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Pinnacle Lab ID number **012099**
January 17, 2001

GIANT REFINING CO.-BLOOMFIELD
#50 ROAD 4990
BLOOMFIELD, NM 87413

Project Name 4TH QTR WELL SAMPLE
Project Number 4TH QTR WELL SAMPLE

Attention: BARRY HOLMAN

On 12/29/00 Pinnacle Laboratories, Inc., (ADHS License No. AZ0592 pending), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

EPA method 8260 analyses were performed by Pinnacle Laboratories, Inc., Albuquerque, NM.

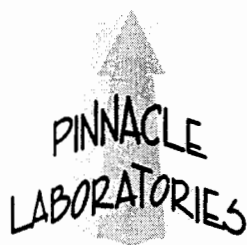
All other analyses were performed by Severn Trent Laboratories, Inc, Pensacola, FL.

If you have any questions or comments, please do not hesitate to contact us at (505)344-3777.

H. Mitchell Rubenstein, Ph. D.
General Manager

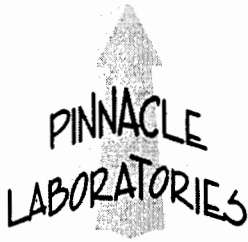
MR: jt

Enclosure



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
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CLIENT	: GIANT REFINING CO.-BLOOMFIELD	PINNACLE ID	: 012099
PROJECT #	: 4TH QTR WELL SAMPLE	DATE RECEIVED	: 12/29/00
PROJECT NAME	: 4TH QTR WELL SAMPLE	REPORT DATE	: 01/17/01
PINNACLE		DATE	
ID #	CLIENT DESCRIPTION	MATRIX	COLLECTED
012099 - 01	QTR INJ WELL	AQUEOUS	12/28/00



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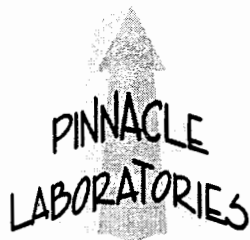
GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
 CLIENT : GIANT REFINING CO.-BLOOMFIELD
 PROJECT # : 4TH QTR WELL SAMPLE
 PROJECT NAME : 4TH QTR WELL SAMPLE

PINNACLE I.D. : 012099
 DATE RECEIVED : 12/29/00

SAMPLE ID #	CLIENT ID	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
012099-01	QTR INJ WELL	AQUEOUS	12/28/00	N/A	01/02/01	1
PARAMETER (CAS#)	DET. LIMIT	RESULT	UNITS			

Dichlorodifluoromethane (75-71-8)	1.0	< 1.0	ug/L	
Chloromethane (74-87-9)	1.0	< 1.0	ug/L	
Vinyl Chloride (75-01-4)	1.0	< 1.0	ug/L	
Bromomethane (74-83-9)	1.0	< 1.0	ug/L	
Chloroethane (75-00-3)	1.0	< 1.0	ug/L	
Trichlorofluoromethane (75-69-4)	1.0	< 1.0	ug/L	
Acetone (67-64-1)	10	120	ug/L	
Acrolein (107-02-8)	5.0	< 5.0	ug/L	
1,1-Dichloroethene (75-35-4)	1.0	< 1.0	ug/L	
Iodomethane (74-88-4)	1.0	< 1.0	ug/L	
Methylene Chloride (75-09-2)	1.0	< 1.0	ug/L	
Acrylonitrile (107-13-1)	5.0	< 5.0	ug/L	
cis-1,2-Dichloroethene (107-06-2)	1.0	< 1.0	ug/L	
Methyl-t-butyl Ether (628-28-4)	1.0	960	ug/L	(D20)
1,1,2-Trichlorotrifluoroethane (76-13-1)	5.0	< 5.0	ug/L	
1,1-Dichloroethane (75-34-3)	1.0	< 1.0	ug/L	
trans-1,2-Dichloroethene (156-60-5)	1.0	< 1.0	ug/L	
2-Butanone (78-93-3)	10	< 10	ug/L	
Carbon Disulfide (75-15-0)	1.0	< 1.0	ug/L	
Bromochloromethane (74-97-5)	1.0	< 1.0	ug/L	
Chloroform (67-66-3)	1.0	< 1.0	ug/L	
2,2-Dichloropropane (594-20-7)	1.0	< 1.0	ug/L	
1,2-Dichloroethane (107-06-2)	1.0	< 1.0	ug/L	
Vinyl Acetate (108-05-4)	1.0	< 1.0	ug/L	
1,1,1-Trichloroethane (71-55-6)	1.0	< 1.0	ug/L	
1,1-Dichloropropene (563-58-6)	1.0	< 1.0	ug/L	
Carbon Tetrachloride (56-23-5)	1.0	< 1.0	ug/L	
Benzene (71-43-2)	1.0	< 1.0	ug/L	
1,2-Dichloropropane (78-87-5)	1.0	< 1.0	ug/L	
Trichloroethene (79-01-6)	1.0	< 1.0	ug/L	
Bromodichloromethane (75-27-4)	1.0	< 1.0	ug/L	
2-Chloroethyl Vinyl Ether (110-75-8)	10	< 10	ug/L	
cis-1,3-Dichloropropene (10061-01-5)	1.0	< 1.0	ug/L	
trans-1,3-Dichloropropene (10061-02-6)	1.0	< 1.0	ug/L	
1,1,2-Trichloroethane (79-00-5)	1.0	< 1.0	ug/L	
1,3-Dichloropropane (142-28-9)	1.0	< 1.0	ug/L	
Dibromomethane (74-95-3)	1.0	< 1.0	ug/L	
Toluene (108-88-3)	1.0	< 1.0	ug/L	
1,2-Dibromoethane (106-93-4)	1.0	< 1.0	ug/L	
4-Methyl-2-Pentanone (108-10-1)	10	< 10	ug/L	
2-Hexanone (591-78-6)	10	< 10	ug/L	
Dibromochloromethane (124-48-1)	1.0	< 1.0	ug/L	
Tetrachloroethene (127-18-4)	1.0	< 1.0	ug/L	
Chlorobenzene (108-90-7)	1.0	< 1.0	ug/L	
Ethylbenzene (100-41-4)	1.0	< 1.0	ug/L	
1,1,1,2-Tetrachloroethane (630-20-6)	1.0	< 1.0	ug/L	
m&p Xylenes (108-38-3, 106-42-3)	1.0	< 1.0	ug/L	



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GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
 CLIENT : GIANT REFINING CO.-BLOOMFIELD
 PROJECT # : 4TH QTR WELL SAMPLE
 PROJECT NAME : 4TH QTR WELL SAMPLE

PINNACLE I.D. : 012099
 DATE RECEIVED : 12/29/00

SAMPLE ID #	CLIENT ID	MATRIX	DATE SAMPLED	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
012099-01	QTR INJ WELL	AQUEOUS	12/28/00	N/A	01/02/01	1
PARAMETER (CAS#)	DET. LIMIT	RESULT	UNITS			
o-Xylene (95-47-6)	1.0	< 1.0	ug/L			
Styrene (100-42-5)	1.0	< 1.0	ug/L			
Bromoform (75-25-2)	1.0	< 1.0	ug/L			
1,1,2,2-Tetrachloroethane (79-34-5)	1.0	< 1.0	ug/L			
1,2,3-Trichloropropane (96-18-4)	1.0	< 1.0	ug/L			
Isopropyl Benzene (98-82-8)	1.0	< 1.0	ug/L			
Bromobenzene (108-86-1)	1.0	< 1.0	ug/L			
trans-1,4-Dichloro-2-Butene (110-57-6)	1.0	< 1.0	ug/L			
n-Propylbenzene (103-65-1)	1.0	< 1.0	ug/L			
2-Chlorotoluene (95-49-8)	1.0	< 1.0	ug/L			
4-Chlorotoluene (106-43-4)	1.0	< 1.0	ug/L			
1,3,5-Trimethylbenzene (108-67-8)	1.0	< 1.0	ug/L			
tert-Butylbenzene (98-06-6)	1.0	< 1.0	ug/L			
1,2,4-Trimethylbenzene (95-63-6)	1.0	< 1.0	ug/L			
sec-Butylbenzene (135-98-9)	1.0	< 1.0	ug/L			
1,3-Dichlorobenzene (541-73-1)	1.0	< 1.0	ug/L			
1,4-Dichlorobenzene (106-46-7)	1.0	< 1.0	ug/L			
p-Isopropyltoluene (99-87-6)	1.0	< 1.0	ug/L			
1,2-Dichlorobenzene (95-50-1)	1.0	< 1.0	ug/L			
n-Butylbenzene (104-51-8)	1.0	< 1.0	ug/L			
1,2-Dibromomo-3-chloropropane (96-12-8)	1.0	< 1.0	ug/L			
1,2,4-Trichlorobenzene (120-82-1)	1.0	< 1.0	ug/L			
Naphthalene (91-20-3)	1.0	< 1.0	ug/L			
Hexachlorobutadiene (87-68-3)	1.0	< 1.0	ug/L			
1,2,3-Trichlorobenzene (87-61-6)	1.0	< 1.0	ug/L			
1,4-Dioxane (123-91-1)	50	< 50	ug/L			

