3**R** - <u>3</u>05

REPORTS

DATE: May 17, 2002



Environmental Services 187 County Road 4980 Bloomfield, NM 87413 505-632-4409 Phone 505-632-4405 Fax

May 17, 2002

Mr. Bill Freeman Environmental Specialist Navajo Nation Environmental Protection Agency, UIC P.O. Box 1999 Shiprock, New Mexico 87420

RECEIVED

MAY 2 9 2002

ENVIRONMENTAL BUREAU OIL CONSERVATION DIVISION

RE: BLANCO WASH DRIP PIT REMEDIATION AND CLOSURE REPORT

Dear Mr. Freeman:

Enclosed please find information on remediation and closure activities associated with the unlined surface impoundment located at the Blanco Wash Drip site (see Figure 1). Public Service Company of New Mexico (PNM) formerly owned the site and initiated closure activities on June 18, 1998. The site later became an asset of Williams upon purchase of Gas Company of New Mexico (GCNM) from PNM. Upon expiration of PNM's retained environmental liabilities associated with the site, Williams agreed to complete necessary closure work. As such, the enclosed documentation reflects activities of both PNM and Williams.

Site History

Excavation of petroleum-hydrocarbon impacted soil beneath the unlined surface impoundment began on June 18, 1998. A total of 380 cubic yards of contaminated soil was removed. Approximately 180 cubic yards of the material was landfarmed on site, with the remaining material landfarmed on the nearby Bolack B#5 location. The excavation was reportedly terminated at a depth of 16-feet, where ground water was encountered. A ground water sample from the excavation was not collected.

Soil samples from the excavation walls and floor contained TPH at 1100 mg/kg and 720 mg/kg, respectively. These TPH levels were in excess of the NMOCD recommended cleanup standard of 100 mg/kg for this site. Still, further excavation of impacted soil was not possible due to concerns over encroachment on existing infrastructure. Sometime after July 28, 1998 the excavation was backfilled with the landfarmed soil. Documents describing contaminant source removal and landfarming activities are included as Exhibit A.

On February 2, 1999, a soil boring was advanced near the center of the former pit to a depth of 25-feet. Ground water was encountered at a depth of 18-feet and the boring was completed as a monitoring well. A water sample from the well collected on the same day contained benzene at 70 ug/l, which was in excess of the NMWQCC standard of 10 ug/l. A letter notifying the NMOCD of ground water contamination at the site was submitted on March 3, 1999. Notification to Mr. James Walker of USEPA Region 9 was provided in a March 16, 1999 letter. May 17, 2001 Mr. Bill Freeman, NNEPA Page 2



To evaluate the magnitude and extent of ground water contamination, three additional monitoring wells were installed on April 6, 1999. Subsequent hydrogeological investigations indicated that natural attenuation processes would result in remediation of residual soil and ground water contamination. A quarterly ground water sampling program was initiated in April 1999 to monitor natural attenuation. Copies of drill logs and monitoring well construction diagrams are included as Exhibit B.

Site Hydrogeology

The Blanco Wash Drip is located in Unit J, Section 31, Township 27N, Range 8W of San Juan County, New Mexico (Figure 1). Immediately adjacent and to the west of the site is Blanco Canyon, which is occupied by a broad, north-draining wash. The wash joins Largo Canyon at a point 7-miles above the Largo's intersection with the San Juan River. The site is underlain by an unknown thickness of primarily very fine to fine, tan, unconsolidated sand. Drill logs indicate the presence of a thin zone of gray, sandy clay near the 16-foot depth with fine to medium sand below.

Groundwater in the unconsolidated sediments is unconfined and water level elevations vary seasonally. Depths to ground water range from approximately 15 to 18-feet below ground level. A hydrograph for the monitoring period is included in Exhibit B. Ground water flows to the north consistent with the local hydraulic gradient and is parallel to the drainage direction of Blanco Canyon. Potentiometric surface maps are included in Exhibit B. Hydraulic conductivities of the sediments are likely on the order of 10⁻³ to 10⁻¹ cm/sec.

Monitoring Results

Concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) were analyzed in water samples collected quarterly from April 1999 through March 2002. Of the four wells in the monitoring network, only well MW-2, located in the former source area, contained concentrations in excess of NMWQCC and USEPA standards. A summary of the analytical data and copies of the laboratory analytical reports are included as Exhibit C.

Natural attenuation processes active at the site resulted in a steady decrease in BTEX over the three-year monitoring period. The initial concentration of total BTEX in well MW-2 was 284.2 ug/L. A little over one-year later, in June 2000, the total BTEX concentration was reduced to 52 ug/L. For the last four quarters of monitoring, BTEX compounds were not detected in any of the ground water samples.

Summary

The unlined surface impoundment at the Blanco Wash Drip was addressed consistent with NMOCD Order 7940-C and with the guidelines pertaining to the remediation of unlined surface impoundments. The work included the removal of hydrocarbon-impacted soils and an evaluation of ground water impacted by the historical operation of the impoundment. A network of ground water monitoring wells was installed and ground water analyses showed that a small BTEX plume existed in the vicinity of the former pit location. Natural attenuation of the BTEX compounds resulted in contaminant degradation to concentrations less than USEPA and NMWQCC MCLs.

Based on current site conditions, Williams requests approval for closure of the Blanco Wash Drip site. Following receipt of your closure approval we will plug and abandon the monitoring wells in accordance with applicable regulations. Williams appreciates your time in reviewing this site closure request. If you have any questions or require any additional information, please contact me at 505-632-4457. May 17, 2001 Mr. Bill Freeman, NNEPA Page 3



Respectfully,

? Struta lan

James P. Struhs Project Hydrogeologist

Enclosures

c: Mr. Denny Faust, NMOCD, Aztec Mr. William Olson, NMOCD, Santa Fe Mr. James Walker, USEPA Region 9



Figure 1 Blanco Wash Drip Twn. 27N Rng. 8W Sec. 31 Unit J



Fresno Canyon, NM Quadrangle





EXHIBIT A

Pit Remediation and Closure Report Blanco Wash Drip District I P.O. Box 1980, Hobbs, NM

> rict II Drawer DD, Artesia, NM 88221

District III 1000 Rio Brazos Rd, Aztec. NM 87410 State of New Mexico Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

SUBMIT I COPY TO APPROPRIATE DISTRICT OFFICE AND I COPY TO SANTA FE OFFICE į

i.

2040 South Pacheco Street Santa Fe, New Mexico 87505

PIT REMEDIATION AND CLOSURE REPORT

Operator:	PNM Gas Services (WFS)	Telephone: 324-3764
Address:	603 W. Elm Street Farmington, NM 87401	
Facility or W	ell Name: Blanco Wash Dri	2 /
Location:	Unit: Sec	T. 27N R. 8W County San Tulan
Pit Type:	Separator Dehydrator	Other Dory Blowslow
Land Type:	BLM <u>×</u> State Fe	e Other
Pit Location:	Pit dimensions: length 18	width 15. depth 3.
(Attach diagra	n) Reference: wellhead 🧾	other Drig Blowclown Rises
	Footage from reference:	,
	Direction from reference: 15	Degrees 🔆 East - Rorth 🗶
		of <u> </u>
Depth to Gro	und Water:	Less than 50 feet (20 points) 50 feet to 99 feet (10 points)
(Vertical distance from seasonal high water elev water	contaminants to Ga auton of ground	reater than 100 feet (0 points)
Wellhead Pro	tection Area:	
(Less than 200 feet from domestic water source, feet from all other wate	n a private or, less than 1,000 : sources)	Yes (20 points) No (0 points)
Distance to S	urface Water: G	Less than 200 feet(20 points)200 feet to 1.000 feet(10 points)greater than 1.000 feet(0 points)
ponds, rivers, streams, canals and ditches	irreeks. irrigauon	ANKING SCORE (TOTAL POINTS):

		<u></u>				
Date Remediation Started:	6-1	8-98	Date Con	npleted:	6-18-98	>
Remediation Method:	Excavation	K	Approx. (Cubic Yard	379.25	
(Check all appropriate sections)	Landfarmed	<u>×</u>	Amount I	Landfarmed (c	cubic yds) <u>37</u>	9.25
,	Other	<u> </u>	<u> </u>			
Remediation Location: (i.e., landfarmed onsite, name and location of offsite facility)	Onsite		Offsite	Matural and on	black PE 515	1 <u>0()</u> 1 <u>31-77</u> 0-80
Backfill Material Location:						
General Description of Ren <u>Matrial war 34</u> <u>Jelevation</u> <u>Fual cellivat</u> Ground Water Encountere	nedial Action: <u>taminated</u> <u>asmed</u> <u>uso</u> <u>climens</u> <u>d</u> : No	ions: 32	(from all f to farmition (0+5)X 20' (E+4) Yes Z	D	epth	Ztaa Lan
Final Pit Closure Sampling:	Sample Locatio	on <u>All b</u>	n walli	Composi	ite) and a	
(if multiple samples. attach sample result and diagram of sample locations and depths.)	Sample depth Sample date	16' L-18'- 98	- <i>15</i> Samj	erally ple time the term	- 1425 - 1405	
	Sample Results	i	0			
	Benzer	ne (ppm)	570			
	Total F	STEX (ppm)	11.73			
	Field he	eadspace (ppm)				
Vertical Extent (ft)	трн <u>> 16 '</u>		Method	tached Ye	es <u> </u>	
Ground Water Sample:	Yes	No	<u> </u>	(If yes, at	tach sample results)
I HEREBY CERTIFY THA KNOWLEDGE AND MY	AT THE INFORM BELIEF	1ATION ABOVI	E IS TRUE AND CO	MPLETE TO	THE BEST OF M	Y
DATE 6-20-98 SIGNATURE RHUT	Haston		PRINTED NAME AND TITLE	D enver Bear A dministrate	den Ray Has ortil <i>Erov. Tech</i>	tin T

. .

