. (ft): al D.T.W. (ft):		Time:	1209	·	_(taken prior to purging			
I If N	APL Present:	DTP:	Time:	<b>/.</b> :	Th	_(taken after sample col ickness:T	ime:		
	AI L'I leseilt.	D.1.1		··		ickiiessi			
	, · · · · · · · · · · · · · · · · · · ·	Vater Quality	Paramete	rs - Rec	orded [	Ouring Well Purging			
	Temp	Conductivity	DO		ORP	PURGED VOLUME			
Time	(deg C)	(µS) (mS)	(mg/L)	рН	(mV)	(see reverse for calc.)	Notes/Observations		
1215	15.56	0.388	1.77	7.23	-79.5	0.125			
1218	15.64	0.891	1.21	7.02	-90.3	0,25			
1221	15.58	0.877	1.26	6.99	-99.6	0.25			
1224	15,48	0.881	1.21	6.98	-105.5	0,25			
1227	15.31	0.885	0.92	6.98	-111.0	0.25			
1232				-			SAMPLES		
COLLECTED									
COLLECTED									
				~		, ,,			
	1						,		
Analyt	ical Parame	ters (include a	analysis n	nethod a	and nun	nber and type of san	nple containers)		
····						·····			
	F	Full VOCs per El	PA Method	8021 (3 -	40 mL V	/ials w/ HCl preserve)			
				·					
		in and of Down	1 \4/						
		isposal of Purg							
Colle	cted Samples	Stored on Ice	in Cooler:						
	Chain of Cu	stody Record (	Complete:						
		Analytical La	ahoratory:	Hall Envi	ronmenta	al Analysis Laboratory, A	Albuquerque, NM		
Easian	ont Hood Dire	_	-						
Equipin	ะแเ บระน มนใ		New Dispos			erface Level, YSI Water	Quality Meter		
Note = 10 =		and	VCM DISPOS	avic Daii	प <b>(ट</b> ि	astaltic lump			
Notes/Com	ments:								

<del>revised: 00/10/03</del>

MONI	TORING W	ELL SAMPLI	NG REC	ORD	Ar	nimas Environme	ntal Services	
Mon	itor Well No:	MW-	-2		6	24 E. Comanche, Farmi	ington NM 87401	
				_	_	Tel. (505) 564-2281 Fax		
		mons #2 Pipelin			-	Project No.: AES 0912		
		an Juan County Monitoring and		ico		Date: <u>8〜川〜川</u> Arrival Time:  7Ӌ2		
	Technician:				-	Air Temp: \$5	eF	
	e / No Purge:				T.O.	.C. Elev. (ft): 5424	4.98	
	Diameter (in):			-	Total We	en Depth (π): 5.s	90	
	al D.T.W. (ft):		Time:		· · ·	(taken at initial gauging		
	m D.T.W. (ft): al D.T.W. (ft):	1.34	Time: Time:	124	6	(taken prior to purging to (taken after sample coll		
		D.T.P.:		/. <del>:</del>	Thi		ime:	
						Ouring Well Purging		
	T			Nec	1	PURGED VOLUME		
	Temp	Conductivity	DO		ORP		N 1 201	
Time	(deg C)	(µS) (mS)	(mg/L)	рН	(mV)	(see reverse for calc.)	Notes/Observations	
1252	17.49	0,753	094	7.21	-125.4	0.25		
1255	17.29	0.752	0.56	7.09	-131.4	O. 25		
1258	17.32	0,753	0.41	7.07	-136.9	0.25		
1301	17.30	0.753	0.33	7.06	-140.8	0.25		
1304	17.21	0.753	0.Z4	7.05	-144.7	0.25		
1307							SAMPLES	
COLLECTE								
COLECIES								
		,						
Δnalvt	ical Parame	ters (include :	analysis r	nethod :	and nur	nber and type of sar	nole containers)	
Allalyt		ters (meidde i	andiy 313 i	nethou (	and nan	ilbor dira typo or our	iipio deiliaiio.e,	
		- II) (00 F		0004 (0	40	/:- /		
	i	-ull VOCs per E	PA Method	συ21 (3 -	40 ML V	/ials w/ HCl preserve)		
<u> </u>		ione sel of Dure	ad Water					
0.11		isposal of Purg						
Colle	•	Stored on Ice						
	Chain of Cu	stody Record					A.I.	
						al Analysis Laboratory, A		
Equipm	ent Used Dur					terface Level, YSI Water	· Quality Meter	
		and	New Dispo	sable Bai	ler			
Notes/Com	ments:							
			·,··,···-	<u></u>				