SURROGATE % RECOVERY

1,2-Dichloroethane-d4	108 (80 - 120)
Toluene-d8	102 (88 - 110)
Bromofluorobenzene	106 (86 - 115)

D20 = Diluted 20X, Analyzed 1/3/00.



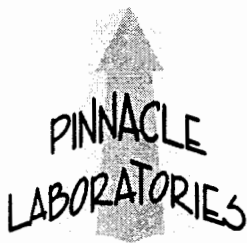
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GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
 CLIENT : GIANT REFINING CO.-BLOOMFIELD PINNACLE I.D. : 012099
 PROJECT # : 4TH QTR WELL SAMPLE
 PROJECT NAME : 4TH QTR WELL SAMPLE

SAMPLE ID #	BATCH	MATRIX	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
REAGENT BLANK	010201	AQUEOUS	N/A	01/02/01	1

PARAMETER (CAS#)	DET. LIMIT	RESULT	UNITS
Dichlorodifluoromethane (75-71-8)	1.0	< 1.0	ug/L
Chloromethane (74-87-9)	1.0	< 1.0	ug/L
Vinyl Chloride (75-01-4)	1.0	< 1.0	ug/L
Bromomethane (74-83-9)	1.0	< 1.0	ug/L
Chloroethane (75-00-3)	1.0	< 1.0	ug/L
Trichlorofluoromethane (75-69-4)	1.0	< 1.0	ug/L
Acetone (67-64-1)	10	< 10	ug/L
Acrolein (107-02-8)	5.0	< 5.0	ug/L
1,1-Dichloroethene (75-35-4)	1.0	< 1.0	ug/L
Iodomethane (74-88-4)	1.0	< 1.0	ug/L
Methylene Chloride (75-09-2)	1.0	< 1.0	ug/L
Acrylonitrile (107-13-1)	5.0	< 5.0	ug/L
cis-1,2-Dichloroethene (107-06-2)	1.0	< 1.0	ug/L
Methyl-t-butyl Ether (628-28-4)	1.0	< 1.0	ug/L
1,1,2-Trichlorotrifluoroethane (76-13-1)	5.0	< 5.0	ug/L
1,1-Dichloroethane (75-34-3)	1.0	< 1.0	ug/L
trans-1,2-Dichloroethene (156-60-5)	1.0	< 1.0	ug/L
2-Butanone (78-93-3)	10	< 10	ug/L
Carbon Disulfide (75-15-0)	1.0	< 1.0	ug/L
Bromochloromethane (74-97-5)	1.0	< 1.0	ug/L
Chloroform (67-66-3)	1.0	< 1.0	ug/L
2,2-Dichloropropane (594-20-7)	1.0	< 1.0	ug/L
1,2-Dichloroethane (107-06-2)	1.0	< 1.0	ug/L
Vinyl Acetate (108-05-4)	1.0	< 1.0	ug/L
1,1,1-Trichloroethane (71-55-6)	1.0	< 1.0	ug/L
1,1-Dichloropropene (563-58-6)	1.0	< 1.0	ug/L
Carbon Tetrachloride (56-23-5)	1.0	< 1.0	ug/L
Benzene (71-43-2)	1.0	< 1.0	ug/L
1,2-Dichloropropane (78-87-5)	1.0	< 1.0	ug/L
Trichloroethene (79-01-6)	1.0	< 1.0	ug/L
Bromodichloromethane (75-27-4)	1.0	< 1.0	ug/L
2-Chloroethyl Vinyl Ether (110-75-8)	10	< 10	ug/L
cis-1,3-Dichloropropene (10061-01-5)	1.0	< 1.0	ug/L
trans-1,3-Dichloropropene (10061-02-6)	1.0	< 1.0	ug/L
1,1,2-Trichloroethane (79-00-5)	1.0	< 1.0	ug/L
1,3-Dichloropropane (142-28-9)	1.0	< 1.0	ug/L
Dibromomethane (74-95-3)	1.0	< 1.0	ug/L
Toluene (108-88-3)	1.0	< 1.0	ug/L
1,2-Dibromoethane (106-93-4)	1.0	< 1.0	ug/L
4-Methyl-2-Pentanone (108-10-1)	10	< 10	ug/L
2-Hexanone (591-78-6)	10	< 10	ug/L
Dibromochloromethane (124-48-1)	1.0	< 1.0	ug/L
Tetrachloroethene (127-18-4)	1.0	< 1.0	ug/L
Chlorobenzene (108-90-7)	1.0	< 1.0	ug/L
Ethylbenzene (100-41-4)	1.0	< 1.0	ug/L
1,1,1,2-Tetrachloroethane (630-20-6)	1.0	< 1.0	ug/L



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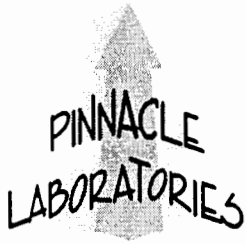
GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
 CLIENT : GIANT REFINING CO.-BLOOMFIELD PINNACLE I.D. : 012099
 PROJECT # : 4TH QTR WELL SAMPLE
 PROJECT NAME : 4TH QTR WELL SAMPLE

SAMPLE ID #	BATCH	MATRIX	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
REAGENT BLANK	010201	AQUEOUS	N/A	01/02/01	1
PARAMETER (CAS#)	DET. LIMIT	RESULT	UNITS		
m&p Xylenes (108-38-3, 106-42-3)	1.0	< 1.0	ug/L		
o-Xylene (95-47-6)	1.0	< 1.0	ug/L		
Styrene (100-42-5)	1.0	< 1.0	ug/L		
Bromoform (75-25-2)	1.0	< 1.0	ug/L		
1,1,2,2-Tetrachloroethane (79-34-5)	1.0	< 1.0	ug/L		
1,2,3-Trichloropropane (96-18-4)	1.0	< 1.0	ug/L		
Isopropyl Benzene (98-82-8)	1.0	< 1.0	ug/L		
Bromobenzene (108-86-1)	1.0	< 1.0	ug/L		
trans-1,4-Dichloro-2-Butene (110-57-6)	1.0	< 1.0	ug/L		
n-Propylbenzene (103-65-1)	1.0	< 1.0	ug/L		
2-Chlorotoluene (95-49-8)	1.0	< 1.0	ug/L		
4-Chlorotoluene (106-43-4)	1.0	< 1.0	ug/L		
1,3,5-Trimethylbenzene (108-67-8)	1.0	< 1.0	ug/L		
tert-Butylbenzene (98-06-6)	1.0	< 1.0	ug/L		
1,2,4-Trimethylbenzene (95-63-6)	1.0	< 1.0	ug/L		
sec-Butylbenzene (135-98-9)	1.0	< 1.0	ug/L		
1,3-Dichlorobenzene (541-73-1)	1.0	< 1.0	ug/L		
1,4-Dichlorobenzene (106-46-7)	1.0	< 1.0	ug/L		
p-Isopropyltoluene (99-87-6)	1.0	< 1.0	ug/L		
1,2-Dichlorobenzene (95-50-1)	1.0	< 1.0	ug/L		
n-Butylbenzene (104-51-8)	1.0	< 1.0	ug/L		
1,2-Dibromo-3-chloropropane (96-12-8)	1.0	< 1.0	ug/L		
1,2,4-Trichlorobenzene (120-82-1)	1.0	< 1.0	ug/L		
Naphthalene (91-20-3)	1.0	< 1.0	ug/L		
Hexachlorobutadiene (87-68-3)	1.0	< 1.0	ug/L		
1,2,3-Trichlorobenzene (87-61-6)	1.0	< 1.0	ug/L		
1,4-Dioxane (123-91-1)	50	< 50	ug/L		