ł

Excavation Work Sheet

Environmental Services

Date	Vertical Extent						
118-98 6	0715	164					
Well Name	Operator	S	T	R	UI	7	
Blanco Wash Dorp	Williams	31	27N	8W	Ŧ		
Pit Dimensions	at Start	Excavation Dimensions at End					
18×18×3		32'W	145)XZO	(Etil) s	(16'0)	10240	
Excavated Cu. Yds.	Overburden Cu. Yds.			Spoil Cu. Yds.			
379.25	Ø			379,2	25		

PIT PID READINGS									
Feet	Center	Soil Type	N. Wall	S. Wall	E. Wall	W. Wall			
3'	1522	Scuid	2.2.			186			
6'	226	somet/silt	690		703	690			
9'		50mid/silt			267				
12'	1038	Servel/silt	429		450	322			
15'	871	soull /silt	87	778					
1816	592	Somelisilt		307	431	99			
21'									

Composite Sample #	1: Sottom 9806181405 K	Dalls 9806181425
Location	Depth	PID Reading
North Wall	46 15'	46
South Wall	14°	148
East Wall	## 15'	230
West Wall	32 15'	32
Pit Bottom	16	244

Land Farm Location: here line right of arey south of pet (across sound) and on Balack B = 5 (I) 31-27hi-8W Woss Timbers

Back Fill Location: N/A

Comments: AT WAA 56 mi



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 24-Jun-98

Client: Work Order: Lab ID: Project:	ent:PNM - Public Service Company of NMClientork Order:9806076Clientb ID:9806076-01AMatrix: SOILCoorest:Blanco Wash DrinCo			Client Sample Info: Blanco Wash Drip Client Sample ID: 9806181405; Bottom Collection Date: 6/18/98 2:05:00 PM COC Record: 5241			
Parameter		Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE	ORGANICS	SW	/8015				Analyst: DC
T/R Hydrocarbon	s: C10-C28	720	25		mg/Kg	1	6/24/98
BTEX		SW	/8020A				Analyst: HR
Benzene		510	100		µg/Kg	100	6/19/98
Toluene		720	200		µg/Kg	100	6/19/98
Ethylbonzono		1300	100		µg/Kg	100	6/19/98
Eurybenzene		7500	200		ua/Ka	100	6/19/98
m,p-Xylene		7500	200		F 3****3		0,10,00

Quali	fiers:
-------	--------

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

R - RPD outside accepted recovery limits E - Value above quantitation range

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 24-Jun-98

Client: Work Order: Lab ID: Project:	PNM - Public Se 9806076 9806076-02A Blanco Wash Dri	lic Service Company of NMClient Sample Info: BlancClient Sample ID: 980612AMatrix: SOILSh DripCollection Date: 6/18/9COC Record: 5241					unco Wash Drip 06181425; Walls .8/98 2:25:00 PM 41	
Parameter		Result	PQL	Qual	Units	DF	Date Analyzed	
DIESEL RANGE	ORGANICS	sw	/8015				Analyst: DC	
T/R Hydrocarbons	s: C10-C28	1100	25		mg/Kg	1	6/24/98	
BTEX		SN	/8020A				Analyst: HR	
Benzene		ND	100		µg/Kg	100	6/19/98	
Toluene		ND	200		µg/Kg	100	6/19/98	
Ethylbenzene		1200	100		µg/Kg	100	6/19/98	
m,p-Xylene		5700	200		µg/Kg	100	6/19/98	
o-Xylene		2500	100		µg/Kg	100	6/19/98	
		9400						

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

R - RPD outside accepted recovery limits E - Value above quantitation range

Surr: - Surrogate

l of l



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Jul-98

Client:PNM - Public Service Company of NMWork Order:9807058Lab ID:9807058-02AMatrix: SOILProject:PNM Pit Remediation			М	Client Sample Info: Blanco Wash Drip LF Client Sample ID: 9807200930: 6pt. Comp. Collection Date: 7/20/98 9:30:00 AM COC Record: 7389			
Parameter		Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS T/R Hydrocarbons: C10-C28		SW 440	8015 25		mg/Kg	1	Analyst: HR 7/23/98

Qualifiers:

OFF: (505) 325-5667

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

•

E - Value above quantitation range

R - RPD outside accepted recovery limits

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

. · · · · · · · · · · · · · · . . *.* . . • • • • • • • • • • • • Blanco Wash Dry WFS Sec 31, 27N, SW, J · · · · · · · · · Landfarm: On location • · · · · • • • • • • • • • • • -· · · · • · · · · Dr:1 Risa · · · · • 1000 sal TK · · · . . -• • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • · 4.1 ·· · · · 3.4 • • · · · · **.** . · · · · · • • 3.5 · · · · · · • 9807200930 180 yards 2"-12" dyth •...•.•• soil upon head space = 12.1 ppm • • • • • • -. **.** • ·



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 28-Jul-98

Client: PNM - Public Service Company of NM Work Order: 9807058			ĪM	Client Sample Info: Blanco Wash Drip LF Client Sample ID: 9807201000; 6pt. Comp.			
Lab ID:	9807058-03A	Matrix: SOIL	Collection Date: 7/20/98 1		10:00:00 AM		
Project: PNM Pit Remediation				COC Record: 7389			
Parameter		Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE	ORGANICS	sv	V8015				Analyst: HR
T/R Hydrocarbons: C10-C28		680	25		mg/Kg	1	7/23/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

I of I

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

STORE WERE FREE WARNESS AND THE



EXHIBIT B

Hydrogeological Documents Blanco Wash Drip

MONITORING WELL INSTAL

· ·- ·--



11 1	•••
Borehole # 💈 🤰	
Well #	
Page 1 of	1

ł

1

Philip Services Corporation				Page 1	of _1	
Farmington, New Mexico 87401			Project Name	PNM Vertical Extent		
(505) 326-2262 FAX (505) 326-2388			Project Number	20731 Phase 6	002	
			Project Location	BLANCO WASH DRI	9	
Elevation Well Location L: J S: 31	T: 27N R: 8W		On-Site Geologist Personnel On-Site	Cecil Irby K. Padilla. A. Werito	· · · · · · · · · · · · · · · · · · ·	
GWL Depth			Contractors On-Site			
Installed By K. Padilla		Clie	ent Personnel On-Site	G. Cook		
Date/Time Started 4 19 Date/Time Completed 4 19	44 49					
Depths in Reference	to Ground Surface					
Item	Material	Depth (feet)		Top of Protective Casing		
Top of Protective Casing	y"xe' WELL PRET.	+41		Top of Riser		
Bottom of Protective Casing	4145' WELL PROTA	; `		Ground Surface		
Top of Permanent Borehole	אוב ויס	+ 3				
Bottom of Permanent Borehole						
Casing	2" PVC	25'				
Top of Concrete	READY MAK	0				
Bottom of Concrete	READY MIN	2,				
Top of Grout	Hold PULL	<u>Z'</u>				
Bottom of Grout	How PLUG	15				
Top of Well Riser	211 242	+3				
Bottom of Well Riser	2" PVL	10				
Top of Well Screen	2" PUC	10'		Top of Seal		
Bottom of Well Screen	Z" PVC	25'				
Top of Peltonite Seal	HOLE PLUG	6				
Bottom of Peltonite Seal	HOLE PLUG	<u> </u>		Top of Gravel Pack	<u> </u>	
Top of Gravel Pack	10-20 SILICA SAND	8'		Top of Screen	10'	
Bottom of Gravel Pack 10-20 SILICH SAN		25'				
Top of Natural Cave-In						
Bottom of Natural Cave-In					}	
Top of Groundwater		<u> </u>		Bottom of Screen	25	
Total Depth of Borehole	}	25'		Bottom of Borehole	_25	

Comments: _

Geologist Signature

RECORD OF SUBSURFACE E RATION

	MW	-
~		

1

١

Well # of Page 1

Philip Services Corporation 4000 Monroe Road Farmington, New Mexico 87401 (505) 326-2262 FAX (505) 326-2388

