GW - 1

MONITORING REPORTS

DATE:

2004

GIANT
REFINING COMPANY

CERTIFIED MAIL # 7099 3220 0010 2242 4832

January 19, 2005

Ms. Hope Monzeglio
State of New Mexico Environmental Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303

Re: Giant Bloomfield Refinery – Request for Supplemental Information
Ground Water Remediation and Monitoring Annual Report April 2004
EPA ID NO. NMD 089416416
HWB-GRCB-04-001

Dear Ms. Monzeglio:

Giant Refining Company Bloomfield (GRCB) received the November 17, 2004 letter from the New Mexico Environmental Department (NMED) concerning NMED's technical adequacy review of Bloomfield's Ground Water Remediation and Monitoring Annual Report submitted April 2004. NMED requested additional information and provided requirements for future ground water reports. The purpose of this letter is to provide NMED with the requested additional information.

General Comments

Giant will endeavor to improve the annual report and will follow the HWB's position paper "General Reporting Requirements For Routine Groundwater Monitoring at RCRA Sites" when preparing future reports.

Specific Comments

1. Giant will collect monthly effluent samples from the outfall discharge to the raw water ponds and analyze the effluent sample for BTEX using EPA method 8021B. After four months of sampling and no exceedance of the WQCC levels, the sampling frequency will be reduced to quarterly.

   In addition Giant is currently conducting a carbon filter pilot test and will share the results with NMED upon completion of the test.

PHONE
505-632-8013
FAX
505-632-3911

50 ROAD 4990
P.O. BOX 159
BLOOMFIELD
NEW MEXICO
87413

2. Monitoring well # 36 was not sampled. Giant has implemented a compliance calendar to insure this omission does not happen in the future.

3. It has been determined that Monitoring Well # 24 was constructed during the time in which Gary-Williams Energy owned and operated the refinery. The design of the well was for air sparging activities, and does not accommodate sampling due to its construction.

   Upon completion of the Barrier wall project, an NMED-OCD approved monitoring point will be constructed.

4. Attachment A presents revised installation diagrams for MW #45 and MW #47 indicating the depth of the water table. MW #45 ground water elevation is at 5479.79 and MW #47 ground water elevation is at 5479.14.

5. MW #45 was developed by pumping out five borehole volumes of water (approximately 16 gallons) at an estimated rate of 0.5 gallons per minute. The water quality parameter condition listed in Attachment A "Requirements for Long-Term Ground Water Monitoring, Corrective Measure Study and Implementation (CMS/CMI) (Discharge Plan-Abatement Plan) was issued on January 6, 2003. MW #45 was drilled on January 15, 2003. Giant did not have ample time to acquire essential equipment for field measuring water quality parameters.

   MW #47 was developed by baling out five borehole volumes of water (calculated to 1.19 gallons) over a thirty minute period. That calculates to a 0.039 gallons/minute removal rate. Water quality parameters are as follows:

pH	EC	Temp (F)
6.60	3670	54
6.68	3690	53
6.68	3570	53

6. Giant will abide by NMED's request.

7. MW #1 and RW # 1 are two separate wells. The Executive Summary states that Recovery well (RW #1) was reactivated in August 2003.

   MW #1 and MW #9 were both measured and sampled during the annual sampling event. MW #9 was converted into a Recovery Well in November 2003.

   Giant has implemented a policy of taking plant wide groundwater measurements during semi-annual and annual sampling events.

8. Giant provides a letter from the third party lab Hall Environmental Analysis Laboratory (attachment B) as the explanation for using EPA Method 6010C instead of EPA Methods 7191 and 7421.

Giant requests approval for the use of EPA method 6010C instead of EPA methods 7191 and 7421 based on the information provided in (attachment B).

9. Giant will submit future reports to NMOCD Santa Fe office, NMOCD Aztec District office, NMED Hazardous Waste Bureau, and to the EPA by April 15 of each respective year.

10. Giant will ensure the Annual Report presents the information requested.

If you have any questions regarding this submittal, please contact me at 505-632-4171.