SURROGATE % RECOVERY

1,2-Dichloroethane-d4	104 (80 - 120)
Toluene-d8	101 (88 - 110)
Bromofluorobenzene	104 (86 - 115)



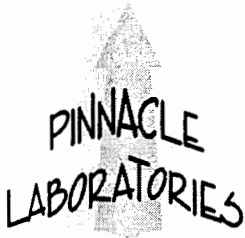
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GC/MS RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
 CLIENT : GIANT REFINING CO.-BLOOMFIELD PINNACLE I.D. : 012099
 PROJECT # : 4TH QTR WELL SAMPLE
 PROJECT NAME : 4TH QTR WELL SAMPLE

SAMPLE ID #	BATCH	MATRIX	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
REAGENT BLANK	010301	AQUEOUS	N/A	01/03/01	1
PARAMETER (CAS#)	DET. LIMIT	RESULT	UNITS		

Dichlorodifluoromethane (75-71-8)	1.0	< 1.0	ug/L
Chloromethane (74-87-9)	1.0	< 1.0	ug/L
Vinyl Chloride (75-01-4)	1.0	< 1.0	ug/L
Bromomethane (74-83-9)	1.0	< 1.0	ug/L
Chloroethane (75-00-3)	1.0	< 1.0	ug/L
Trichlorofluoromethane (75-69-4)	1.0	< 1.0	ug/L
Acetone (67-64-1)	10	< 10	ug/L
Acrolein (107-02-8)	5.0	< 5.0	ug/L
1,1-Dichloroethene (75-35-4)	1.0	< 1.0	ug/L
Iodomethane (74-88-4)	1.0	< 1.0	ug/L
Methylene Chloride (75-09-2)	1.0	< 1.0	ug/L
Acrylonitrile (107-13-1)	5.0	< 5.0	ug/L
cis-1,2-Dichloroethene (107-06-2)	1.0	< 1.0	ug/L
Methyl-t-butyl Ether (628-28-4)	1.0	< 1.0	ug/L
1,1,2-Trichlorotrifluoroethane (76-13-1)	5.0	< 5.0	ug/L
1,1-Dichloroethane (75-34-3)	1.0	< 1.0	ug/L
trans-1,2-Dichloroethene (156-60-5)	1.0	< 1.0	ug/L
2-Butanone (78-93-3)	10	< 10	ug/L
Carbon Disulfide (75-15-0)	1.0	< 1.0	ug/L
Bromochloromethane (74-97-5)	1.0	< 1.0	ug/L
Chloroform (67-66-3)	1.0	< 1.0	ug/L
2,2-Dichloropropane (594-20-7)	1.0	< 1.0	ug/L
1,2-Dichloroethane (107-06-2)	1.0	< 1.0	ug/L
Vinyl Acetate (108-05-4)	1.0	< 1.0	ug/L
1,1,1-Trichloroethane (71-55-6)	1.0	< 1.0	ug/L
1,1-Dichloropropene (563-58-6)	1.0	< 1.0	ug/L
Carbon Tetrachloride (56-23-5)	1.0	< 1.0	ug/L
Benzene (71-43-2)	1.0	< 1.0	ug/L
1,2-Dichloropropane (78-87-5)	1.0	< 1.0	ug/L
Trichloroethene (79-01-6)	1.0	< 1.0	ug/L
Bromodichloromethane (75-27-4)	1.0	< 1.0	ug/L
2-Chloroethyl Vinyl Ether (110-75-8)	10	< 10	ug/L
cis-1,3-Dichloropropene (10061-01-5)	1.0	< 1.0	ug/L
trans-1,3-Dichloropropene (10061-02-6)	1.0	< 1.0	ug/L
1,1,2-Trichloroethane (79-00-5)	1.0	< 1.0	ug/L
1,3-Dichloropropane (142-28-9)	1.0	< 1.0	ug/L
Dibromomethane (74-95-3)	1.0	< 1.0	ug/L
Toluene (108-88-3)	1.0	< 1.0	ug/L
1,2-Dibromoethane (106-93-4)	1.0	< 1.0	ug/L
4-Methyl-2-Pentanone (108-10-1)	10	< 10	ug/L
2-Hexanone (591-78-6)	10	< 10	ug/L
Dibromochloromethane (124-48-1)	1.0	< 1.0	ug/L
Tetrachloroethene (127-18-4)	1.0	< 1.0	ug/L
Chlorobenzene (108-90-7)	1.0	< 1.0	ug/L
Ethylbenzene (100-41-4)	1.0	< 1.0	ug/L
1,1,1,2-Tetrachloroethane (630-20-6)	1.0	< 1.0	ug/L



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GC/MS RESULTS

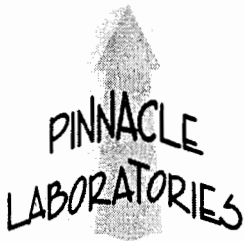
TEST : VOLATILE ORGANICS EPA METHOD 8260
 CLIENT : GIANT REFINING CO.-BLOOMFIELD PINNACLE I.D. : 012099
 PROJECT # : 4TH QTR WELL SAMPLE
 PROJECT NAME : 4TH QTR WELL SAMPLE

SAMPLE ID #	BATCH	MATRIX	DATE EXTRACTED	DATE ANALYZED	DIL. FACTOR
REAGENT BLANK	010301	AQUEOUS	N/A	01/03/01	1

PARAMETER (CAS#)	DET. LIMIT	RESULT	UNITS
m&p Xylenes (108-38-3, 106-42-3)	1.0	< 1.0	ug/L
o-Xylene (95-47-6)	1.0	< 1.0	ug/L
Styrene (100-42-5)	1.0	< 1.0	ug/L
Bromoform (75-25-2)	1.0	< 1.0	ug/L
1,1,2,2-Tetrachloroethane (79-34-5)	1.0	< 1.0	ug/L
1,2,3-Trichloropropane (96-18-4)	1.0	< 1.0	ug/L
Isopropyl Benzene (98-82-8)	1.0	< 1.0	ug/L
Bromobenzene (108-86-1)	1.0	< 1.0	ug/L
trans-1,4-Dichloro-2-Butene (110-57-6)	1.0	< 1.0	ug/L
n-Propylbenzene (103-65-1)	1.0	< 1.0	ug/L
2-Chlorotoluene (95-49-8)	1.0	< 1.0	ug/L
4-Chlorotoluene (106-43-4)	1.0	< 1.0	ug/L
1,3,5-Trimethylbenzene (108-67-8)	1.0	< 1.0	ug/L
tert-Butylbenzene (98-06-6)	1.0	< 1.0	ug/L
1,2,4-Trimethylbenzene (95-63-6)	1.0	< 1.0	ug/L
sec-Butylbenzene (135-98-9)	1.0	< 1.0	ug/L
1,3-Dichlorobenzene (541-73-1)	1.0	< 1.0	ug/L
1,4-Dichlorobenzene (106-46-7)	1.0	< 1.0	ug/L
p-Isopropyltoluene (99-87-6)	1.0	< 1.0	ug/L
1,2-Dichlorobenzene (95-50-1)	1.0	< 1.0	ug/L
n-Butylbenzene (104-51-8)	1.0	< 1.0	ug/L
1,2-Dibromomo-3-chloropropane (96-12-8)	1.0	< 1.0	ug/L
1,2,4-Trichlorobenzene (120-82-1)	1.0	< 1.0	ug/L
Naphthalene (91-20-3)	1.0	< 1.0	ug/L
Hexachlorobutadiene (87-68-3)	1.0	< 1.0	ug/L
1,2,3-Trichlorobenzene (87-61-6)	1.0	< 1.0	ug/L
1,4-Dioxane (123-91-1)	50	< 50	ug/L