<del>revised: 08/10/09</del>

MON	ITORING W	ELL SAMPL	ING REC	ORD	A	nimas Environme	ental Services	
Mon	itor Well No:	MW	-3		6	624 E. Comanche, Farm	inaton NM 87401	
				-	1	Tel. (505) 564-2281 Fax	-	
Site:	Williams San	nmons #2 Pipelii	ne Spill			Project No.: AES 0912		
		San Juan County		ico	_	Date: 8-11-11		
Project:	Groundwater	Monitoring and	Sampling			Arrival Time: 1312		
	g Technician:				- -	Air Temp: <b>85%</b>		
_	e / No Purge:		e ·	_	T.O	.C. Elev. (ft): 5425	5.44	
1	Diameter (in):		<del></del>	_	Total We	ell Depth (ft): 5.		
Initi	al D.T.W. (ft): m D.T.W. (ft):	1.05	Time:			_(taken at initial gauging		
	al D.T.W. (ft):		Time: Time:	1316	<b></b>	_(taken prior to purging _(taken after sample col		
	APL Present:			/.:	Th		ime:	
	V	Vater Quality	Paramete	rs - Rec	orded D	Ouring Well Purging		
	Temp	Conductivity	DO		ORP	PURGED VOLUME		
Time	(deg C)	(µS) (mS)	(mg/L)	рН	(mV)	(see reverse for calc.)	Notes/Observations	
1319	19.60	0.700	3.68	7.20	-105.9	0.125	-	
1322	17.79	0.682	1.57	7.10	-118.4	0.25		
1325	17.79	0,682	0.34	7.06	-172.6	0.25		
1328	17.51	0.683	0.24	7.04	-125,4	0.25		
1331	17.42	0,683	6.22	7.03	-127.2	0.75		
1334	~						Samples Collected	
							Collected	
Collected								
							· · · · · · · · · · · · · · · · · · ·	
			٠.					
Analyt	ical Parame	ters (include a	analysis n	nethod a	and nun	nber and type of san	nple containers)	
		•						
	F	Full VOCs ner Fl	PA Method	8021 (3 -	40 ml V	ials w/ HCl preserve)		
	<u>.</u>			/ /-				
	ח	isposal of Purg	ed Water					
0.11		•	-					
Colle	cted Samples	Stored on Ice	in Cooler:			· · · · · · · · · · · · · · · · · · ·		
	Chain of Cu	stody Record (	Complete:					
		Analytical La	aboratory:	Hall Envi	ronmenta	al Analysis Laboratory, A	Albuquerque, NM	
Fauinm	ent Used Dur	ing Sampling	Keck Water	· Level or	Keck Int	erface Level, YSI Water	Quality Meter	
-4aibiii	J.N. 3004 Dul		New Dispos				Taking Motor	
Notes/Com	monte:	u, id	Diopoc	230.0 0011	-			
ivotes/com	ilicino.				· · · · · · · · · · · · · · · · · · ·			
•		·		<u> </u>				