Sincerely,

GIANT REFINING COMPANY

James R. Schmaltz
Environmental Manager

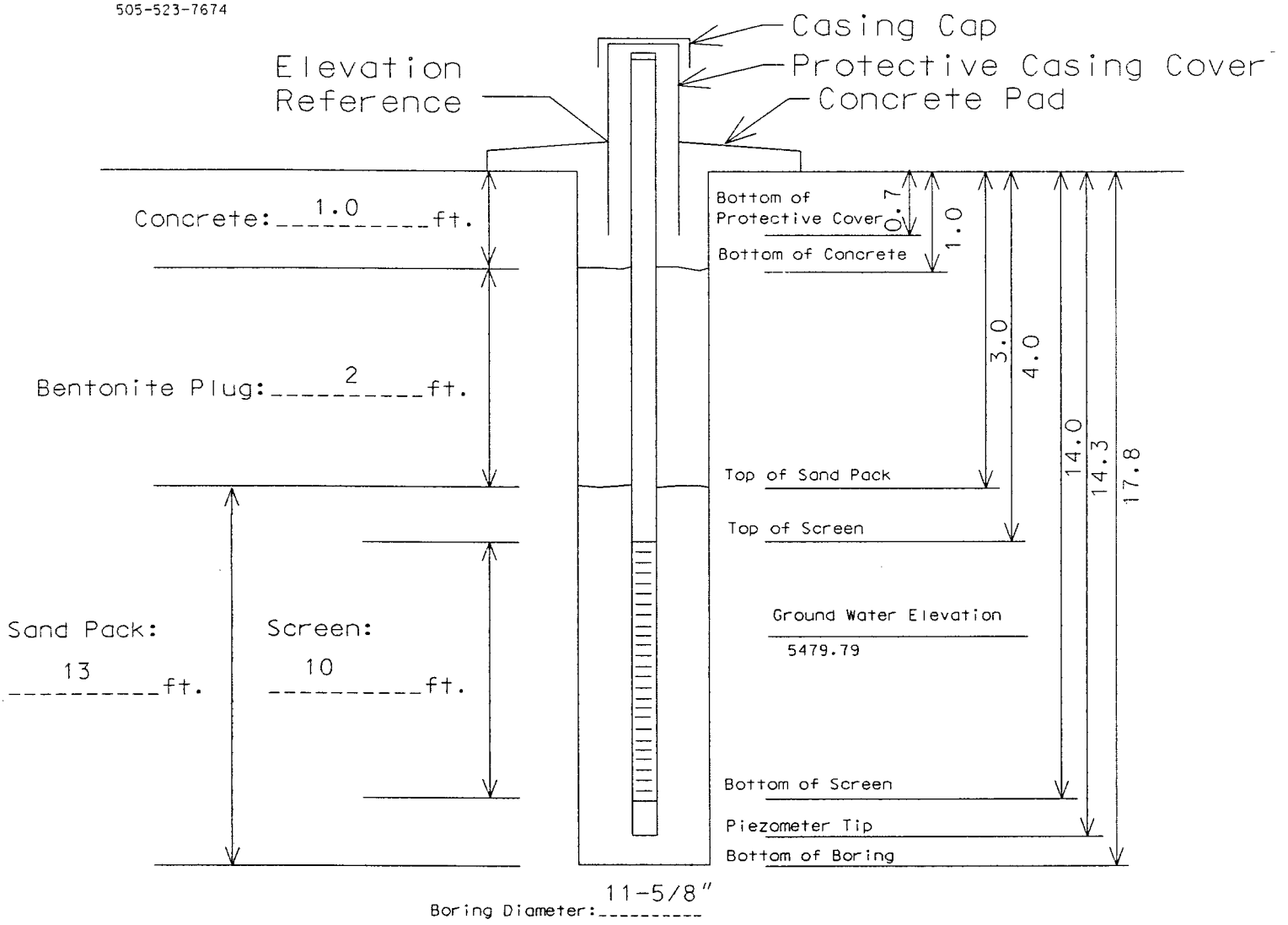
Cc: Wayne Price - OCD
Denny Foust - OCD Aztec Office
Bob Wilkinson – EPA
Ed Riege
Chad King

Attachment A

PRECISION ENGINEERING, INC.
505-523-7674

Installation Diagram

Monitoring Well No. MW - 45



Sand Type: 10-20 Silica

Bollards, Type/Size: Steel, 3" min.