SURROGATE % RECOVERY

1,2-Dichloroethane-d4	97 (80 - 120)
Toluene-d8	100 (88 - 110)
Bromofluorobenzene	103 (86 - 115)



2709-D Pan American Freeway NE
Albuquerque, New Mexico 87107
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MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

TEST : VOLATILE ORGANICS EPA METHOD 8260
SPIKED SAMPLE : 012081-04
CLIENT : GIANT REFINING CO.-BLOOMFIELD
PROJECT # : 4TH QTR WELL SAMPLE
PROJECT NAME : 4TH QTR WELL SAMPLE

PINNACLE I.D. : 012099
DATE ANALYZED : 01/02/01
UNITS : ug/L (PPB)

COMPOUND	SAMPLE CONC.	SPIKE ADDED	MS RESULT	MSD RESULT	MS %REC	MSD %REC	RPD	QC LIMITS RPD	QC LIMITS %RECOVERY
1,1-DICHLOROETHENE	<1.0	50.0	48.2	48.7	96	97	1	14	61-145
BENZENE	<1.0	50.0	52.7	52.5	105	105	0	11	76-127
TRICHLOROETHENE	<1.0	50.0	53.5	54.0	107	108	1	14	71-120
TOLUENE	<1.0	50.0	52.0	51.5	104	103	1	13	76-125
CHLOROBENZENE	<1.0	50.0	50.4	50.0	101	100	1	13	75-130

CASE NARRATIVE

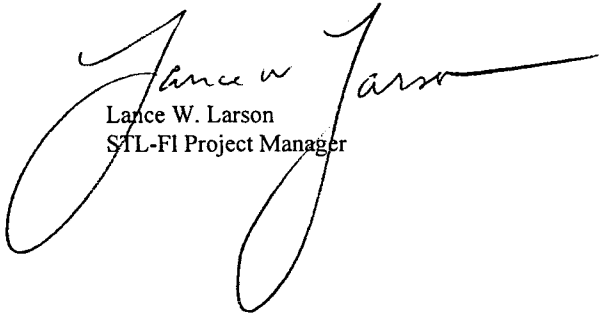
Date: January 10, 2001
STL Order Number: C012705
Project Name: QTR. WELL SAMPLE
Project Location: N/S
Methods: 8270

STL Sample ID
012705-01

Client Sample ID
012099-01

Target compounds not listed in the 8270 results were searched for by the NBS Library Search Program and the following five requested compounds were not found:

Quinoline
Benzenethiole
Indene
4-Methyl Phenol
Methyl Chrysene


Lance W. Larson
STL-FI Project Manager

STL Pensacola

LOG NO: C0-12705
Received: 30 DEC 00
Reported: 10 JAN 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 012099, GRCB-4th QTR WELL
Sampled By: Client
Code: 163610110

REPORT OF RESULTS

Page 1

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
12705-1	012099-01	12-28-00/11:15
PARAMETER		12705-1
Ignitability-flash point (1010), Degrees C		>100
Dilution Factor		1
Prep Date		01.10.01
Analysis Date		01.10.01
Batch ID		FPX001
Prep Method		SW1010
Analyst		WG
Chloride (SM4500E), mg/l		1800
Dilution Factor		20
Prep Date		01.03.01
Analysis Date		01.03.01
Batch ID		CKW01A
Prep Method		4500E
Analyst		CR
Sulfate as SO4 (375.4), mg/l		1100
Dilution Factor		50
Prep Date		01.09.01
Analysis Date		01.09.01
Batch ID		SEW003
Prep Method		375.4
Analyst		BE

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LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
12705-1	012099-01	12-28-00/11:15
PARAMETER		12705-1
Total Dissolved Solids (160.1), mg/l		5200
Dilution Factor		1
Prep Date		01.02.01
Analysis Date		01.04.01
Batch ID		TDW001
Prep Method		160.1
Analyst		ST
pH (150.1), units		7.3R4
Dilution Factor		1
Prep Date		12.30.00
Analysis Date		12.30.00
Batch ID		PHW269
Prep Method		150.1
Analyst		WG
Specific Conductance (120.1), umhos/cm		7700
Dilution Factor		1
Prep Date		01.03.01
Analysis Date		01.03.01
Batch ID		CDW001
Prep Method		120.1
Analyst		ST

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Albuquerque, NM 87107Project: 012099, GRCB-4th QTR WELL
Sampled By: Client
Code: 163610110

REPORT OF RESULTS

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LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
12705-1	012099-01	12-28-00/11:15
PARAMETER		12705-1
Alkalinity Series (2320B/SM4500)		
Alkalinity (to pH 4.5) as CaCO ₃ , mg/l		310
Bicarbonate (2320/4500), mg/l		310
Carbon Dioxide, mg/l		78
pH, mg/l		6.9
Hydroxide, mg/l		<1.0
Carbonate (2320/4500), mg/l		<1.0
Dilution Factor		1
Prep Date		01.09.01
Analysis Date		01.09.01
Batch ID		AEW003
Prep Method		4500
Analyst		BE
Total Releasable Cyanide (SW7.3.3.2), mg HCN/kg		
		<25
Dilution Factor		1
Prep Date		01.09.01
Analysis Date		01.09.01
Batch ID		RSX001
Prep Method		7332
Analyst		BH
Total Releasable Sulfide (SW7.3.4.2), mg H ₂ S/kg		
		<150
Dilution Factor		1
Prep Date		01.09.01
Analysis Date		01.09.01
Batch ID		RSX001
Prep Method		7342
Analyst		BH

STL Pensacola

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Project: 012099, GRCB-4th QTR WELL
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
12705-1	012099-01	12-28-00/11:15
PARAMETER		12705-1
RCRA Metals		
Arsenic, mg/l		0.028
Barium, mg/l		0.137
Calcium, mg/l		80
Cadmium, mg/l		<0.005
Chromium, mg/l		0.006
Lead, mg/l		<0.005
Magnesium, mg/l		21
Potassium, mg/l		35
Selenium, mg/l		0.018
Silver, mg/l		<0.005
Sodium, mg/l		1700
Dilution Factor		1,100
Prep Date		01.03.01
Analysis Date		01.05.01
Batch ID		PW455
Prep Method		3010A
Analyst		CH
Mercury (7470), mg/l		0.0010
Dilution Factor		1
Prep Date		01.04.01
Analysis Date		01.04.01
Batch ID		HGW167
Prep Method		7470A
Analyst		JDE

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2709-D Pan American Freeway Northeast
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Project: 012099, GRCB-4th QTR WELL
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REPORT OF RESULTS

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LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
12705-1	012099-01	12-28-00/11:15
PARAMETER	12705-1	
Semivolatile Organic Compounds (8270)		
	Benzoic acid, ug/l	<50
	4-Chloro-3-methylphenol (p-Chloro-m-cresol), ug/l	<10
	2-Chlorophenol, ug/l	<10
	2,4-Dichlorophenol, ug/l	<10
	2,6-Dichlorophenol, ug/l	<10
	2,4-Dimethylphenol, ug/l	<10
	4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol), ug/l	<50
	2,4-Dinitrophenol, ug/l	<50
	2-Methylphenol (o-Cresol), ug/l	<10
	3-Methylphenol/4-Methylphenol (m&p-Cresol), ug/l	<10
	2-Nitrophenol (o-Nitrophenol), ug/l	<10
	4-Nitrophenol (p-Nitrophenol), ug/l	<50
	Pentachlorophenol, ug/l	<50
	Phenol, ug/l	<10
	2,3,4,6-Tetrachlorophenol, ug/l	<10
	2,4,5-Trichlorophenol, ug/l	<50
	2,4,6-Trichlorophenol, ug/l	<10
	Acenaphthene, ug/l	<10
	Acenaphthylene, ug/l	<10
	Acetophenone, ug/l	<10
	4-Aminobiphenyl, ug/l	<10
	Aniline, ug/l	<10
	Anthracene, ug/l	<10
	Benzidine, ug/l	<50
	Benzo(a)anthracene, ug/l	<10