Tevised: 00/10/09

MONI	TORING W	/ELL SAMPLI	ING REC	ORD	A	nimas Environme	ental Services		
Mon	nitor Well No:	MW-	-4		$ $ $\epsilon$	624 E. Comanche, Farmi	ington NM 87401		
				_		Tel. (505) 564-2281 Fax			
Site:	. Williams Sar	nmons #2 Pipelir	ne Spill		1	Project No.: AES 0912			
		San Juan County		cico	-	Date: 8-11-			
Project:	: Groundwater	r Monitoring and			- /	Arrival Time: 1341	· · · · · · · · · · · · · · · · · · ·		
	g Technician:		WILLIS			Air Temp: 890			
	ge / No Purge:	: Purg	je			O.C. Elev. (ft): 5424			
	Diameter (in):			_	Total W€	ell Depth (ft): 5.8			
•	ial D.T.W. (ft):		Time:	10.		_(taken at initial gauging			
	m D.T.W. (ft):		_ Time:	134	14	(taken prior to purging	•		
	nal D.T.W. (ft): IAPL Present:		_ Time: D.T.W		Th	_(taken after sample coll ickness: Ti	•		
11 14	APL Present.	D.1.P.:		<i>1</i> .:	110	ickness:i	ime:		
	V	Nater Quality	Paramete	rs - Rec	orded [	During Well Purging			
	Temp	Conductivity	DO		ORP	PURGED VOLUME			
Time	(deg C)	(µS) (mS)	(mg/L)	pН	(mV)	(see reverse for calc.)	Notes/Observations		
1350	21,04	0,967	0.69	7.16	-111.9	0.125			
1353	17.17	0.960	0.23	7.04	-122.8				
1356	17,19	0.959	0.17	7.00	-127,9	0.25			
1359	17.26	0.959	0.14	6.98	-132.2	0.25			
1402	17.12	0,960	0.12	6.96	-135.2	0.25			
1405				F			Samoles		
							Samples Collected		
(b)((ex1+0)									
						,			
Analyt	ical Parame	ters (include	analysis r	method	and nur	mber and type of san	mple containers)		
							,		
	· · ·	Full VOCs per E	PA Method	8021 (3 -	40 mL v	/ials w/ HCl preserve)			
		·							
	D	Disposal of Purg	jed Water:						
Colle	cted Samples	s Stored on Ice	in Cooler:						
	Chain of C	ustody Record (	Complete:						
		_			ironment	al Analysis Laboratory, A	Albuquerque. NM		
Fauipm	ent Used Du	-	٠.			terface Level, YSI Water			
- derb		-	New Dispos			011400 20101, 12.114.	Quanty moto.		
Notes/Com	ments:								
110100, 0 0	myino.								

<del>revised. 00/10/09</del>

MON	ITORING W	ELL SAMPL	ING REC	ORD	A	nimas Environme	ental Services		
Mon	itor Well No:	MW	<b>'-5</b>		6	624 E. Comanche, Farm	ington NM 87401		
				_	1	Tel. (505) 564-2281 Fax	~		
Site:	Williams San	nmons #2 Pipeli	ne Spill		<u> </u>	Project No.: AES 0912			
		San Juan County		ico	-	Date: 8-11-			
		Monitoring and			-	Arrival Time: 1415	<del></del>		
Sampling	Technician:	N. W	ILLIS		<del>-</del>	Arrival Time: 1415 Air Temp: <b>899</b>	E		
Purg	e / No Purge:	Purg	je	_	T.O	.C. Elev. (ft): 542	4.17		
	Diameter (in):			_	Total We	ell Depth (ft):5.	91		
	al D.T.W. (ft):		_ Time:			(taken at initial gauging	•		
		1.33		141	3	_(taken prior to purging			
Fin	al D.T.W. (ft):	D.T.P.:	Time:			(taken after sample col			
If N	APL Present:	D.1.P.:	D.I.W	/.:	I h	ickness:T	ime:		
	V	Vater Quality	Paramete	rs - Rec	orded C	Ouring Well Purging			
	Temp	Conductivity	DO		ORP	PURGED VOLUME			
Time	(deg C)	(μS) <b>(mS)</b>	(mg/L)	pН	(mV)	(see reverse for calc.)	Notes/Observations		
1424	19.17	1.665	1,09	6.96	-1206	0,25			
1427	18.88	1.656	0.32	6.83	-122.1	0.25			
1430	18.87	1.651	0.22	6.77	-124.3	0.25			
1433	18.85	1.650	0.18	6.75	$\overline{}$				
1436	18.48	1.647	0.16	1	-127.8	0.25			
1439							Samples		
Collected									
Collected									
Analyti	ical Parame	ters (include a	analysis n	nethod a	nd nun	nber and type of san	nple containers)		
	F	Full VOCs per El	PΔ Method	8021 (3 -	40 ml \/	ials w/ HCl preserve)			
		dii voos pei Li	A Method	0021 (0 -	40 IIIL V	iais w/ Fior preserve)			
	<u> </u>	isposal of Purg	od Water						
		_							
Colle	cted Samples	Stored on Ice	in Cooler:						
	Chain of Cu	stody Record (	Complete:						
		Analytical La	ahoratory.	Hall Envi	onmenta	al Analysis Laboratory, A	Albuquerque NM		
<b></b>	4 D	-	•						
⊨quipm	ent Used Dur	-				erface Level, YSI Water	Quality Meter		
		and	New Dispos	sable Bail	er				
Notes/Com	ments:	.,							
· · · · · · · · · · · · · · · · · · ·									
					w. <del>11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 . 11.5 </del>				
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revised: 00/10/09