Elevation			
Borehole Locatio	L: J	S: 31	T: 27N R: 8W
GWL Depth	11	8.5	
Logged By	C. Irt	by	
Drilled By	K. Pa	idilla	
Date Started	LL.	-6-6	<u>,</u>
Date Completed	्रम्	- 4 -	79

Project Name	PNM Ve	Vertical Extent					
Project Number	2073	731 Phase		6003			
Project Location	Blanco	Wash D	rip				
On-Site Geologist	t C	. Irby					
Personnel On-Sit	e K	K. Padilla, D. Padiila					
Contractors On-S	iite ,	D.1.m	1:1	Mar me t			
Client Personnel	On-Site	G. Cook					

Drilling Method Air Monitoring Method

4 1/4 ID HSA

PID

				Sample			Depth				
Decth		Samp:e	Sample	Туре &	Sample Description	USCS	Lithology	Air	Monitori	ng	Drilling Conditions
(Feet)		Numbar	Interval	Recovery	Classification System: USCS	Symcol	Change	Ur	uts ND	J	& Blow Counts
		-		(inches)			(feet)	9Z	вн	s	
	0				Dell' to 11's Same's Second States			đ			9:39 A.
	5				JErron Wages at						
	10				and the second	1					
		!		12"	Tansas abore						50 = 10 51/0 81/1
	15	r (7.'	Tan fand ar . 27 tan inn 1944 28 tan inn 1944			0			
	20										[] [*] : },*≠ +
	25				·						
	30										
	35										
	40										

Comments:

Car

3/12/99\1-40ft.xls

MONITORING WELL INST I'Lilip Environmental Services Corp 4000 Morvee Rood Fermington, New Mexico 87401 (506) 326-2252 FAX (506) 326-2388 Elevation Well Location GWL Depth Installed By K. PAD111A H. SRAdby/ Date/Time Started 21 21 Date/Time Completed	ALLATION RECO	RD		Proje Proje Proje On-S Perso Cont Clian	Boreho Well # Page ct Name ct Number ct Location the Geologist onnel On-Site ractors On-Site the Personnel On-Site	VERDICALEXTENT VERDICALEXTENT	7 la use
Depths in Reference to Ground S	Surface				Top of Protective Casing Top of Riser	+3	
ltem	Material	Depth			Ground Surface	_0	
Top of Protective Casing				10.000			
Bottom of Protective Casing							
Top of Permanent Borehole							
Bottom of Permanent Borehoie Casing							
Top of Concrete							
Bottom of Concrete		0					
Top of Grout							
Eattam of Grout	<u> </u>						
Top of Weil Riser		0					
Bottom of Well Riser	24.5	10					
Top of Well Screen	ZPVC	10'			Top of Seal	<u> </u>	
Bottom of Well Screen	2" PVC	25'					
Top of Peltonite Seal		0.			Top of Gravel Pack	8	
Bottom of Peltonite Seal		8.		[T (A		
Top of Gravel Pack		8.			lop of Screen		
Bottom of Gravel Pack							
Top of Natural Cave-In		_					
Bottom of Natural Cave-In						_	
Top of Groundwater		19:6	5 <u> </u> E	<u> </u>	Bottom of Screen	25	
Total Depth of Borehole		25			Bollow of Bolepole		

Comments:_

T

Geologist Signature

Holly Bracking

RECORD OF SUBSURFACE / PLORATION

PHILIP SERVICES CORP.

4000 Monroe Road Farmington, New Mexico 87401 (505) 326-2262 FAX (505) 326-2388

	Project Number	20731
	Project Name	PNM Ve
	Project Location	BIA
B	Source 1	N 2 11
		

		Boreho	le #	BH-		
		Well #				
	12-	Page	1	of		
ber	20731	Pha	se	6001	77	
3	PNM Vert	ical Exte	ent			

BIANCO WASH DRIP

Elevation	
Borehole Location	LTR: J S. 31 T. 27 R. 8
GWL Depth	
Drilled By	K. PADILLA
Well Logged By	H. BRADBURY
Date Started	2/2/99
Date Completed	212199

Drilling Method	4 1/4	ID	HSA	
Air Monitoring M	ethod	PI	D	

	Depth (Feet)	Sample Number	Samp.e Interval	Sample Type & Recovery (inches)	Sample Descriptio Classification System:	n us USCS Syn	SCS mbol	Depth Lithology Change	Air I Un BZ	Vonitorii its: PPN	rg M S/HS	Drilling Conditions & Blow Counts	
A.2		1	26-21	(inches)	EXCAVATION COLLECTED A CLAY LAYER UPPER LT BR SAND. F ICOSE, WET	SAMPLE + 16' 2 2" iNE SHILD SET WE!		(feet)	ΒΖ , Ι	<u>БН</u> 5]	57 57	BZ=Breathing Zone BH=Borenole S/HS=Sampie/Heacsbace INJE hRS hRS	
	Commer	113.	PE	RU	ENT REQUEST					1111			
			<u> </u>		Ge	eologist Signature		Hot	ly	ß	NA	dling	

MONITORING WELL INSTAL.



MW-3

- · ·

MONITORING WELL INSTAL				Borenole #	<u> </u>	
				Well #	<u> </u>	
4000 Morroe Road				Page 1	1	
Farmington, New Mexico 87401			Project Name	PNM Vertical Extent		
(505) 326-2262 FAX (505) 326-2388			Project Number	20731 Phase	6002	
			Project Location	Blanco Wash Drip		
Elevation			On-Site Geologist	Cecil Irby		
Well Location L: J S: 31	<u>1:27N R:8W</u>		Personnel On-Site	K. Padilla, A. Werito		
Installed By K Padilla		Clie	Contractors On-Site	- G. Cook		
		Chi			<u> </u>	
Date/Time Started 4/6	jac					
Date/Time Completed 4'/1/2	140					
· ,	•					
Depths in Reference	to Ground Surface					
Item	Material	Depth (feet)		Top of Protective Casi	$ng = \frac{\omega'}{2}$	
Top of Protective Casing	UNAS' WELL PROT.	+ 4'		Top of Riser	3	
Bottom of Protective Casing	4"x 5' 10 EL PROT.	11 .		Ground Surface	<u> </u>	
Top of Permanent Borehole	24 DVC	÷ ?'				
Bottom of Permanent Borehole	6 190)				
Casing	2" PVC	25				
Top of Concrete	PERCY MA	0				
Bottom of Concrete	REALY MIN	2;				
Top of Grout	Male Auss	2'				
Bottom of Grout	HOLE JULL	6				
Top of Well Riser	2" PVC	+ 3'				
Bottom of Well Riser	2" PVC	10'			· ·	
Top of Well Screen	2" PVC	10'		Top of Seal	10	
Bottom of Well Screen	2" PVC	25'				
Top of Peltonite Seal	HOLE PLUG	6				
Bottom of Peltonite Seal	HOLE PLUG	8'		Top of Gravel Pack	<u> </u>	
Top of Gravel Pack	Top of Gravel Pack 10 - 20 SINCA SAMO			Top of Screen	<u> </u>	
Bottom of Gravel Pack 10-20 SILICH SAND		<u>zs'</u>				
Top of Natural Cave-In						
Bottom of Natural Cave-In					,	
Top of Groundwater				Bottom of Screen	25'	
Total Depth of Borehole		25'		Bottom of Borehole	<u>_25'</u>	

Comments:

Geologist Signature

RECORD OF SUBSURFACE F AORATION

	IVIVV - D
prenole #	3
Weil #	3
Page 1	of 1

Philip Services Corporation 4000 Monroe Road

Farmington, New Mexico 87401 (505) 326-2262 FAX (505) 326-2388

Elevation			
Borehole Locatio	L: J	S: 31	T: 27N R: 8W
GWL Depth			
Logged By	C. Irt	by	
Drilled By	K. Pa	dilla	
Date Started	4	- 1, - 6	9
Date Completed		- 4 - 9	5

Project Name	PNM Vertica	Extent	
Project Number	20731	Phase	6003
Project Location	Blanco Wash	n Drip	
On-Site Geologist	C. Irby		
Personnel On-Site	K. Pad	illa, D. Pa	dilla
Contractors On-Si	ite Pry	n /	Herent
Client Personnel	On-Site G. Coo	ж	
Drilling Method	4 1/4	D HSA	