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Albuquerque, NM 87107

Project: 012099, GRCB-4th QTR WELL

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
12705-1	012099-01	12-28-00/11:15
PARAMETER		12705-1
Benzo(b)fluoranthene, ug/l		<10
Benzo(k)fluoranthene, ug/l		<10
Benzo(g,h,i)perylene, ug/l		<10
Benzo(a)pyrene, ug/l		<10
Benzyl alcohol, ug/l		<10
4-Bromophenylphenyl ether, ug/l		<10
Butylbenzylphthalate, ug/l		<10
Carbazole, ug/l		<10
4-Chloroaniline (p-Chloroaniline), ug/l		<10
bis(2-Chloroethoxy)methane, ug/l		<10
bis(2-Chloroethyl)ether, ug/l		<10
bis(2-Chloroisopropyl) ether, ug/l		<10
1-Chloronaphthalene, ug/l		<10
2-Chloronaphthalene, ug/l		<10
4-Chlorophenylphenyl ether, ug/l		<10
Chrysene, ug/l		<10
Dibenz(a,j)acridine, ug/l		<10
Dibenzo(a,h)anthracene, ug/l		<10
Dibenzofuran, ug/l		<10
Di-n-butylphthalate, ug/l		<10
1,2-Dichlorobenzene (o-Dichlorobenzene), ug/l		<10
1,3-Dichlorobenzene (m-Dichlorobenzene), ug/l		<10
1,4-Dichlorobenzene (p-Dichlorobenzene), ug/l		<10
3,3'-Dichlorobenzidine, ug/l		<50
Diethylene Glycol Monobutyl Ether, ug/l		<10
Diethylphthalate, ug/l		<10

STL Pensacola

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LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
12705-1	012099-01	12-28-00/11:15
PARAMETER		12705-1
p-(Dimethylamino)azobenzene, ug/l		<10
7,12-Dimethylbenz(a)anthracene, ug/l		<10
alpha,alpha-Dimethylphenethylamine, ug/l		<10
Dimethylphthalate, ug/l		<10
2,4-Dinitrotoluene, ug/l		<10
2,6-Dinitrotoluene, ug/l		<10
Di-n-octylphthalate, ug/l		<10
1,2-Diphenylhydrazine, ug/l		<10
bis(2-Ethylhexyl)phthalate, ug/l		<10
Ethyl methanesulfonate, ug/l		<10
Fluoranthene, ug/l		<10
Fluorene, ug/l		<10
Hexachlorobenzene, ug/l		<10
Hexachlorobutadiene, ug/l		<10
Hexachlorocyclopentadiene, ug/l		<10
Hexachloroethane, ug/l		<10
Indeno(1,2,3-cd)pyrene, ug/l		<10
Isophorone, ug/l		<10
3-Methylcholanthrene, ug/l		<10
Methyl methanesulfonate, ug/l		<10
1-Methylnaphthalene, ug/l		<10
2-Methylnaphthalene, ug/l		<10
Naphthalene, ug/l		<10
1-Naphthylamine, ug/l		<10
2-Naphthylamine, ug/l		<10
2-Nitroaniline (o-Nitroaniline), ug/l		<10

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LOG NO	SAMPLE DESCRIPTION , LIQUID SAMPLES	DATE/ TIME SAMPLED
12705-1	012099-01	12-28-00/11:15
PARAMETER		12705-1
3-Nitroaniline (m-Nitroaniline), ug/l		<10
4-Nitroaniline (p-Nitroaniline), ug/l		<10
Nitrobenzene, ug/l		<10
N-Nitrosodi-n-butylamine, ug/l		<10
N-Nitrosodimethylamine, ug/l		<10
N-Nitrosodiphenylamine, ug/l		<10
n-Nitrosodi-n-propylamine, ug/l		<10
N-Nitrosopiperidine, ug/l		<10
Pentachlorobenzene, ug/l		<10
Pentachloronitrobenzene, ug/l		<10
Phenacetin, ug/l		<10
Phenanthrene, ug/l		<10
2-Picoline, ug/l		<10
Pronamide, ug/l		<10
Pyrene, ug/l		<10
Pyridine, ug/l		<10
1,2,4,5-Tetrachlorobenzene, ug/l		<10
1,2,4-Trichlorobenzene, ug/l		<10
Surrogate - 2-Fluorobiphenyl		64 %
Surrogate - 2-Fluorophenol		39 %
Surrogate - Nitrobenzene - d5		60 %
Surrogate - Phenol-d5		59 %
Surrogate - Terphenyl-d14		76 %
Surrogate - 2,4,6-Tribromophenol		82 %
Dilution Factor		1
Prep Date		01.02.01
Analysis Date		01.05.01
Batch ID		ALW126
Prep Method		3520C
Analyst		RW

SEVERN**TRENT****SERVICES****STL Pensacola**LOG NO: C0-12705
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Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107Project: 012099, GRCB-4th QTR WELL
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REPORT OF RESULTS

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LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	
12705-2	Method Blank		
12705-3	Lab Control Standard % Recovery		
PARAMETER		12705-2	12705-3
Ignitability-flash point (1010), Degrees C		N/A	100 %
Dilution Factor		---	1
Prep Date		---	01.10.01
Analysis Date		---	01.10.01
Batch ID		---	FPX001
Prep Method		---	SW1010
Analyst		---	WG
Chloride (SM4500E), mg/l		<2.0	102 %
Dilution Factor		1	1
Prep Date		01.03.01	01.03.01
Analysis Date		01.03.01	01.03.01
Batch ID		CKW01A	CKW01A
Prep Method		4500E	4500E
Analyst		CR	CR
Sulfate as SO4 (375.4), mg/l		<5.0	91 %
Dilution Factor		1	1
Prep Date		01.09.01	01.09.01
Analysis Date		01.09.01	01.09.01
Batch ID		SEW003	SEW003
Prep Method		375.4	375.4
Analyst		BE	BE

STL Pensacola

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	
12705-2	Method Blank		
12705-3	Lab Control Standard % Recovery		
PARAMETER		12705-2	12705-3

Total Dissolved Solids (160.1), mg/l		<5.0	96 %
Dilution Factor		1	1
Prep Date		01.02.01	01.02.01
Analysis Date		01.04.01	01.04.01
Batch ID		TDW001	TDW001
Prep Method		160.1	160.1
Analyst		ST	ST

pH (150.1), units		N/A	99 %
Dilution Factor		---	1
Prep Date		---	12.30.00
Analysis Date		---	12.30.00
Batch ID		---	PHW269
Prep Method		---	150.1
Analyst		---	WG

Alkalinity Series (2320B/SM4500)			
Alkalinity (to pH 4.5) as CaCO ₃ , mg/l		<1.0	100 %
Bicarbonate (2320/4500), mg/l		<1.0	---
Carbon Dioxide, mg/l		<1.0	---
Hydroxide, mg/l		<1.0	---
Carbonate (2320/4500), mg/l		<1.0	---
Dilution Factor		1	1
Prep Date		01.09.01	01.09.01
Analysis Date		01.09.01	01.09.01
Batch ID		AEW003	AEW003
Prep Method		4500	4500
Analyst		BE	BE

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REPORT OF RESULTS

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LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	
12705-2	Method Blank		
12705-3	Lab Control Standard % Recovery		
PARAMETER		12705-2	12705-3
Total Releasable Cyanide (SW7.3.3.2), mg HCN/kg		<25	110 %
Dilution Factor		1	1
Prep Date		01.09.01	01.09.01
Analysis Date		01.09.01	01.09.01
Batch ID		RSX001	RSX001
Prep Method		7332	7332
Analyst		BH	BH
Total Releasable Sulfide (SW7.3.4.2), mg H2S/kg		<150	92 %
Dilution Factor		1	1
Prep Date		01.09.01	01.09.01
Analysis Date		01.09.01	01.09.01
Batch ID		RSX001	RSX001
Prep Method		7342	7342
Analyst		BH	BH