MON	ITORING W	ELL SAMPL	ING REC	ORD	A	nimas Environme	ental Services	
Mon	itor Well No:	MW	-6		6	624 E. Comanche, Farm	inaton NM 87401	
				_	1	Tel. (505) 564-2281 Fax	<del>-</del>	
Site	: Williams San	nmons #2 Pipelii	ne Spill			Project No.: AES 0912		
		San Juan County		ico	_	Date: 8-1/-		
		Monitoring and	Sampling			Arrival Time: 1444	<i>i</i>	
	g Technician:				_	Air Temp: \$90		
_	e / No Purge:		е	_		.C. Elev. (ft): 542		
	Diameter (in):				Total We	ell Depth (ft): 6		
	ial D.T.W. (ft):		Time:	4		(taken at initial gauging	-	
•	m D.T.W. (ft):		Time:	_/449		_(taken prior to purging	•	
	al D.T.W. (ft):	D.T.P.:	Time: D.T.W	,	Th	_(taken after sample col ickness: T	ime: *	
	AFE FIESEIII.	D.1.F	D.1.W	/	111	ickness	ime	
	V	Vater Quality	Paramete	rs - Rec	orded D	Ouring Well Purging		
	Temp	Conductivity	DO		ORP	PURGED VOLUME		
Time	(deg C)	(µS) (MS)	(mg/L)	pН	(mV)	(see reverse for calc.)	Notes/Observations	
1456	22.83	1.703	1.12	6.93	-131.3	0.25		
1459	22.48	1.677	0.78	6.79	-127.3			
1502	22,32	1.670	0.73		-124.6	0.25		
1505	22,32	1.664	0.68	6.71	-12Z.8			
1508	72.26	1.660	0.63	6.70	-121.7	0.25		
1511	22.41	1.657	0.60	6.70	-121.0	0.25		
							Collected	
			***************************************					
	j							
Analyt	ical Parame	ters (include a	analysis n	nethod a	and nun	nber and type of san	nple containers)	
	F	Full VOCs per El	PA Method	8021 (3 -	40 mL V	'ials w/ HCl preserve)		
, , , , , , , , , , , , , , , , , , , ,								
	D	isposal of Purg	ed Water:					
Collo		Stored on Ice						
Colle	•							
	Chain of Cu	stody Record (	Complete:					
		Analytical La	aboratory:	Hall Envi	ronmenta	al Analysis Laboratory, A	Albuquerque, NM	
Equipm	ent Used Dur	ing Sampling:	Keck Water	r Level or	Keck Inte	erface Level, YSI Water	Quality Meter	
•		_	New Dispos			3.2,		
Notes/Com	ments:							
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								

<del>revised: 08/10/09</del>



#### **COVER LETTER**

Friday, August 19, 2011

Tami Ross
Animas Environmental Services
624 East Comanche
Farmington, NM 87401

TEL: (505) 564-2281 FAX (505) 324-2022

RE: Williams Sammons #2 Pipeline Spill

analyses presented in the following report.

Dear Tami Ross:

Hall Environmental Analysis Laboratory, Inc. received 7 sample(s) on 8/16/2011 for the

Order No.: 1108615

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. All samples are reported as received unless otherwise indicated.

Please do not hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Freeman, Laboratory Manager

NM Lab# NM9425 NM0901

AZ license # AZ0682

Date: 19-Aug-11
Analytical Report

CLIENT:

Animas Environmental Services

Client Sample ID: MW-1

Lab Order:

1108615

Collection Date: 8/11/2011 12:32:00 PM

Project:

Williams Sammons #2 Pipeline Spill

Date Received: 8/16/2011

Lab ID:

1108615-01

Matrix: AQUEOUS

Analyses	Result	Result PQL Qual Un		Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		µg/L	1	8/16/2011 4:46:51 PM
Toluene	ND	1.0		μg/L	1	8/16/2011 4:46:51 PM
Ethylbenzene	ND	1.0		µg/L	1	8/16/2011 4:46:51 PM
Xylenes, Total	ND	2.0		μ <b>g/</b> L	1	8/16/2011 4:46:51 PM
Surr: 4-Bromofluorobenzene	87.8	89.6-125	S	%REC	1	8/16/2011 4:46:51 PM

#### Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Page 1 of 7

Date: 19-Aug-11 Analytical Report

CLIENT:

Animas Environmental Services

Client Sample ID: MW-2

Lab Order:

1108615

Collection Date: 8/11/2011 1:07:00 PM

Project:

Williams Sammons #2 Pipeline Spill

Date Received: 8/16/2011

Lab ID:

1108615-02

Matrix: AQUEOUS

Analyses	Result PQL Qual U		Units	DF	Date Analyzed				
EPA METHOD 8021B: VOLATILES						Analyst: NSB			
Benzene	ΝĐ	1.0		μg/L	1	8/16/2011 5:16:51 PM			
Toluene	ND	1.0		μg/L	1	8/16/2011 5:16:51 PM			
Ethylbenzene	ND	1.0		μg/L	1	8/16/2011 5:16:51 PM			
Xylenes, Total	ND	2.0		μg/L	1	8/16/2011 5:16:51 PM			
Surr: 4-Bromofluorobenzene	81.6	89.6-125	S	%REC	1	8/16/2011 5:16:51 PM			

#### Qualifiers:

- Value exceeds Maximum Contaminant Level
- E Estimated value
- Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- В Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
  - Spike recovery outside accepted recovery limits

Page 2 of 7

Date: 19-Aug-11
Analytical Report

CLIENT:

Animas Environmental Services

Client Sample ID: MW-3

Lab Order:

1108615

Collection Date: 8/11/2011 1:34:00 PM

Project:

Williams Sammons #2 Pipeline Spill

Date Received: 8/16/2011

Lab ID:

1108615-03

Matrix: AQUEOUS

Analyses	Result PQL Qual		Units	DF	Date Analyzed	
EPA METHOD 8021B: VOLATILES				···		Analyst: NSB
Benzene	ND	1.0		μg/L	1	8/16/2011 5:46:57 PM
Toluene	ND	1.0		μg/L	1	8/16/2011 5:46:57 PM
Ethylbenzene	ND	1.0		μg/L	1	8/16/2011 5:46:57 PM
Xylenes, Total	ND	2.0		μg/L	1	8/16/2011 5:46:57 PM
Surr: 4-Bromofluorobenzene	80.9	89.6-125	S	%REC	1	8/16/2011 5:46:57 PM

#### Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Page 3 of 7

Date: 19-Aug-11
Analytical Report

8/16/2011 6:16:56 PM

CLIENT:

Animas Environmental Services

Lab Order:

1108615

Surr: 4-Bromofluorobenzene

Client Sample ID: MW-4

%REC

Collection Date: 8/11/2011 2:05:00 PM

Project:

Williams Sammons #2 Pipeline Spill

Date Received: 8/16/2011 Matrix: AQUEOUS

Lab ID:

1108615-04

Analyses	Result	PQL Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES					Analyst: NSB
Benzene	ND	1.0	μg/L	1	8/16/2011 6:16:56 PM
Toluene	ND	1.0	µg/L	1	8/16/2011 6:16:56 PM
Ethylbenzene	ND	1.0	µg/L	1	8/16/2011 6:16:56 PM
Xylenes, Total	ND	2.0	μg/L	1	8/16/2011 6:16:56 PM

89.6-125

90.4

#### Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Page 4 of 7

Date: 19-Aug-11
Analytical Report

CLIENT:

Animas Environmental Services

Client Sample ID: MW-5

Lab Order:

1108615

Collection Date: 8/11/2011 2:39:00 PM

Project:

Williams Sammons #2 Pipeline Spill

Date Received: 8/16/2011

Lab ID:

1108615-05

Matrix: AQUEOUS

Analyses	Result	PQL	PQL Qual l		DF	Date Analyzed
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		μg/L	1	8/16/2011 6:47:14 PM
Toluene	ND	1.0		µg/L	1	8/16/2011 6:47:14 PM
Ethylbenzene	ND	1.0		µg/L	1	8/16/2011 6:47:14 PM
Xylenes, Total	ND	2.0		μg/L	. 1	8/16/2011 6:47:14 PM
Surr: 4-Bromofluorobenzene	84.4	89.6-125	s	%REC	1	8/16/2011 6:47:14 PM

#### Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
  - S Spike recovery outside accepted recovery limits