Air Monitoring Method PID

				·····				_		
De -15	6		Sample			Depth				
Depth	Sample	Samole	lype &	Sample Description	uscs	Lithology	Aır	Mon ter	ınç	Drilling Conditions
(Feet)	Number	Interval	Recovery	C'assification System: USCS	Symbol	Charge	ບ	nits NO	U	& Blow Counts
		ļ	(inches)			(feet)	9Z	BH	S	
0		1		Basin South 2 11						121 - 21 0
							1.0			
				a sample every star	1]				س يفية المعني المراجع المراجع
				Gary Cuok Jostowa Frank						HS = Heed Summer -
	ł	ł	l i	/ _ / / / / / / / /	1	1		Į		2
5				1			1			0.3-100
1					1					11:11 Am
	1		1			ļ				
	1	1	1		1					
	1	1	1	/	1	1				
	1		1		1	1				
10		+			1				ļ	2 2
		1	1	Tan of 15 Unenselfaied	1	1	1	1		50-3
				Sanda						53/0
					1				1	
	1									
15				mida in the art						
				Ian P - Mingra Tassis is	1.1					5
				Solver Stores Such	1					55
		1			1		1			1214
		1			1	1		1		
					ļ		1			
20	1				1					
					1					
						· ·				
	1				1					
	(1		1		1	1		
25	1	1			1					
		1								
		1								
H 30					1					
1⊢-~										
						1				
						1				
	1					1				
1					1					
		1	1		1	1	1		1	
		1	1		1		1			
			1		1					
		1		· ·	1					
1		1			1		1			
40	1	1	1		1	1	1			

Comments:

<u>Cil Cr</u>

				MW-	
MONITORING WELL INSTAI	L. ON RECORD			Borehole # Well #	<u>4</u> <u>4</u>
Philip Services Corporation				Page 1	of <u>L</u>
Farmington, New Mexico 87401			Project Name	PNM Vertical Extent	
(505) 326-2262 FAX (505) 326-2388			Project Number	20731 Phase 6	5002
			Project Location	Blanco Wash Drip	<u> </u>
Elevation			On-Site Geologist	Cecil Irby	
Well Location L: J S: 31	T:27N R:8W		Personnel On-Site	K. Padilla, A. Werito	
GWL Depth		<u></u>	Contractors On-Site		<u> </u>
Installed By <u>K. Padilla</u>		Che	nt Personnel On-Site	G. Cook	
Date/Time Started 4/6	49				
Date/Time Completed	99				
Γ					
Depths in Reference	to Ground Surface				
Item	Material	Depth		Top of Protective Casing	<u>~:.'</u>
		(teet)		Top of Riser	÷3'
Top of Protective Casing	4" × 5' WELL P.2. T.	+ 4		Ground Surface	~
Bottom of Protective Casing	4"x 5' 101.11 PROT,			Glouid Surace	· · · · · · · · ·
Top of Permanent Borenoie Casing	2" PVC	÷3'			
Bottom of Permanent Borehole			▏▐▀▕▏▏▝┓		
Casing	Z" PVC	25			
Top of Concrete	READY MIN	0			
Bottom of Concrete	READY MIL	<u>2'</u>			
Top of Grout	HOLE PLUG	2'			
Bottom of Grout	Hore Pruc	15			
Top of Well Riser	z" FVC	73'			
Bottom of Well Riser	2" PVC	10'			
Top of Well Screen	2" PVC	10'		Top of Seal	12
Bottom of Well Screen	2" PUC	25'			
Top of Peltonite Seal	HOLE PLUG	6'			
Bottom of Peltonite Seal	HOLE PLUC	8'		Top of Gravel Pack	<u> </u>
Top of Gravel Pack	10-20 SILICA SAND	Β'] []]	Top of Screen	_10'
Bottom of Gravel Pack	10-20 SILICA SHAD	25'			
Top of Natural Cave-In					
Bottom of Natural Cave-In					
Top of Groundwater				Bottom of Screen	<u> </u>
Total Depth of Borehole		zs'		Bottom of Borehole	25'

- ----

Comments:

i

Geologist Signature Ceel II

RECORD OF SUBSURFACE E

	11.0
Ч	7

of 2

:*

Page 1

Weil #

4000 Monroe Road Farmington, New Mexico 87401 (505) 326-2252 FAX (505) 326-2388

Philip Services Corporation

L: J	S: 6	T: 30N R: 8W
C. Irb)y	
K. Pa	Idilla	
ц.	6-9	9
<u></u>	67 - 4	ș
	L: J C. Irt K. Pa	L: J S: 6 C. Irby K. Padilla $H = 6 - \frac{9}{4}$

Project Name 🛛 🗜	'NM Vertical Extent
Project Number	20731 Phase 6003
Project Location	Hitchard #2 Riggin Warth Dein
	· · ·
On-Site Geologist	C. Irby
Personnel On-Site	K. Padilla. D. Padilla
Contractors On-Site	PNN IW Mans
Client Personnei Or	-Site G. Cook

4 1/4 ID HSA

PID

Drilling Method

Air Monitoring Method

ī			Sample			Depth 4		· · · · · ·	1	
Deoth	Sample	Sample	Type &		uscs	Linplogy	Air	Montorio	. 1	Datling Canditions
(Feet)	Number	Interval	Recovery	Classification System: USCS	Sympol	Change	L'n			3 Biow Counts
(lingnas	Siddanicandir Gyatani. Good	dyn ber	(faat)	87	6U		
Depth (Feet)	Sample Number	Sampie Interval	Sample Type & Recovery (incnes)	Sample Description Classification System: USCS Begin Surgers 41 Intervents 200 R-Gory Costh VF-Converting VF-Converting The Convert Charles As Abore Charles As Abore	USCS Symool	Depth Lithology Change (feet:	Air I Un BZ O	Mon.torin its: NDU 9H	g S	Define Constants 3 Blow Counts Because 2 = 2 = 4 BC = 2000 - 2000
30 										

Comments:

____ (sel U.J.





- :



· = -:



÷

EXHIBIT C

Analytical Data Blanco Wash Drip

nalytical Data Summary

Site Name:

Blanco Wash Drip

Reporting Period:

4/1/99 To 4/1/02

Well ID	Sample Date	Sample ID	Benzene ug/l	Toluene ug/l	Ethylbenzene ug/l	Xylene (Total) ug/l
MW-1						
light of a three local in advances and an advice in a state of the second second second second second second se	4/28/99	9904281250	<0.5	<0.5	<0.5	<1.5
	9/28/99	9909281240	<0.5	<0.5	<0.5	<1.5
	12/6/99	9912060940	<0.5	0.8	<0.5	<1.5
	3/17/00	0003170955	<0.5	<0.5	<0.5	<1.5
	5/1/01	103201MAY01	<1	<1	<1	<1
	3/25/02	100925MAR02	<2.0	<2.0	<2.0	<5.0
MW-2		n an	* *			
The constraint of the second sec	4/28/99	9904281320	110	93	9.2	72
	9/28/99	9909281350	37	8.2	4.2	15.4
	12/6/99	9912061112	63	97	9.4	74
	3/17/00	0003171012	12	10	2.9	19.3
	6/7/00	0006071030	19	4.3	3.7	25
	11/22/00	095222NOV00	<1	<1	<1	<1
	2/22/01	165022FEB01	<1	<1	<1	<1
	5/1/01	104001MAY01	<1	<1	<1	<1
	3/25/02	103025MAR02	<2.0	<2.0	<2.0	<5.0
MW-3						
	4/28/99	9904281340	<0.5	<0.5	<0.5	<1.5
	9/28/99	9909281300	<0.5	<0.5	<0.5	<1.5
	12/6/99	9912061030	<0.5	0.8	<0.5	1.2
	3/17/00	0003171036	<0.5	<0.5	<0.5	<1.5
	5/1/01	105101MAY01	<1	<1	<1	<1
	3/25/02	101525MAR02	<2.0	<2.0	<2.0	<5.0
6 MW-4						
	4/28/99	9904281400	<0.5	<0.5	1.6	3.8
	9/28/99	9909281325	<0.5	<0.5	<0.5	<1.5
	12/6/99	9912061000	0.8	0.9	3.2	4.1
	3/17/00	0003171051	1.1	<0.5	4.1	6.5
	5/1/01	110401MAY01	<1	<1	<1	2.42
	3/25/02	102225MAR02	<2.0	<2.0	<2.0	<5.0



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 23-Jun-99

Client: Work Order: Lab ID: Project:	PNM - Public Ser 9905002 9905002-01A Blanco Wash Drij	IM DUS	Client Sample Info: Blanco Wash Drip Client Sample ID: 9904281250; MW-1 Collection Date: 4/28/99 12:50:00 PM COC Record: 7536				
Parameter		Result	PQL	Qual Units	DF	Date Analyzed	
AROMATIC VOL	ATILES BY GC/PID	sv	V8021B			Analyst: DC	
Benzene		ND	0.5	µg/L	1	5/7/99	
Toluene		ND	0.5	μg/L	1	5/7/99	
Ethylbenzene		ND	0.5	µg/L	1	5/7/99	
m,p-Xylene		ND	1	µg/L	1	5/7/99	
o-Xylene		ND	0.5	µg/L	1	5/7/99	