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REPORT OF RESULTS

DATE/

LOG NO SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES TIME SAMPLED

12705-2 Method Blank
 12705-3 Lab Control Standard % Recovery

PARAMETER	12705-2	12705-3
RCRA Metals		
Arsenic, mg/l	<0.005	98 %
Barium, mg/l	<0.010	100 %
Calcium, mg/l	<0.50	103 %
Cadmium, mg/l	<0.005	102 %
Chromium, mg/l	<0.005	103 %
Lead, mg/l	<0.005	101 %
Magnesium, mg/l	<0.50	103 %
Potassium, mg/l	<1.00	96 %
Selenium, mg/l	<0.010	93 %
Silver, mg/l	<0.005	98 %
Sodium, mg/l	<1.0	96 %
Dilution Factor	1	1
Prep Date	01.03.01	01.03.01
Analysis Date	01.05.01	01.05.01
Batch ID	PW455	PW455
Prep Method	3010A	3010A
Analyst	CH	CH
Mercury (7470), mg/l	<0.00020	102 %
Dilution Factor	1	1
Prep Date	01.04.01	01.04.01
Analysis Date	01.04.01	01.04.01
Batch ID	HGW167	HGW167
Prep Method	7470A	7470A
Analyst	JDE	JDE

SEVERN

TRENT

SERVICES

STL Pensacola

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Project: 012099, GRCB-4th QTR WELL

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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
12705-2	Method Blank	
12705-3	Lab Control Standard % Recovery	
PARAMETER	12705-2	12705-3
Semivolatile Organic Compounds (8270)		
Benzoic acid, ug/l	<50	---
4-Chloro-3-methylphenol (p-Chloro-m-cresol), ug/l	<10	80 %
2-Chlorophenol, ug/l	<10	75 %
2,4-Dichlorophenol, ug/l	<10	---
2,6-Dichlorophenol, ug/l	<10	---
2,4-Dimethylphenol, ug/l	<10	---
4,6-Dinitro-2-methylphenol (4,6-Dinitro-o-cresol), ug/l	<50	---
2,4-Dinitrophenol, ug/l	<50	---
2-Methylphenol (o-Cresol), ug/l	<10	---
3-Methylphenol/4-Methylphenol (m&p-Cresol), ug/l	<10	---
2-Nitrophenol (o-Nitrophenol), ug/l	<10	'
4-Nitrophenol (p-Nitrophenol), ug/l	<50	105 %
Pentachlorophenol, ug/l	<50	81 %
Phenol, ug/l	<10	77 %
2,3,4,6-Tetrachlorophenol, ug/l	<10	---
2,4,5-Trichlorophenol, ug/l	<50	---
2,4,6-Trichlorophenol, ug/l	<10	---
Acenaphthene, ug/l	<10	84 %
Acenaphthylene, ug/l	<10	---
Acetophenone, ug/l	<10	---
4-Aminobiphenyl, ug/l	<10	---
Aniline, ug/l	<10	---
Anthracene, ug/l	<10	---
Benzidine, ug/l	<50	---

STL Pensacola

LOG NO: C0-12705
Received: 30 DEC 00
Reported: 10 JAN 01

Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 012099, GRCB-4th QTR WELL
Sampled By: Client
Code: 163610110

REPORT OF RESULTS

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LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	
12705-2	Method Blank		
12705-3	Lab Control Standard % Recovery		
PARAMETER		12705-2	12705-3
Benzo(a)anthracene, ug/l		<10	---
Benzo(b)fluoranthene, ug/l		<10	---
Benzo(k)fluoranthene, ug/l		<10	---
Benzo(g,h,i)perylene, ug/l		<10	---
Benzo(a)pyrene, ug/l		<10	---
Benzyl alcohol, ug/l		<10	---
4-Bromophenylphenyl ether, ug/l		<10	---
Butylbenzylphthalate, ug/l		<10	---
Carbazole, ug/l		<10	---
4-Chloroaniline (p-Chloroaniline), ug/l		<10	---
bis(2-Chloroethoxy)methane, ug/l		<10	---
bis(2-Chloroethyl)ether, ug/l		<10	---
bis(2-Chloroisopropyl) ether, ug/l		<10	---
1-Chloronaphthalene, ug/l		<10	---
2-Chloronaphthalene, ug/l		<10	---
4-Chlorophenylphenyl ether, ug/l		<10	---
Chrysene, ug/l		<10	---
Dibenz(a,j)acridine, ug/l		<10	---
Dibenzo(a,h)anthracene, ug/l		<10	---
Dibenzofuran, ug/l		<10	---
Di-n-butylphthalate, ug/l		<10	---
1,2-Dichlorobenzene (o-Dichlorobenzene), ug/l		<10	---
1,3-Dichlorobenzene (m-Dichlorobenzene), ug/l		<10	---
1,4-Dichlorobenzene (p-Dichlorobenzene), ug/l		<10	72 %
3,3'-Dichlorobenzidine, ug/l		<50	---

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Project: 012099, GRCB-4th QTR WELL
Sampled By: Client
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	
12705-2	Method Blank		
12705-3	Lab Control Standard % Recovery		
PARAMETER		12705-2	12705-3
Diethylene Glycol Monobutyl Ether, ug/l		<10	---
Diethylphthalate, ug/l		<10	---
p-(Dimethylamino)azobenzene, ug/l		<10	---
7,12-Dimethylbenz(a)anthracene, ug/l		<10	---
alpha,alpha-Dimethylphenethylamine, ug/l		<10	---
Dimethylphthalate, ug/l		<10	---
2,4-Dinitrotoluene, ug/l		<10	90 %
2,6-Dinitrotoluene, ug/l		<10	---
Di-n-octylphthalate, ug/l		<10	---
1,2-Diphenylhydrazine, ug/l		<10	---
bis(2-Ethylhexyl)phthalate, ug/l		<10	---
Ethyl methanesulfonate, ug/l		<10	---
Fluoranthene, ug/l		<10	---
Fluorene, ug/l		<10	---
Hexachlorobenzene, ug/l		<10	---
Hexachlorobutadiene, ug/l		<10	---
Hexachlorocyclopentadiene, ug/l		<10	---
Hexachloroethane, ug/l		<10	---
Indeno(1,2,3-cd)pyrene, ug/l		<10	---
Isophorone, ug/l		<10	---
3-Methylcholanthrene, ug/l		<10	---
Methyl methanesulfonate, ug/l		<10	---
1-Methylnaphthalene, ug/l		<10	---
2-Methylnaphthalene, ug/l		<10	---
Naphthalene, ug/l		<10	---

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Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 012099, GRCB-4th QTR WELL
Sampled By: Client
Code: 163610110
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	
12705-2	Method Blank		
12705-3	Lab Control Standard % Recovery		
PARAMETER		12705-2	12705-3
1-Naphthylamine, ug/l		<10	---
2-Naphthylamine, ug/l		<10	---
2-Nitroaniline (o-Nitroaniline), ug/l		<10	---
3-Nitroaniline (m-Nitroaniline), ug/l		<10	---
4-Nitroaniline (p-Nitroaniline), ug/l		<10	---
Nitrobenzene, ug/l		<10	---
N-Nitrosodi-n-butylamine, ug/l		<10	---
N-Nitrosodimethylamine, ug/l		<10	---
N-Nitrosodiphenylamine, ug/l		<10	---
n-Nitrosodi-n-propylamine, ug/l		<10	80 %
N-Nitrosopiperidine, ug/l		<10	---
Pentachlorobenzene, ug/l		<10	---
Pentachloronitrobenzene, ug/l		<10	---
Phenacetin, ug/l		<10	---
Phenanthrene, ug/l		<10	---
2-Picoline, ug/l		<10	---
Pronamide, ug/l		<10	---
Pyrene, ug/l		<10	87 %
Pyridine, ug/l		<10	---
1,2,4,5-Tetrachlorobenzene, ug/l		<10	---
1,2,4-Trichlorobenzene, ug/l		<10	77 %
Surrogate - 2-Fluorobiphenyl		72 %	76 %
Surrogate - 2-Fluorophenol		23 %	52 %
Surrogate - Nitrobenzene - d5		64 %	69 %
Surrogate - Phenol-d5		46 %	70 %