Page 5 of 7

Date: 19-Aug-11
Analytical Report

CLIENT:

Animas Environmental Services

Client Sample ID: MW-6

Lab Order:

1108615

1108615-06

Collection Date: 8/11/2011 3:14:00 PM

Project: Lab ID: Williams Sammons #2 Pipeline Spill

Date Received: 8/16/2011

Matrix: AQUEOUS

Analyses	Result PQL Qual		Units	DF	Date Analyzed	
EPA METHOD 8021B: VOLATILES						Analyst: NSB
Benzene	ND	1.0		μg/L	1	8/17/2011 12:05:23 PM
Toluene	ND	1.0		µg/L	1	8/17/2011 12:05:23 PM
Ethylbenzene	ND	1.0		μg/L	1	8/17/2011 12:05:23 PM
Xylenes, Total	ND	2.0		µg/L	1	8/17/2011 12:05:23 PM
Surr: 4-Bromofluorobenzene	89.2	89.6-125	s	%REC	1	8/17/2011 12:05:23 PM

#### Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Page 6 of 7

Date: 19-Aug-11
Analytical Report

CLIENT:

Animas Environmental Services

Lab Order:

1108615

1108615-07

Client Sample ID: Trip Blank

Collection Date:

Project: Lab ID: Williams Sammons #2 Pipeline Spill

Date Received: 8/16/2011

Matrix: TRIP BLANK

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
EPA METHOD 8021B: VOLATILES		***************************************				Analyst: NSB
Benzene	ND	1.0		µg/L	1	8/16/2011 7:47:09 PM
Toluene	ND	1.0		µg/L	1	8/16/2011 7:47:09 PM
Ethylbenzene	ND	1.0		μg/L	1	8/16/2011 7:47:09 PM
Xylenes, Total	ND	2.0		μg/L	1	8/16/2011 7:47:09 PM
Surr: 4-Bromofluorobenzene	84.3	89.6-125	S	%REC	1	8/16/2011 7:47:09 PM

#### Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- NC Non-Chlorinated
- PQL Practical Quantitation Limit

- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Page 7 of 7

Date: 19-Aug-11

# QA/QC SUMMARY REPORT

Client:

Animas Environmental Services

Project: Williams Sammons #2 Pipeline Spill

Work Order:

1108615

			<del></del>								
Analyte	Result Units PQL SPK Va SPK ref				%Rec L	owLimit Hi	ghLimit	%RPD	RPDLimit	Qual	
Method: EPA Method 8021B:	Volatiles										
Sample ID: 1108615-01A MSD		MSD				Batch ID:	R47192	Analys	sis Date:	8/16/2011	8:47:14 PM
Benzene	16.67	µg/L	1.0	20	0.2	82.3	76.6	119	1.95	16.4	
Toluene	16.32	μg/L	4.0	20	0	81.6	77.3	118	0.973	13.9	
Ethylbenzene	16.65	μg/L	1.0	20	0.154	82.5	76.6	114	0.602	13.5	
Xylenes, Total	51.57	μg/L	2.0	60	0	86.0	82	113	1.34	12.9	
Sample ID: 5ML RB		MBLK				Batch ID:	R47192	Analys	is Date:	8/16/2011	9:35:51 AM
Benzene	ND	μg/L	1.0								
Toluene	ND	μg/L	1.0								
Ethylbenzene	ND .	μg/L	1.0								
Xylenes, Total	ND	μg/L	2.0								
Sample ID: 6ML RB		MBLK				Batch ID:	R47231	Analys	is Date:	8/17/2011 9	9:35:04 AM
Berizene	ND	μg/L	1.0								
Toluene	ND	µg/L	1.0								
Ethylbenzene	ND	µg/L	1.0								
Xylenes, Total	ND	μg/L	2.0								
Sample ID: 100NG BTEX LCS		LCS				Batch ID:	R47192	Analys	is Date:	8/16/2011 9	9:17:15 PM
Benzene	19.94	µg/L	1.0	20	٠,0	99.7	80	120			
Toluene	19.72	µg/L	1.0	20	D	98.6	80	120			
Ethylbenzene	19.67	µg/L	1.0	20	0	98.4	80	120			
Xylenes, Total	60.73	μg/L	2.0	60	0	101	80	120			
Sample ID: 1108615-01A MS		MS				Batch ID:	R47192	Analys	is Date:	8/16/2011 8	3: <b>17</b> :11 PM
Benzene	16.35	μg/L	1.0	20	0.2	80.7	76.6	119			
Toluene	16.16	µg/L	1.0	20	0	80.8	77.3	118			
Ethylbenzene	16.55	μg/L	1.0	20	0.154	82.0	76.6	114			
Xylenes, Total	52.27	µg/L	2.0	60	0	87.1	82	113			