Bentonite: 3/8" Chip

Screen Type/Size: 4" PVC Sch. 40, 0.010" Slotted

Cement/Grout: ---

Riser Type/Size: 4" PVC Sch. 40

Water: Potable

Locking Expandable Casing Plug? Yes

Site Northing: 5790.85

Other: N/A

Bottom Cap Used? Yes

Site Easting: 2837.78

Project #: 03-015

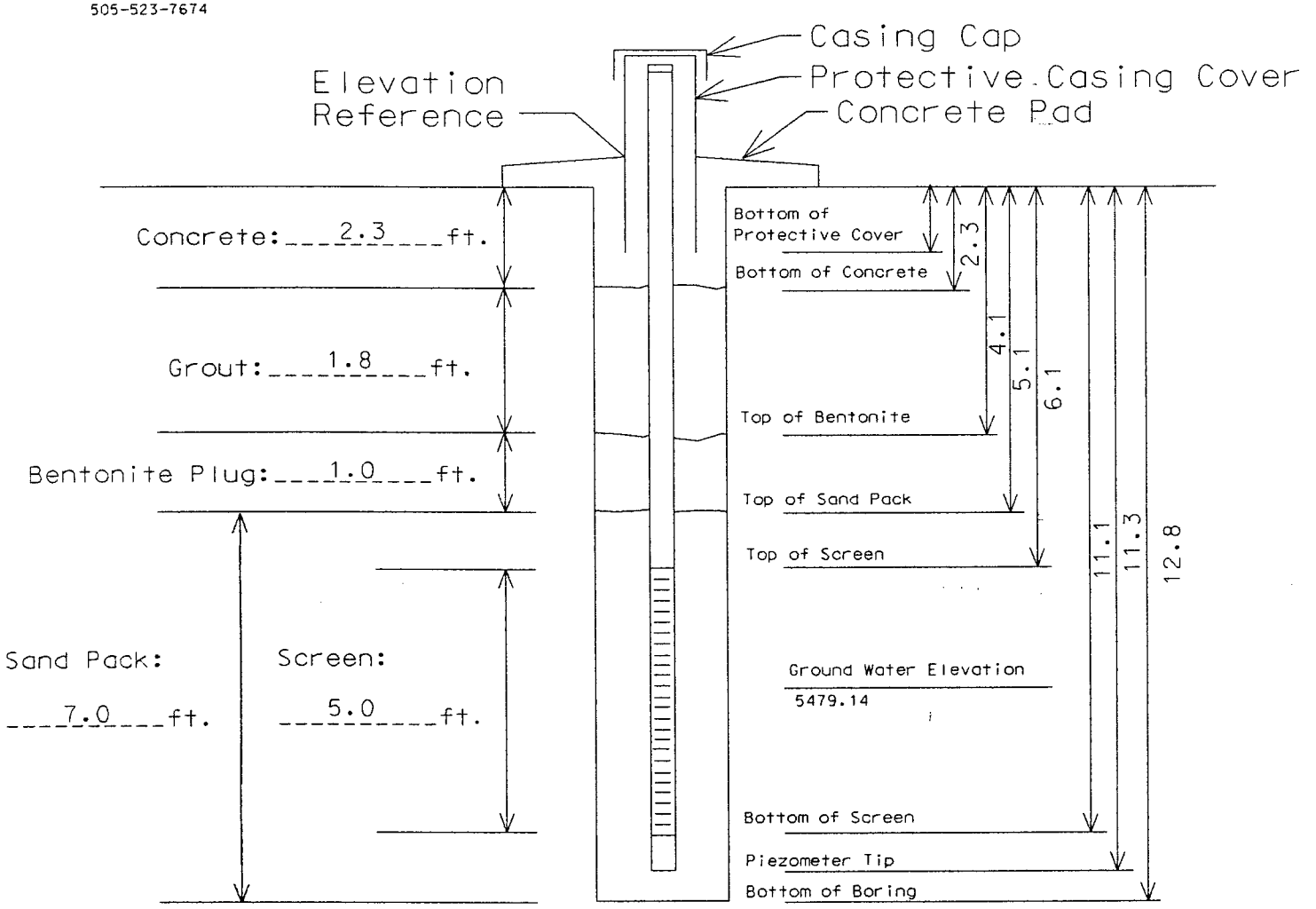
Project Name: Bloomfield Wells

Elevation: 5489.33

PRECISION ENGINEERING, INC.
505-523-7674

Installation Diagram

Monitoring Well No. MW-47(Seep 5)



Boring Diameter: 8 5/8"

Sand Type: 10-20 Silica

Bollards. Type/Size: Steel, 3"

Bentonite: 3/8" Chips

Screen Type/Size: 2" PVC Sch. 40. 0.010" Slotted

Cement/Grout: 6% Bentonite

Riser Type/Size: 2" PVC Sch. 40

Water: Potable

Locking Expandable Casing Plug? Yes

Site Northing: 5413.57

Other: N/A

Bottom Cap Used? Yes

Site Easting: 2220.90

Giant Refining Co.