**SEVERN
TRENT
SERVICES**

STL Pensacola

LOG NO: C0-12705
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 Pinnacle Laboratories
 2709-D Pan American Freeway Northeast
 Albuquerque, NM 87107

Project: 012099, GRCB-4th QTR WELL
 Sampled By: Client
 Code: 163610110

REPORT OF RESULTS

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LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
12705-2	Method Blank	
12705-3	Lab Control Standard % Recovery	
PARAMETER	12705-2	12705-3
Surrogate - Terphenyl-d14	101 %	87 %
Surrogate - 2,4,6-Tribromophenol	65 %	85 %
Dilution Factor	1	1
Prep Date	01.02.01	01.02.01
Analysis Date	01.05.01	01.05.01
Batch ID	ALW126	ALW126
Prep Method	3520C	3520C
Analyst	RW	RW

**SEVERN
TRENT
SERVICES**

STL Pensacola

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Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 012099, GRCB-4th QTR WELL
Sampled By: Client
Code: 163610110

REPORT OF RESULTS

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LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED
12705-4	Matrix Spike % Recovery	
12705-5	Matrix Spike Duplicate % Recovery	
PARAMETER	12705-4	12705-5
Chloride (SM4500E), mg/l	107 %	109 %
Dilution Factor	1	1
Prep Date	01.03.01	01.03.01
Analysis Date	01.03.01	01.03.01
Batch ID	CKW01A	CKW01A
Prep Method	4500E	4500E
Analyst	CR	CR
Sulfate as SO4 (375.4), mg/l	78 %	69 %
Dilution Factor	1	1
Prep Date	01.09.01	01.09.01
Analysis Date	01.09.01	01.09.01
Batch ID	SEW003	SEW003
Prep Method	375.4	375.4
Analyst	BE	BE
Alkalinity Series (2320B/SM4500)		
Alkalinity (to pH 4.5) as CaCO3, mg/l	120 %	132 %
Dilution Factor	1	1
Prep Date	01.09.01	01.09.01
Analysis Date	01.09.01	01.09.01
Batch ID	AEW003	AEW003
Prep Method	4500	4500
Analyst	BE	BE

**SEVERN
TRENT
SERVICES**

STL Pensacola

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Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 012099, GRCB-4th QTR WELL
Sampled By: Client
Code: 163610110

REPORT OF RESULTS

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LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	
PARAMETER		12705-4	12705-5
12705-4	Matrix Spike % Recovery		
12705-5	Matrix Spike Duplicate % Recovery		
RCRA Metals			
Arsenic, mg/l		102 %	100 %
Barium, mg/l		102 %	100 %
Cadmium, mg/l		102 %	100 %
Chromium, mg/l		106 %	105 %
Lead, mg/l		102 %	101 %
Magnesium, mg/l		101 %	98 %
Potassium, mg/l		106 %	104 %
Selenium, mg/l		97 %	95 %
Silver, mg/l		101 %	100 %
Sodium, mg/l		101 %	101 %
Dilution Factor		1	1
Prep Date		01.03.01	01.03.01
Analysis Date		01.05.01	01.05.01
Batch ID		PW455	PW455
Prep Method		3010A	3010A
Analyst		CH	CH
Mercury (7470), mg/l		100 %	100 %
Dilution Factor		1	1
Prep Date		01.04.01	01.04.01
Analysis Date		01.04.01	01.04.01
Batch ID		HGW167	HGW167
Prep Method		7470A	7470A
Analyst		JDE	JDE

STL Pensacola

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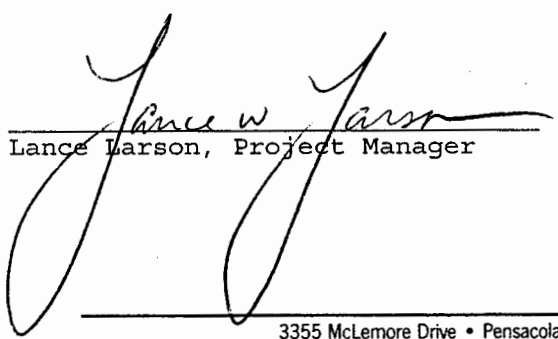
Ms. Jacinta Tenorio
Pinnacle Laboratories
2709-D Pan American Freeway Northeast
Albuquerque, NM 87107

Project: 012099, GRCB-4th QTR WELL
Sampled By: Client
Code: 163610110
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REPORT OF RESULTS

LOG NO	SAMPLE DESCRIPTION , QC REPORT FOR LIQUID SAMPLES	DATE/ TIME SAMPLED	
12705-4	Matrix Spike % Recovery		
12705-5	Matrix Spike Duplicate % Recovery		
PARAMETER		12705-4	12705-5
Semivolatle Organic Compounds (8270)			
4-Chloro-3-methylphenol (p-Chloro-m-cresol), ug/l		63 %	80 %
2-Chlorophenol, ug/l		26 % M2	51 % M2
4-Nitrophenol (p-Nitrophenol), ug/l		101 %	129 %
Pentachlorophenol, ug/l		88 %	109 %
Phenol, ug/l		36 % M2	57 % M2
Acenaphthene, ug/l		78 %	87 %
1,4-Dichlorobenzene (p-Dichlorobenzene), ug/l		57 %	62 %
2,4-Dinitrotoluene, ug/l		94 %	107 %
n-Nitrosodi-n-propylamine, ug/l		75 %	77 %
Pyrene, ug/l		94 %	107 %
1,2,4-Trichlorobenzene, ug/l		61 %	70 %
Surrogate - 2-Fluorobiphenyl		71 %	71 %
Surrogate - 2-Fluorophenol		11 %	30 %
Surrogate - Nitrobenzene - d5		64 %	61 %
Surrogate - Phenol-d5		31 %	50 %
Surrogate - Terphenyl-d14		96 %	106 %
Surrogate - 2,4,6-Tribromophenol		71 %	87 %
Dilution Factor		1	1
Prep Date		01.02.01	01.02.01
Analysis Date		01.05.01	01.05.01
Batch ID		ALW126	ALW126
Prep Method		3520C	3520C
Analyst		RW	RW

These test results meet all the requirements of NELAC. All questions regarding this test report should be directed to the STL Project Manager who signed this test report.


Lance Larson, Project Manager

STL Pensacola PROJECT SAMPLE INSPECTION FORM



Lab Order #: 012705 Date Received: 12-30-00

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. Was there a Chain of Custody? <input checked="" type="radio"/> Yes No⁺</p> <p>2. Was Chain of Custody properly filled out and relinquished? <input checked="" type="radio"/> Yes No⁺</p> <p>3. Were samples received cold? (Criteria: 2° - 6°C: STL-SOP) <input checked="" type="radio"/> Yes No⁺ N/A</p> <p>4. Were all samples properly labeled and identified? <input checked="" type="radio"/> Yes No⁺</p> <p>5. Did samples require splitting or compositing*? Yes⁺ <input checked="" type="radio"/> No</p> <p>Req By: PM Client Other*</p> <p>6. Were samples received in proper containers for analysis requested? <input checked="" type="radio"/> Yes No⁺</p> <p>7. Were all sample containers received intact? <input checked="" type="radio"/> Yes No⁺</p> | <p>8. Were samples checked for preservative? (Check pH of all H₂O requiring preservative (STL-PN SOP 917) except VOA vials that require zero headspace)* <input checked="" type="radio"/> Yes No⁺ N/A</p> <p>9. Is there sufficient volume for analysis requested? <input checked="" type="radio"/> Yes No⁺ N/A (Can)</p> <p>10. Were samples received within Holding Time? (REFER TO STL-SOP 1040) <input checked="" type="radio"/> Yes No⁺</p> <p>11. Is Headspace visible > ¼" in diameter in VOA vials?* If any headspace is evident, comment in out-of-control section. Yes⁺ No <input checked="" type="radio"/> N/A</p> <p>12. If sent, were matrix spike bottles returned? Yes No⁺ <input checked="" type="radio"/> N/A</p> <p>13. Was Project Manager notified of problems? (initials: _____) Yes No⁺ <input checked="" type="radio"/> N/A</p> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Airbill Number(s): 128781684444041745