	_		
Qual	lifi	er	s:

E Estimated value

ND Not Detected at the Reporting Limit

NC Non-Chlorinated

R RPD outside accepted recovery limits

Page 1

J Analyte detected below quantitation limits

H Holding times for preparation or analysis exceeded

#### Sample Receipt Checklist

Client Name ANIMAS ENVIRONMENTAL	·		•	Date Received	<b>i</b> :		8/16/2011	
Work Order Number 1108615				Received by:	AT	1		
	( )			Sample ID la	bels checked	DV:	5/	_
Checklist completed by:   linius		78	// <i>(g/</i>	//		Ϋ́n	itials	
Matrix:	Carrier name:	Grey	hound					
Shipping container/cooler in good condition?		Yes	V	No 🗀	Not Present			
Custody seals intact on shipping container/cooler?		Yes	V	No 🗆	Not Present		Not Shipped	
Custody seals intact on sample bottles?		Yes		No 🗆	N/A	$\checkmark$		
Chain of custody present?		Yes	V	No 🗆				
Chain of custody signed when relinquished and red	ceived?	Yes	$\checkmark$	No 🗀				
Chain of custody agrees with sample labels?		Yes	¥	No 🗆				
Samples in proper container/bottle?		Yes	<b>/</b>	No 🗆				
Sample containers intact?		Yes	V	No 🗌				
Sufficient sample volume for indicated test?		Yes	V	No 🗆				
All samples received within holding time?		Yes	<b>~</b>	No 🗀				f preserved
Water - VOA vials have zero headspace?	No VOA vials submi	itted		Yes 🗹	No 🗆		bottles che pH:	ecked for
Water - Preservation labels on bottle and cap mate	<b>ከ</b> ?	Yes (		No 🗆	N/A 🗹			
Water - pH acceptable upon receipt?		Yes (		No 🗆	N/A 🗹		<2 >12 uni	ess noted
Container/Temp Blank temperature?		3.8	<b>3º</b> .	<6° C Acceptable	,		below.	
COMMENTS:			i	f given sufficient t	ime to cool.			
Client contacted Date	te contacted:			Person	n contacted			
Contacted by: Re	garding:						***************************************	-
Comments:								
					***************************************			
Corrective Action								
					1			

	ANALYSIS LABORATORY		ō.					(N )	o Y)	Air Bubbles														lytical report.
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			ineSpil	-						, Vo	-	7-	5	7-	7	10	1					Time 15.56	Jime O946	as notice of the
			2 Pipel		<u>_</u>				× M	-4E							,					Date   8/15/11	Date 08/15/11. d	s. This serves
Time:	□ Rush		Sammens #2 Pipeline Spill		5 11030	jer:	Tami Ross		eraffire	Preservative Type	124	/				-	7					al chape	Z	ccredited laboratories
Tum-Around	्री Standard	Project Name	Williams	Project #:	大万ろ	Project Manager:	F	Sampler:	Samplestem	Container Type and #	6146 3-40ml	/	)	1-40-1 WA		<b>ન</b>	Glass Z-10 mL					Received by:	Received by:	contracted to other a
ecord	Client: Animas Environmental		Mailing Address: 1074 E Comanche	87461	505-5164-2281	505-324-2022	□ Level 4 (Full Validation)			Sample Request ID	1-mh	2-MW	MW-3	MW-4	MW-5	MW-6	TRIP BLANK					d by:	Relinquished by:  Note the	If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report
of-Cus	Envis	۲	1024 E	Farmington NA	05-56	505	_	Other		Matrix	1420		/				T					Relinquished by:		samples subm
hain-	nimas	Services	Address:	ninata		r Fax#:	QA/QC Package:	itation	EDD (Type)	Time	12,22	1307	1334	1405	1439	1514						Time: 1556	Time:	
O	Client:		Mailing	17 Z	Phone #:	email or Fax#;	QA/QC Packa		EDD	ate	3-11-11	/				7						Date:	Daté:	