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 23-Jun-99

Client:	PNM - Public Ser	vice Company c	of NM	Client	t Sample Info: nt Sample ID:	Blanco W	Vash Drip 250: MW-1	
work Order:	9905002	Matrizza AOI		Cire	Illection Dates	7704201230, IVI W -1		
Lab ID:	9905002-01C	Matrix: AQU	E003			7626	12.30.001141	
Project:	Blanco Wash Dri	P			CUC Record	: 7536	· · · · · · · · · · · · · · · · · · ·	
Parameter		Result	PQL	Qual	Units	DF	Date Analyzed	
CALCIUM, DISSO	OLVED		E215.1				Analyst: HR	
Calcium		1.89	0.25		mg/L	1	5/13/99	
POTASSIUM, DI	SSOLVED	0.44	E258.1			4	Analyst: HR	
Potassium		2.14	0.25		mg/L	1	5/12/99	
MAGNESIUM, DI	SSOLVED		E242.1		ma/1	4	Analyst: HR	
		ND	0.20		mg/L	1	5/13/99	
SODIUM, DISSO	LVED	261	E2/3.1		mo/l	125	Analyst: HK	
	TAI	201	M1220 D		nig/L	125	Apolyet: UD	
ALKALINITT, IC	DIAL	480	1V12320 D			1	5/17/99	
Alkalinity, Dicardo	rate (As CaCO3)	-00 ND	5			1	5/17/99	
Alkalinity, Burton	ide	ND	5		mg/L CaCO3	1	5/17/99	
Alkalinity, Total (/	As CaCO3)	480	5		mg/L CaCO3	1	5/17/99	
CHLORIDE			E325.3		C		Analyst: HR	
Chloride		2.8	1		mg/L	1	5/3/99	
CONDUCTIVITY	@ 25C		E120.1				Analyst: HR	
Specific Conduct	ance	934	2		uS/cm	1	5/3/99	
HARDNESS, TO	TAL		M2340 B				Analyst: HR	
Hardness (As Ca	CO3)	5	1		mg/L	1	5/13/99	
PH			E150.1				Analyst: HR	
рН		7.94	2		pH units	1	5/3/99	
SULFATE			M4500-SO4	D			Analyst: HR	
Sulfate		160	8		mg/L	1	5/4/99	
TOTAL DISSOL	VED SOLIDS		E160.1				Analyst: DM	
Total Dissolved S Filterable)	Solids (Residue,	850	40		mg/L	1	5/24/99	
TOTAL DISSOL	VED SOLIDS		CALC				Analyst: HR	
Total Dissolved S	Solids (Calculated)	900	40		mg/L	1	5/13/99	

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

associated Method Blank Surr: - Surrogate

E - Value above quantitation range

1 of 1

B - Analyte detected in the associated Method Blank

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 23-Jun-99

Client:PNM - Public Service Company of NMWork Order:9905002Lab ID:9905002-02AMatrix: AQUEOUS		Client Sample In Client Sample Collection D	Info: Blanco Wash Drip ID: 9904281320; MW-2 Date: 4/28/99 1:20:00 PM			
Project:	Blanco Wash Drij	p		COC Record: 7536		
Parameter		Result	PQL	Qual Units	DF	Date Analyzed
AROMATIC VOL	ATILES BY GC/PID	SV	V8021B			Analyst: DC
Benzene		110	0.5	µg/L	1	5/7/99
Toluene		93	0.5	µg/L	1	5/7/99
Ethylbenzene		9.2	0.5	µg/L	1	5/7/99
m,p-Xylene		57	1	µg/L	1	5/7/99
+ Videne		15	05	ug/l	1	5/7/99

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

E - Value above quantitation range

J - Analyte detected below Practical Quantitation Limit B - Analyte detected in the associated Method Blank

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 23-Jun-99

Client:	PNM - Public Se	ervice Company o	f NM	Client Sample Info	: Blanco V	Vash Drip		
Work Order:	Vork Order: 9905002			Client Sample ID	9904281	9904281320; MW-2		
Lab ID:	9905002-02C	Matrix: AQU	IEOUS	Collection Date	e: 4/28/99 1	1:20:00 PM		
Project:	Blanco Wash Dr	ip		COC Record	l: 7536			
Parameter		Result	PQL	Qual Units	DF	Date Analyzed		
CALCIUM, DISS	OLVED		E215.1			Analyst: HR		
Calcium		1.35	0.25	mg/L	1	5/13/99		
POTASSIUM, DI	SSOLVED		E258.1			Analyst: HR		
Potassium		2.23	0.25	mg/L	1	5/12/99		
MAGNESIUM, DI	ISSOLVED		E242.1			Analyst: HR		
Magnesium		ND	0.25	mg/L	1	5/13/99		
SODIUM, DISSO	LVED		E273.1			Analyst: HR		
Sodium		276	31	mg/L	125	5/12/99		
ALKALINITY, TO	DTAL		M2320 B			Analyst: HR		
Alkalinity, Bicarbo	onate (As CaCO3)	460	5	mg/L CaCO3	1	5/17/99		
Alkalinity, Carbor	ate (As CaCO3)	ND	5	mg/L CaCO3	1	5/17/99		
Alkalinity, Hydrox	tide	ND	5	mg/L CaCO3	1	5/17/99		
Alkalinity, Total (/	As CaCO3)	460	5	mg/L CaCO3	1	5/17/99		
CHLORIDE			E325.3			Analyst: HR		
Chloride		5	1	mg/L	1	5/3/99		
CONDUCTIVITY	@ 25C		E120.1			Analyst: HR		
Specific Conduct	ance	1120	2	uS/cm	1	5/3/99		
HARDNESS, TO	TAL		M2340 B			Analyst: HR		
Hardness (As Ca	(CO3)	4	1	mg/L	1	5/13/99		
РН			E150.1	-1.1		Analyst: HR		
		7.95	2	pH units	1	5/3/99		
SULFAIE			M4500-SO4	U		Analyst: HR		
		180	8	mg/L	1	5/4/99		
Total Dissolved S	VED SOLIDS Solids (Residue,	890	∟160.1 40	mg/L	1	Analyst: DN 5/24/99		
			CALC			Analyst HP		
Total Dissolved	Solids (Calculated)	930	40	ma/L	1	5/13/99		
		550			•			

Qu	alifi	ers:
----	-------	------

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

ON SITE TECHNOLOGIES, LTD.

OFF: (505) 325-5667

m,p-Xylene

o-Xylene

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 23-Jun-99

5/7/99

5/7/99

1

1

Client:PNM - Public Service Company of NMWork Order:9905002Lab ID:9905002-03AMatrix: AQUEOUSProject:Blanco Wash Drip			Client Sample Info: Blanco Wash Drip Client Sample ID: 9904281340; MW-3 Collection Date: 4/28/99 1:40:00 PM COC Record: 7536				
Parameter		Result	PQL	Qual	Units	DF	Date Analyzed
	ATILES BY GC/PID	SI	N8021B				Analyst: DC
Benzene		ND	0.5		µg/L	1	5/7/99
Toluene		ND	0.5		µg/L	1	5/7/99
Ethylbenzene		ND	0.5		µg/L	1	5/7/99

1

0.5

µg/L

µg/L

ND

ND

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

1 of 1

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

R - RPD outside accepted recovery limits

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 23-Jun-99

Client: Work Order: Lab ID: Project:	PNM - Public Ser 9905002 9905002-04A Blanco Wash Drip	ce Company of NM Matrix: AQUEOUS		Client Sample Info: Blanco Wash Drip Client Sample ID: 9904281400; MW-4 Collection Date: 4/28/99 2:00:00 PM COC Record: 7536			Wash Drip 1400; MW-4 2:00:00 PM
Parameter		Result	PQL	Qual	Units	DF	Date Analyzed
AROMATIC VOL	ATILES BY GC/PID	SV	V8021B				Analyst: DC
Benzene		ND	0.5		µg/L	1	5/7/99
Toluene		ND	0.5		µg/L	1	5/7/99
Ethylbenzene		1.6	0.5		µg/L	1	5/7/99
m,p-Xylene		3.8	1		µg/L	1	5/7/99
o-Xylene		ND	0.5		µg/L	1	5/7/99

Οı	ıal	ifi	ers	:
νı	21	111	er3	•

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

Surr: - Surrogate

I of I

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 13-Oct-99

Client: Work Order: Lab ID:	PNM - Public Service Company of NMClient Sample Info: Blanco Wash Drip9909080Client Sample ID: 9909281240; MW-19909080-01AMatrix: AQUEOUSDiameter With the timeCollection Date: 09/28/1999 12:40:00 PMDiameter With the timeCOC December 7826			pany of NM Client Sample Info: Client Sample ID: AQUEOUS Collection Date:		Wash Drip 1240; MW-1 999 12:40:00 PM
Parameter		Result	PQL	Qual Units	DF	Date Analyzed
AROMATIC VOL	ATILES BY GC/PID	SV	V8021B	<u> </u>	; _ <u></u> <u>, , , , , , , , , , , , , , , , , ,</u>	Analyst: DM
Benzene		ND	0.5	µg/L	1	09/30/1999
Toluene		ND	0.5	µg/L	1	09/30/1999
Ethylbenzene		ND	0.5	µg/L	1	09/30/1999
m,p-Xylene		ND	1	µg/L	1	09/30/1999
o-Xylene		ND	0.5	µg/L	1	09/30/1999