Shipped By: UPS

Cooler Number(s): CLIENT

Shipping Charges: N/A

Cooler Weight(s): 27 lbs

Cooler Temp(s) (°C): 2°
CCK10

(LIST THERMOMETER NUMBER(S) FOR VERIFICATION)

Out of Control Events and Inspection Comments:

(USE BACK OF PSIF FOR ADDITIONAL NOTES AND COMMENTS)

Inspected By: JA Date: 12-30-00 Logged By: AL Date: 12-30-00

- * Note all Out-of-Control and/or questionable events on Comment Section of this form. For holding times, the analytical department will flag immediate hold time samples (pH, Dissolved O₂, Residual CL) as out of hold time, therefore, these samples will not be documented on this PSIF.
- * If Other, note who requested the splitting or compositing of samples on the Comment Section of this form. All volatile samples requested to be split or composited must be done in the Volatile Lab. Document: "Volatile sample values may be compromised due to sample splitting (compositing)"
- + All preservatives for the State of North Carolina, the State of New York, and other requested samples are to be recorded on the sheet provided to record pH results (STL-SOP 938, section 2.2.9).
- * According to EPA, ¼" of headspace is allowed in 40 ml vials requiring volatile analysis, however, STL makes it policy to record any headspace as out-of-control (STL-SOP 938, section 2.2.12).



Network Project Manager: Jacinta A. Tenorio

ANALYSIS REQUEST

Pinnacle Laboratories, Inc.
2709-D Pan American Freeway, NE
Albuquerque, New Mexico 87107
(505) 344-3777 Fax (505) 344-4413

Please see attached list for 8270 Skinner List.

C012705

Table with columns: SAMPLE ID, DATE, TIME, MATRIX, LAB ID, Metals (8) RCRA, RCRA TCLP METALS, Metals-13 PP List, Metals-TAL (23 METALS), Ignitability, TOX, TOC, Gen Chemistry: Cl, SO4, TDS, PH, Conductivity, Alk + Bicarb/Carb, Oil and Grease, Volatile Organics GC/MS (8260), BOD, COD, PESTICIDES/PCB (608/8082), Herbicides (615/8151), PNA (8310)/8270 SIMS, 8240 (TCLP 1311) ZHE, Leachability (Cu+Sulfide), Base/Neutral Acid Compounds GC/MS (825/8270) See attached list, URANIUM (ICP-MS), RADIUM 226+228, Gross Alpha/Beta, TO-14, NUMBER OF CONTAINERS.

Table with columns: PROJECT INFORMATION, SAMPLE RECEIPT, SAMPLES SENT TO, RELINQUISHED BY: 1, RELINQUISHED BY: 2. Includes fields for Project #, Name, QC Level, TAT, Due Date, Rush Surcharge, Client Discount, Special Certification, and various signatures and dates.



Pinnacle Laboratories Inc.

CHAIN OF CUSTODY

PLI Accession #: 012099

DATE: _____ PAGE: _____ OF _____

SHADED AREAS ARE FOR LAB USE ONLY.

PROJECT MANAGER: BARRY HOLMAN

COMPANY: GIANT Refining

ADDRESS: #50 CRUGRO
Bloomfield, Nm. 87413

PHONE: 505-632-4168

FAX: 505-632-3911

BILL TO: Same

COMPANY: _____

ADDRESS: _____

ANALYSIS REQUEST

Petroleum Hydrocarbons (418.1) TRPH (MOD.8015) Diesel/Direct Inject	<input type="checkbox"/>
Reactivity Sulfide (M8015) Gas/Purge & Trap	<input type="checkbox"/>
8021 (BTEX)/8015 (Gasoline) MTBE	<input type="checkbox"/>
8021 (BTEX) <input type="checkbox"/> MTBE <input type="checkbox"/> TMB <input type="checkbox"/> PCE	<input type="checkbox"/>
8021 (TCL)	<input type="checkbox"/>
8021 (EDX)	<input type="checkbox"/>
8021 (HALO)	<input type="checkbox"/>
8021 (CUST)	<input type="checkbox"/>
504.1 EDB <input type="checkbox"/> / DBCP <input type="checkbox"/>	<input type="checkbox"/>
Reactivity Cyanide	<input type="checkbox"/>
8260 (TCL) Volatile Organics	<input checked="" type="checkbox"/>
8260 (Full) Volatile Organics	<input type="checkbox"/>
8260 (CUST) Volatile Organics	<input type="checkbox"/>
8260 (Landfill) Volatile Organics	<input type="checkbox"/>
Pesticides / PCB (608/8081/8082)	<input type="checkbox"/>
Herbicides (615/8151)	<input type="checkbox"/>
Base/Neutral/Acid Compounds GC/MS (625/8270)	<input type="checkbox"/>
Polynuclear Aromatics (610/8310/8270-SIMS)	<input type="checkbox"/>
General Chemistry:	<input type="checkbox"/>
8270 Metal Sulfur	<input checked="" type="checkbox"/>
Priority Pollutant Metals (13)	<input type="checkbox"/>
Target Analyte List Metals (23)	<input type="checkbox"/>
RCRA Metals (8)	<input checked="" type="checkbox"/>
RCRA Metals by TCLP (Method 1311)	<input type="checkbox"/>
Metals: Cay Nak King, Hg	<input checked="" type="checkbox"/>
IGMTABILITY	<input type="checkbox"/>
NUMBER OF CONTAINERS	

SAMPLE ID	DATE	TIME	MATRIX	LAB I.D.
OTR IWS Well	12/28/00	11:15 ^{PM}	A20	-01

PLEASE FILL THIS FORM IN COMPLETELY.

PROJECT INFORMATION		PRIOR AUTHORIZATION IS REQUIRED FOR RUSH PROJECTS		RELINQUISHED BY: 1.		RELINQUISHED BY: 2.	
PROJ. NO.: <u>4th OTR Well Sample</u>	(RUSH) <input type="checkbox"/> 24hr <input type="checkbox"/> 48hr <input type="checkbox"/> 72hr <input type="checkbox"/> 1 WEEK	(NORMAL) <input type="checkbox"/>		Signature: <u>[Signature]</u>	Time: <u>12:30 pm</u>	Signature: _____	Time: _____
PROJ. NAME: <u>4th OTR Well Sample</u>	CERTIFICATION REQUIRED: <input type="checkbox"/> NM <input type="checkbox"/> SDWA <input type="checkbox"/> OTHER			Printed Name: <u>BARRY HOLMAN</u>	Date: <u>12/28/00</u>	Printed Name: _____	Date: _____
P.O. NO.:	METHANOL PRESERVATION <input type="checkbox"/>			Company: _____	See reverse side (Force Majeure)		
SHIPPED VIA:	COMMENTS: <input type="checkbox"/> FIXED FEE			RECEIVED BY: 1.		RECEIVED BY: (LAB) 2.	
SAMPLE RECEIPT				Signature: _____	Time: _____	Signature: <u>[Signature]</u>	Time: <u>10:15</u>
NO. CONTAINERS	<u>11</u>			Printed Name: _____	Date: _____	Printed Name: <u>AM/Busse</u>	Date: <u>12/29/00</u>
CUSTODY SEALS	Y/N/NA <u>(NA)</u>			Company: <u>Pinnacle Laboratories Inc.</u>			
RECEIVED INTACT	<u>Y</u>						
BLUE ICE/ICE	<u>4.8° C</u>						