Project #: 03-015

Project Name: Bloomfield Wells

Elevation: 5486.63

Attachment B

Hall Environmental
Analysis Laboratory, Inc.

November 22, 2004

Cindy Hurtado
San Juan Refinery
#50 CR 4990
Bloomfield NM, 87413

RE: EPA Method 6010C vs. Graphite Furnace methods

Dear Ms. Cindy Hurtado,

Hall Environmental Analysis Laboratory uses EPA Method 6010 for metals analysis instead of the EPA 7000 series methods. This method is EPA approved and has been adopted by virtually all commercial laboratories. In fact, most commerical laboratories including Hall Environmental do not have the old equipment to perform the 7000 series methods.

Should you have any further questions regarding this matter, please feel free to call me at 505-345-3975.

Sincerely,

Andy Freeman
Business/Project Manager

4901 Hawkins NE Albuquerque, NM 87109 Ph (505) 345-3975 Fax (505) 345-4107

GIANT
INDUSTRIES, INC.
SAN JUAN REGIONAL OFFICE

February 9, 2005

Mr. Roger Anderson
Bureau Chief
New Mexico Oil Conservation Division
Environmental Bureau
1220 South St. Francis Drive
Santa Fe, NM 87504

Dear Mr. Anderson:

Enclosed you will find the annual report for Giant Refining Company's Bloomfield Refinery for 2004.

Please contact me if you have any questions.

Sincerely,

Tim Kinney
Remediation Project Manager

/gr

Enclosure

cc w/enc.: Luke Wethers-Giant
David Kirby-Giant
Jacque Cumbie-Giant
Stephanie Odell-BLM
Maura Hanning-EID
Chris Shuey-SWRIC
Jim Durrett-SJC
Herbert Gorrod-EPA
Denny Foust-OCD

PHONE
505-632-8006
FAX
505-632-4021

111 COUNTY
ROAD 4990
BLOOMFIELD
NEW MEXICO
87413

ANNUAL DATA REPORT

GIANT BLOOMFIELD REFINERY

2004

Prepared By:

GIANT REFINING COMPANY
111 County Road 4990
Bloomfield, NM 87413
(505) 632-8006
FAX (505) 632-4021

TABLE OF CONTENTS

Introduction and Summary.....Section 1

Annual Analytical Results .....Section 2

Potentiometric Surface Maps.....Section 3

Total Volume History .....Section 4

INTRODUCTION AND SUMMARY
ANNUAL REPORT
2004

INTRODUCTION

Tank 22 is being used for intermediate water storage. All water is treated by the carbon filter unit exclusively. All water was discharged into the southern infiltration field in 2004.

SUMMARY

Section 2

Section 2 contains a summary of the annual analytical results. Raw data, as received from the laboratory, is available on request as a supplement to the annual report.

Section 3

Potentiometric surface maps, as well as the adjusted water surface elevation and product thickness for each well, are included in Section 3.

Section 4

Section 4 illustrates the volume history for the year. Total volume pumped from each well, as well as current tank volumes and the reinjection volume, is reported. Tanks 21, 22, and 106 are no longer in use for water storage.

SECTION 2

The following pages show the annual analytical data for the Giant Refining Remediation Project. The data is broken down into units as described below.

	Unit of Measure
Total dissolved solids (180)	mg/l
Total dissolved solids (calc)	mg/l
Total alkalinity as CaCO3	mg/l
Total hardness as CaCO3	mg/l
Bicarbonate as HCO3	mg/l
Carbonate as CO3	mg/l
Chloride	mg/l
Sulfate	mg/l
Calcium	mg/l
Magnesium	mg/l
Potassium	mg/l
Sodium	mg/l

The remainder of the data is measured in ug/l.