Qualifiers: PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

R - RPD outside accepted recovery limits E - Value above quantitation range

J - Analyte detected below Practical Quantitation LimitB - Analyte detected in the associated Method Blank

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 13-Oct-99

Client:	PNM - Public Service Company of NM			Client	sample I	nfo: Blanco V	Blanco Wash Drip	
Work Order: 9909080			Client Sample ID: 9909281350; MW-2			350; MW-2		
Lab ID:	DID: 9909080-02A Matrix: AQUEOUS			Co	llection D	ate: 09/28/19	999 1:50:00 PM	
Project:	Blanco Wash Drig)	COC Record: 7826					
Parameter		Result	PQL	Qual	Units	DF	Date Analyzed	
	ATILES BY GC/PID	sv	V8021B				Analyst: DM	
Benzene		37	0.5		µg/L	1	09/30/1999	
Toluene		8.2	0.5		µg/L	1	09/30/1999	
Ethylbenzene		4.2	0.5		µg/L	1	09/30/1999	
m,p-Xylene		14	1		µg/L	1	09/30/1999	
o-Xylene		· 1.4	0.5		µg/L	1	09/30/1999	

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

E - Value above quantitation range

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit B - Analyte detected in the associated Method Blank

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 13-Oct-99

Client:PNM - Public Service Company of NMWork Order:9909080Lab ID:9909080-03AMatrix: AQUEOUSProject:Blanco Wash Drip		Client Sample Info: Blanco Wash Drip Client Sample ID: 9909281300; MW-3 Collection Date: 09/28/1999 1:00:00 PM COC Record: 7826				
Parameter		Result	PQL	Qual Units	DF	Date Analyzed
AROMATIC VOL	ATILES BY GC/PID		V8021B			Analyst: DM
Benzene		ND	0.5	µg/L	1	09/30/1999
Toluene		ND	0.5	µg/L	1	09/30/1999
Ethylbenzene		ND	0.5	µg/L	1	09/30/1999
m,p-Xylene		ND	1	μg/L	1	09/30/1999
o-Xylene		ND	0.5	µg/L	1	09/30/1999

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range

B - Analyte detected in the associated Method Blank

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 13-Oct-99

Client:PNM - Public Service Company of NMWork Order:9909080Lab ID:9909080-04AMatrix: AQUEOUSProject:Blanco Wash Drip			Client Sample Info: Blanco Wash Drip Client Sample ID: 9909281325; MW-4 Collection Date: 09/28/1999 1:25:00 PM COC Record: 7826			
Parameter		Result	PQL	Qual Units	DF	Date Analyzed
AROMATIC VOL	ATILES BY GC/PID	SV	V8021B			Analyst: DM
Benzene		ND	0.5	µg/L	1	09/30/1999
Toluene		ND	0.5	µg/L	1	09/30/1999
Ethylbenzene		ND	0.5	µg/L	1	09/30/1999
m,p-Xylene		ND	1	µg/L	1	09/30/1999
o-Xylene		ND	0.5	µg/L	1	09/30/1999

Oualifiers:	
-------------	--

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

Surt: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 22-Dec-99

Client:	PNM - Public Service Company of NM	Client Sample Info: Blanco Wash Drip
Work Order:	9912009	Client Sample ID: 9912060940; MW-1
Lab ID:	9912009-01A Matrix: AQUEOUS	Collection Date: 12/6/1999 9:40:00 AM
Project:	Blanco Wash Drip	COC Record: 7744
Project:	Blanco Wash Drip	COC Record: 7744

Parameter	Result	PQL	Qual Units	DF	Date Analyzed
AROMATIC VOLATILES BY GC/PID	SW8021B				Analyst: DM
Benzene	ND	0.5	µg/L	1	12/15/1999
Toluene	0.8	0.5	µg/L	1	12/15/1999
Ethylbenzene	ND	0.5	µg/L	1	12/15/1999
m,p-Xylene	ND	1	µg/L	1	12/15/1999
o-Xylene	ND	0.5	µg/L	1	12/15/1999

Quanners

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

ND - Not Detected at Practical Quantitation Limit

E - Value above quantitation range

Suit: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNOLOGY ELSED HIG INDUCED WITH THE ENVIRONMENT -



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 22-Dec-99

Client: Work Order: Lab ID: Project:	PNM - Public Se 9912009 9912009-04A Blanco Wash Dr	rvice Company of NM Matrix: AQUEOU ip	S	Client Sample In Client Sample Collection D COC Reco	nfo: Blanco V ID: 9912061 ate: 12/6/199 ord: 7744	Wash Drip 112; MW-2 99 11:12:00 AM
Parameter		Result	PQL	Qual Units	DF	Date Analyzed

AROMATIC VOLATILES BY GC/PID	SW8021B				Analyst: DM	
Benzene	63	0.5	µg/L	1	12/15/1999	
Toluene	97	0.5	µg/L	1	12/15/1999	
Ethylbenzene	9.4	0.5	µg/L	1	12/15/1999	
m,p-Xylene	60	1	µg/L	1	12/15/1999	
o-Xylene	14	0.5	μg/L	1	12/15/1999	

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

1 of 1

R - RPD outside accepted recovery limits

J - Analyte detected below Practical Quantitation Limit E - V

B - Analyte detected in the associated Method Blank

ND - Not Detected at Practical Quantitation Limit

E - Value above quantitation range

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY RUEMEAN ANALISTRY WITH THE ENVIRONMENT -



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 22-Dec-99

Client:	PNM - Public Service Company of NM	Client Sample Info: Blanco Wash Drip
Work Order:	9912009	Client Sample ID: 9912061030; MW-3
Lab ID:	9912009-03A Matrix: AQUEOUS	Collection Date: 12/6/1999 10:30:00 AM
Project:	Blanco Wash Drip	COC Record: 7744
Parameter	Result PQ	L Qual Units DF Date A

AROMATIC VOLATILES BY GC/PID	SM	/8021B			Analyst: DM
Benzene	ND	0.5	µg/L	1	12/15/1999
Toluene	0.8	0.5	µg/L	1	12/15/1999
Ethylbenzene	ND	0.5	µg/L	1	12/15/1999
m,p-Xylene	1.2	1	µg/L	1	12/15/1999
o-Xylene	ND	0.5	µg/L	1	12/15/1999

Qualifiers:	PQL - Practical Quantitation Limit	S - Spike Recovery outside accepted recovery limits			
	ND - Not Detected at Practical Quantitation Limit	R - RPD outside accepted recovery limits			
	J - Analyte detected below Practical Quantitation Limit	E - Value above quantitation range			
	B - Analyte detected in the associated Method Blank	Surr: - Surrogate			
	P.O. BOX 2606 • FARMINGTON, NM 87499				

- TECHNOLOGY BLENDING INDUCTRY WITH THE ENVIRONMENT -

Ethylbenzene

m,p-Xylene

o-Xylene



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 22-Dec-99

12/15/1999

12/15/1999

12/15/1999

1

1

1

Client:	PNM - Public Se	rvice Company of N	e Company of NM		nfo: Blanco V	Blanco Wash Drip	
Work Order: 9912009 Lab ID: 9912009-02A			Matrix: AQUEOUS		ID: 9912061	9912061000; MW-4 12/6/1999 10:00:00 AM	
		Matrix: AQUE			ate: 12/6/199		
Project:	ip		COC Rec	ord: 7744			
Parameter		Result	PQL	Qual Units	DF	Date Analyzed	
AROMATIC VOL	ATILES BY GC/PI) SV	N8021B			Analyst: DM	
Benzene		0.8	0.5	µg/L	1	12/15/1999	
Toluene		0.9	0.5	µg/L	1	12/15/1999	

0.5

0.5

1

µg/L

µg/L

µg/L

3.2

4.1

ND

Qualifiers:

PQL - Practical Quantitation Limit

S - Spike Recovery outside accepted recovery limits

l of l

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

E - Value above quantitation range

R - RPD outside accepted recovery limits

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BESSIERE INDUSTRY WHILE THE ENVIRONMENT

N SITE TREADERS TECHNOLOGIES, LTD.