GIANT INDUSTRIES, INC.
ONSITE REMEDIATION PROJECT
ANNUAL ANALYTICAL DATA SUMMARY
2004

	JAN	APR	JUL	OCT	DEC
SYSTEM EFFLUENT					
Lab pH	7.6	7.3	7.3	7.3	
Lab Conductivity@25C	2800	2900	2700	3200	
Total Dissolved Solids (Calc)	2100	2300	2200	2500	
Total Alkalinity as CaCO3	490	430	450	310	
Total Hardness as CaCO3	730	780	790	880	
Bicarbonate as HCO3	490	430	450	310	
Carbonate as CO3	5.0	nd	1.0	1.0	
Hydroxide	nd	nd	nd	nd	
Chloride	92	92	87	90	
Sulfate	1100	1200	1100	1300	
Calcium	250	260	270	310	
Magnesium	26	25	28	29	
Potassium	3.4	3.5	3.5	4.2	
Sodium	430	460	410	390	
HALOCARBONS					
Bromodichloromethane	nd	nd	nd	nd	
Bromoform	nd	nd	nd	nd	
Bromomethane	nd	nd	nd	nd	
Carbon Tetrachloride	nd	nd	nd	nd	
Chloroethane	nd	nd	nd	nd	
Chloroform	nd	nd	nd	nd	
Chloromethane	nd	nd	nd	nd	
Dibromochloromethane	nd	nd	nd	nd	
1,2-Dibromomethane (EDB)	nd	nd	nd	nd	
1,2-Dichlorobenzene	nd	nd	nd	nd	
1,3-Dichlorobenzene	nd	nd	nd	nd	
1,4-Dichlorobenzene	nd	nd	nd	nd	
1,1-Dichloroethane	nd	nd	nd	nd	
1,2-Dichloroethane (EDC)	nd	nd	nd	nd	
1,1-Dichoroethene	nd	nd	nd	nd	
cis-1,-Dichloroethene					
trans-1,2-Dichloroethene	nd	nd	nd	nd	
1,2-Dichloropropane	nd	nd	nd	nd	
cis-1,-Dichloropropene	nd	nd	nd	nd	
trans-1,2-Dichloropropene	nd	nd	nd	nd	
Methylene Chloride	nd	nd	nd	nd	
1,1,2,2-Tetrachloroethane	nd	nd	nd	nd	

	JAN	APR	JUL	OCT	DEC
Tetrachloroethane	nd	nd	nd	nd	
1,1,1-Trichloroethane	nd	nd	nd	nd	
1,1,2-Trichloroethane	nd	nd	nd	nd	
Trichloroethene	nd	nd	nd	nd	
Trichlorofluoromethane	nd	nd	nd	nd	
Vinyl Chloride	nd	nd	nd	nd	
AROMATICS					
Benzene	nd	nd	nd	nd	
Chlorobenzene	nd	nd	nd	nd	
1,2-Dichlorobenzene	nd	nd	nd	nd	
1,3-Dichlorobenzene	nd	nd	nd	nd	
1,4-Dichlorobenzene	nd	nd	nd	nd	
Ethylbenzene	nd	nd	nd	nd	
Methyl-t-Butyl Ether	nd	nd	nd	nd	
Toluene	nd	nd	nd	nd	
Total Xylenes	nd	nd	nd	nd	
PAH					
1-Methylnapthalene	nd				
2-Methylnapthalene	nd				
Benzo(a)pyrene	nd				
Napthalene	nd				
METALS (mg/l)					
Antimony	nd				
Arsenic	nd				
Beryllium	nd				
Cadmium	nd				
Chromium	nd				
Copper	nd				
Lead	nd				
Nickel	0.016				
Selenium	nd				
Silver	nd				
Thallium	nd				
Zinc	nd				
Mercury	nd				
SYSTEM INFLUENT					
Lab pH	7.6	7.3	7.5	7.3	
Lab Conductivity@25C	2800	2900	2700	3200	
Total Dissolved Solids (Calc)	2100	2300	2200	2500	
Total Alkalinity as CaCO3	480	430	450	310	

	JAN	APR	JUL	OCT	DEC
Total Hardness as CaCO3	720	710	780	900	
Bicarbonate as HCO3	480	430	450	310	
Carbonate as CO3	2.0	nd	1.0	nd	
Hydroxide	nd	nd	nd	nd	
Chloride	92	92	88	90	
Sulfate	1000	1200	1100	1300	
Calcium	250	260	270	310	
Magnesium	25	25	27	29	
Potassium	3.3	3.6	3.4	4.2	
Sodium	430	440	410	390	
HALOCARBONS					
Bromodichloromethane	nd	nd	nd	nd	
Bromoform	nd	nd	nd	nd	
Bromomethane	nd	nd	nd	nd	
Carbon Tetrachloride	nd	nd	nd	nd	
Chloroethane	nd	nd	nd	nd	
Chloroform	nd	nd	nd	nd	
Chloromethane	nd	nd	nd	nd	
Dibromochloromethane	nd	nd	nd	nd	
1,2-Dibromomethane (EDB)	nd	nd	nd	nd	
1,2-Dichlorobenzene	nd	nd	nd	nd	
1,3-Dichlorobenzene	nd	nd	nd	nd	
1,4-Dichlorobenzene	nd	nd	nd	nd	
1,1-Dichloroethane	nd	nd	nd	nd	
1,2-Dichloroethane (EDC)	nd	nd	nd	nd	
1,1-Dichoroethene	nd	nd	nd	nd	
trans-1,2-Dichloroethene	nd	nd	nd	nd	
1,2-Dichloropropane	nd	nd	nd	nd	
cis-1,-Dichloropropene	nd	nd	nd	nd	
trans-1,2-Dichloropropene	nd	nd	nd	nd	
Methylene Chloride	nd	nd	nd	nd	
1,1,2,2-Tetrachloroethane	nd	nd	nd	nd	
Tetrachloroethane	nd	nd	nd	nd	
1,1,1-Trichloroethane	nd	nd	nd	nd	
1,1,2-Trichloroethane	nd	nd	nd	nd	
Trichloroethene	nd	nd	nd	nd	
Trichlorofluoromethane	nd	nd	nd	nd	
Vinyl Chloride	nd	nd	nd	nd	
AROMATICS					
Benzene	nd	nd	nd	nd	
Chlorobenzene	nd	nd	nd	nd	
1,2-Dichlorobenzene	nd	nd	nd	nd	