OFF: (505) 325-5667

n 22 f.S/ Marth

LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 27-Mar-00

3/22/2000

3/22/2000

3/22/2000

1

1

1

Client:	PNM - Public Ser	vice Company of	ce Company of NM		Client Sample Info: Blanco Wash Drip			
Work Order:	0003031			Client Sample	ID: 0003170	0955; MW 1		
Lab ID: 0003031-01A N		Matrix: AQUE	Matrix: AQUEOUS		ate: 3/17/20	3/17/2000 9:55:00 AM		
Project:	.	COC Record:			: 7665			
Parameter		Result	PQL	Qual Units	DF	Date Analyzed		
AROMATIC VOI	LATILES BY GC/PI) (SW8021B			Analyst: DM		
Benzene		ND	0.5	µg/L	1	3/22/2000		
Toluene		ND	0.5	µg/L	1	3/22/2000		

Toluene	ND	0.5	µg/L
Ethylbenzene	ND	0.5	µg/L
m,p-Xylene	ND	1	µg/L
o-Xylene	ND	0.5	µg/L

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

- R RPD outside accepted recovery limits
- E Value above quantitation range

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

Capping, box Result for the set of the set and set and set

1 of 4



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 27-Mar-00

Client:	PNM - Public Service Company of NM			Client Sample Info: Blanco Wash Drip			
Work Order:	0003031	93031			Client Sample ID: 0003171012; MW 2		
Lab ID:	0003031-02A	Matrix: AQU	Vatrix: AQUEOUS Collection Date: 3/17/2000_10:12:00			00,10:12:00 AM	
Project:	Blanco Wash Drip	COC Record: 7665					
Parameter		Result	PQL	Qual Units	DF	Date Analyzed	
AROMATIC VOI	LATILES BY GC/PID		SW8021B			Analyst: DM	
Benzene		12	0.5	µg/L	1	3/22/2000	
Toluene		10	0.5	µg/L	1	3/22/2000	
Ethylbenzene		2.9	0.5	µg/L	1	3/22/2000	
m,p-Xylene		15	1	µg/L	1	3/22/2000	
o-Xylene		4.3	0.5	µg/L	1	3/22/2000	

Quanners

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

- J Analyte detected below Practical Quantitation Limit
- B Analyte detected in the associated Method Blank
- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- Surr: Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 27-Mar-00

Client: Work Order:	PNM - Public Service Company of NM	Client Sample Info: Blanco Wash Drip Client Sample ID: 0003171036: MW 3
Lab ID: Project:	0003031-03A Matrix: AQUEOUS Blanco Wash Drip	Collection Date: 3/17/2000 10:36:00 AM COC Record: 7665
Parameter	Result	PQL Qual Units DF Date Analyzed

AROMATIC VOLATILES BY GC/PID	sv	V8021B			Analyst: DM	
Benzene	ND	0.5	µg/L	1	3/22/2000	
Toluene	ND	0.5	µg/L	1	3/22/2000	
Ethylbenzene	ND	0.5	µg/L	1	3/22/2000	
m,p-Xylene	ND	1	µg/L	1	3/22/2000	
o-Xylene	ND	0.5	µg/L	1	3/22/2000	

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range
- Surr: Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 27-Mar-00

Client: PNM - Public Service Company of NM Work Order: 0003031			of NM	Client Sample Info: Blanco Wash Drip Client Sample ID: 0003171051; MW 4			
Lab ID:	0003031-04A	Matrix: AQU	atrix: AQUEOUS Collection Date: 3/17/2000 10			00 10:51:00 AM	
Project:	Blanco Wash Drip	COC Record: 7665					
Parameter		Result	PQL	Qual Units	DF	Date Analyzed	
AROMATIC VOL	ATILES BY GC/PID		SW8021B			Analyst: DM	
Benzene		1.1	0.5	µg/L	1	3/22/2000	
Toluene		ND	0.5	µg/L	1	3/22/2000	
Ethylbenzene		4.1	0.5	µg/⊾	1	3/22/2000	
m,p-Xylene		6.5	1	µg/L	1	3/22/2000	
o-Xylene		ND	0.5	µg/L	1	3/22/2000	

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

- S Spike Recovery outside accepted recovery limits
- R RPD outside accepted recovery limits
- E Value above quantitation range

Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499

Teomotor (Blantwick Utilian)
All des Englisherments

4 of 4

OFF: (505) 325-5667 FAX: (505) 327-1496



LAB: (505) 325-1556 FAX: (505) 327-1496

ANALYTICAL REPORT

Date: 20-Jun-00

Client: Work Order: Lab ID: Project:	PNM - Public Ser 0006019 0006019-01A Blanco Wash Drij	vice Company of N Matrix: AQUEC	IM DUS	Client Sample Info: Blanco Wash Drip Client Sample ID: 0006071030; MW-2 Collection Date: 6'7/2000 10:30:00 AM		
Parameter		Result	PQL	Qual Units	DF	Date Analyzed
AROMATIC VOL	ATILES BY GC/PID	SM	V8021B			Analyst: DM
Benzene		19	0.5	µg/L	1	6/14/2000
Toluene		4.3	0.5	µg/L	1	6/14/2000
Ethylbenzene		3.7	0.5	µg/L	1	6/14/2000
m,p-Xylene		20	1	µg/L	1	6/14/2000
o-Xylene		5	0.5	µg/L	1	6/14/2000

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

1 of I

P.O. BOX 2606 • FARMINGTON, NM 87499

- TECHNOLOGY BLENDING INDUSTRY WITH THE ENVIRONMENT -

N C. AL LABORATORIES,

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

Sample Matrix: WATER

LABOR	ATORY REPORT:	REFERENCE #:	0011656	
SENT	WILLIAMS GAS PIPELINE	DATE REPORTED:	12/01/00	
то:	187 COUNTY ROAD # 4980	DATE COLLECTED:	11/22/00	
	BLOOMFIELD, NM 87413	DATE RECEIVED:	11/28/00	
	JIM STRUHS	P.O. #:	JPS-112700-01	
PROJE	CT:WES/BLANCO WASH DRIP			

Sample ID: BLNC-SAMW2

I

J

Collection Date: 11/22/00 09:52:00

TEST ANALYZED METHOD-CAS # RESULT UNITS PQL EXTRACTED BTEX OA1/8021B 3.0 BENZENE 71-43-2 ND UG/L 1.0 11/30/00MB TOLUENE ND UG/L 1.0 11/30/00MB 108-88-3 ETHYLBENZENE ND UG/L 1.0 11/30/00MB 100-41-4 11/30/00MB TOTAL XYLENES 1330-20-7 ND UG/L 1.0 BFB (SURROGATE) 92 125 75

ND≈NONE DETECTED PQL=PRACTICAL QUANTITATION LIMIT SU≈STANDARD UNITS *BACKGROUND CONTAMINATION SUR=SURROGATE Q=OUTSIDE LIMITS B=DETECTED IN METHOD BLANK

APPROVED BY :-

TERRY KOESTER LABORATORY DIRECTOR AL LABORATORIES, UNC.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABOR	ATORY REPORT:	REFERENCE #	\$: 0102613	
SENT	WILLIAMS GAS PIPELINE	DATE REPORTE	ED: 02/27/01	
TO:	187 COUNTY ROAD # 4980	DATE COLLECT	TED: 02/22/01	
	BLOOMFIELD, NM 87413	DATE RECEIVE	ED: 02/24/01	
	JIM STRUHS	P.O.	#: SWA-022301-02	
PROJE	CT:WES/BLANCO WASH DRIP			

0

Sample ID: BLNC-SA-MW2 Collection Date: 02/22/01 16:50:00 Sample Matrix: WATER

TEST	METHOD-CAS #	RESULT	UNITS	PQL	ANALYZED	EXTRACTED
BTEX	OA1/8021B			3.0	······	······································
BENZENE	71-43-2	NI	UG/L	1.0	02/26/01KK	L
TOLUENE	108-88-3	NI	UG/L	1.0	02/26/01KK	L
ETHYLBENZENE	100-41-4	NI	UG/L	1.0	02/26/01KK	L
TOTAL XYLENES	1330-20-7	NI	UG/L	1.0	02/26/01KK	L
BFB (SURROGATE)	-	101	. 125	75		

ND=NONE DETECTED PQL≈PRACTICAL QUANTITATION LIMIT SU=STANDARD UNITS *BACKGROUND CONTAMINATION SUR≈SURROGATE Q=OUTSIDE LIMITS B=DETECTED IN METHOD BLANK

TERRY KOESTERING APPROVED BY :-

TERRY KOESTER LABORATORY DIRECTOR

REFERENCE #: 0102613 PAGE: 1

QWUL LABORATORIE UNC.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105064

DATE REPORTED: 05/09/01

DATE COLLECTED: 05/01/01 DATE RECEIVED: 05/02/01

SENT	WIL	LIAMS	GAS	PII	PELI	INE	
TO:	187	COUNT	CY RO	OAD	#49	80	
	BLC	OMFIEI	'.D, 1	NM	874	13	
JIM STRUHS							
PROJE	CT:	WES/BI	LANCO	O WA	ASH	DRI	Ρ

Reference Fraction:0105064-04A Sample ID: BLNC-UG-MW1 Sample Date Collected: 05/01/0110:32:00

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	PQL		ANALYZED	BY
BTEX	OA1/8021B	<u> </u>	· · · · · · · · · · · · · · · · · · ·		3.0	·····	
BENZENE		ND	UG/L		1.0	05/07/01	MB
TOLUENE		ND	UG/L		1.0	05/07/01	MB
ETHYLBENZENE		ND	UG/L		1.0	05/07/01	MB
TOTAL XYLENES		ND	UG/L		1.0	05/07/01	MB
BFB (SURROGATE)		117	125		75		

ND=NONE DETECTED PQL=PRACTICAL QUANTITAION LIMIT SU=STANDARD UNITS B=DETECTED IN METHOD BLANK

APPROVED BY: ERRÝ KOESTER LABORATORY DIRECTOR (D)

QWUL LABORATORIE UNC.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105064

DATE REPORTED: 05/09/01 DATE COLLECTED: 05/01/01 DATE RECEIVED: 05/02/01

SENT	WILLIAMS (GAS PII	PELINE
TO:	187 COUNT	Y ROAD	#4980
	BLOOMFIEL	D, NM	87413
	JIM STRUH	5	
			

PROJECT: WES/BLANCO WASH DRIP

Reference Fraction:0105064-03A Sample ID: BLNC-SA-MW2 Sample Date Collected: 05/01/0110:40:00 Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES BFB (SURROGATE)	OA1/8021B	ND ND ND 113	UG/L UG/L UG/L UG/L 125	3.0 1.0 1.0 1.0 1.0 75	05/07/01 05/07/01 05/07/01 05/07/01	MB MB MB MB

ND=NONE DETECTED PQL=PRACTICAL QUANTITAION LIMIT SU=STANDARD UNITS B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER LABORATORY DIRECTOR

61

QW L LABORATORIE, INC.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105064

DATE REPORTED: 05/09/01 DATE COLLECTED: 05/01/01 DATE RECEIVED: 05/02/01

SENT	WIL.	LIAMS (GAS I	PIPEL	INE
TO:	187	COUNT	Y ROP	AD #49	980
	BLO	OMFIELI), NN	M 874	413
	JIM	STRUH	5		
PROJE	СТ:	WES/BLA	ANCO	WASH	DRIP

Reference Fraction:0105064-02A Sample ID: BLNC-DG-MW3 Sample Date Collected: 05/01/0110:51:00

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX BENZENE TOLUENE ETHYLBENZENE TOTAL XYLENES	OA1/8021B	ND ND ND	UG/L UG/L UG/L	3.0 1.0 1.0 1.0	05/07/01 05/07/01 05/07/01 05/07/01	MB MB MB
BFB (SURROGATE)		120	125	75	00,01,01	

ND=NONE DETECTED PQL=PRACTICAL QUANTITAION LIMIT SU=STANDARD UNITS B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY' KOESTER LABORATORY DIRECTOR

셊

QWUL LABORATORIE, INC.

2911 ROTARY TERRACE, P.O. BOX 562/PITTSBURG, KS 66762/(316)232-1970

LABORATORY REPORT:

REFERENCE #: 0105064

DATE COLLECTED: 05/01/01 DATE RECEIVED: 05/02/01

DATE REPORTED:

05/09/01

SENT	WILI	LIAMS	GAS	PIP	ELI	NE
TO:	187	COUNT	TY RC	DAD	#49	80
	BLO	OMFIEI	D, N	M	874	13
	JIM	STRU	IS			
PROJE	CT: V	VES/BI	LANCO) WA	SH	DRIF

Reference Fraction:0105064-01A Sample ID: BLNC-CG-MW4 Sample Date Collected: 05/01/0111:04:00

Sample Matrix: WATER

TEST	METHOD	RESULT	UNITS	PQL	ANALYZED	BY
BTEX BENZENE TOLUENE ETHYLBENZENE	OA1/8021B	ND ND ND	UG/L UG/L UG/L	3 1 1 1	3.0 0 05/08/01 0 05/08/01 0 05/08/01	MB MB MB
TOTAL XYLENES BFB (SURROGATE)		2.42 102	UG/L 125	1	0 05/08/01 75	MB

ND=NONE DETECTED PQL=PRACTICAL QUANTITAION LIMIT SU=STANDARD UNITS B=DETECTED IN METHOD BLANK

APPROVED BY: TERRY KOESTER LABORATORY DIRECTOR h



MILE HIGH ENVIRONMENTAL 187 C.R. 4980 Bloomfield, NM 87413 Lab Project Number: 6057811 Client Project ID: SJB-GW BLNC

Attn: Mr. Jim Struhs Phone: (505)632-4457

Lab Sample No: 605034487			Project Sample	Number: 6057811-	001	Date Coll	ected: 03/25/02 10:15
Client Sample ID: 101525MAR02	2			Matrix: Water		Date Received: 03/27/02 09:40	
Parameters	Results	Units	Report Limit	Analyzed	by	CAS No.	Ftnote Reg Limit
GC Volatiles							
Aromatic Volatile Organics	Prep/Method:	EPA 8021	/ EPA 8021				
Benzene	ND	ug/l	2.0	03/30/02 00:21	SHF	71-43-2	
Ethylbenzene	ND	ug/l	2.0	03/30/02 00:21	SHF	100-41-4	
Toluene	ND	ug/l	2.0	03/30/02 00:21	SHF	108-88-3	
Xylene (Total)	ND	ug/l	5.0	03/30/02 00:21	SHF	1330-20-7	
a,a,a-Trifluorotoluene (S)	104	*		03/30/02 00:21	SHF	2164-17-2	

Date: 04/09/02

Page: 1

REPORT OF LABORATORY ANALYSIS







Lab Project Number: 6057811 Client Project ID: SJB-GW BLNC

Lab Sample No: 6	Project Sample Number: 6057811-002					Date Collected: 03/25/02 10:0		
Client Sample ID: 1	00925MAR02				Matrix: Water		Date Receive	ed: 03/27/02 09:40
Parameters		Results	<u>Units</u>		Analyzed	by	CAS No. Ft	note <u>Reg Limit</u>
GC Volatiles			-					
Aromatic Volatile	Organics	Prep/Method:	EPA 8021	/ EPA 8021				
Benzene		ND	ug/l	2.0	03/30/02 04:03	SHF	71-43-2	
Ethylbenzene		ND	ug/1	2.0	03/30/02 04:03	SHF	100-41-4	
Toluene		ND	ug/1	2.0	03/30/02 04:03	SHF	108-88-3	
Xylene (Total)		ND	ug/1	5.0	03/30/02 04:03	SHF	1330-20-7	
a,a,a-Trifluoroto	luene (S)	93	*		03/30/02 04:03	SHF	2164-17-2	

Date: 04/09/02

Page: 2

REPORT OF LABORATORY ANALYSIS







Lab Project Number: 6057811 Client Project ID: SJB-GW BLNC

Lab Sample No: 605034503	}		Project Sample	Number: 6057811-	003	Date Collected: 03/25/02 10:22	
Client Sample ID: 102225MAR	102			Matrix: Water		Date Received: 03/27/02 09:4	
Parameters	Results	Units	<u>Report Limit</u>	Analyzed	by	CAS No. <u>Ftnot</u> e <u>Reg Limit</u>	
GC Volatiles							
Aromatic Volatile Organics	Prep/Method:	EPA 8021	/ EPA 8021				
Benzene	ND	ug/1	2.0	03/30/02 04:32	SHF	71-43-2	
Ethylbenzene	ND	ug/1	2.0	03/30/02 04:32	SHF	100-41-4	
Toluene	ND	ug/1	2.0	03/30/02 04:32	SHF	108-88-3	
Xylene (Total)	ND	ug/1	5.0	03/30/02 04:32	SHF	1330-20-7	
a,a,a-Trifluorotoluene (S	i) 93	*		03/30/02 04:32	SHF	2164-17-2	

Date: 04/09/02

Page: 3

REPORT OF LABORATORY ANALYSIS





Lab Project Number: 6057811 Client Project ID: SJB-GW BLNC

Lab Sample No: 605034511				Project Sample	Number: 6057811	-004	Date Coll	ected: 03/25/02 10:30
Client Sample ID: 1	L03025MAR02				Matrix: Water		Date Received: 03/27/02 09	
<u>Parameters</u>		Results	Units	<u>Report Limit</u>	Analyzed	by	CAS No.	<u>Ftnote</u> <u>Reg Limit</u>
GC Volatiles								
Aromatic Volatile	Organics	Prep/Method:	EPA 8021	/ EPA 8021				
Benzene		ND	ug/l	2.0	03/30/02 05:01	SHF	71-43-2	
Ethylbenzene		ND	ug/1	2.0	03/30/02 05:01	SHF	100-41-4	
Toluene		ND	ug/1	2.0	03/30/02 05:01	SHF	108-88-3	
Xylene (Total)		ND	ug/1	5.0	03/30/02 05:01	SHF	1330-20-7	
a,a,a-Trifluoroto	oluene (S)	94	*		03/30/02 05:01	SHF	2164-17-2	

Date: 04/09/02

Page: 4

REPORT OF LABORATORY ANALYSIS