	JAN	APR	JUL	OCT	DEC
1,3-Dichlorobenzene	nd	nd	nd	nd	
1,4-Dichlorobenzene	nd	nd	nd	nd	
Ethylbenzene	nd	nd	nd	nd	
Methyl-t-Butyl Ether	nd	nd	nd	nd	
Toluene	nd	nd	nd	nd	
Total Xylenes	nd	nd	nd	nd	
GRW-3					
Lab pH	7.7				
Lab Conductivity@25C	4300				
Total Dissolved Solids (Calc)	3700				
Total Alkalinity as CaCO3	160				
Total Hardness as CaCO3	1100				
Bicarbonate as HCO3	160				
Carbonate as CO3	nd				
Hydroxide	nd				
Chloride	27				
Sulfate	2500				
Calcium	400				
Magnesium	19				
Potassium	9.1				
Sodium	740				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				

	JAN	APR	JUL	OCT	DEC
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
PAH					
1-Methylnapthalene	nd				
2-Methylnapthalene	nd				
Benzo(a)pyrene	nd				
Napthalene	nd				
GRW-6					
Lab pH	7.7				
Lab Conductivity@25C	2300				
Total Dissolved Solids (Calc)	1500				
Total Alkalinity as CaCO3	720				
Total Hardness as CaCO3	410				
Bicarbonate as HCO3	720				
Carbonate as CO3	3.0				
Hydroxide	nd				
Chloride	110				
Sulfate	410				
Calcium	130				
Magnesium	22				
Potassium	1.8				
Sodium	430				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				

	JAN	APR	JUL	OCT	DEC
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
PAH					
1-Methylnapthalene	nd				
2-Methylnapthalene	nd				
Benzo(a)pyrene	nd				
Napthalene	nd				
GBR-17					

	JAN	APR	JUL	OCT	DEC
Lab pH					6.4
Lab Conductivity@25C					2300
Total Dissolved Solids (Calc)					2000
Total Alkalinity as CaCO3					280
Total Hardness as CaCO3					990
Bicarbonate as HCO3					280
Carbonate as CO3					nd
Hydroxide					nd
Chloride					50
Sulfate					1100
Calcium					340
Magnesium					33
Potassium					7.2
Sodium					280
HALOCARBONS					
Bromodichloromethane					nd
Bromoform					nd
Bromomethane					nd
Carbon Tetrachloride					nd
Chloroethane					nd
Chloroform					nd
Chloromethane					nd
Dibromochloromethane					nd
1,2-Dibromomethane (EDB)					nd
1,2-Dichlorobenzene					nd
1,3-Dichlorobenzene					nd
1,4-Dichlorobenzene					nd
1,1-Dichloroethane					nd
1,2-Dichloroethane (EDC)					nd
1,1-Dichoroethene					nd
trans-1,2-Dichloroethene					nd
1,2-Dichloropropane					nd
cis-1,-Dichloropropene					nd
trans-1,2-Dichloropropene					nd
Methylene Chloride					nd
1,1,2,2-Tetrachloroethane					nd
Tetrachloroethane					nd
1,1,1-Trichloroethane					nd
1,1,2-Trichloroethane					nd
Trichloroethene					nd
Trichlorofluoromethane					nd
Vinyl Chloride					nd

	JAN	APR	JUL	OCT	DEC
AROMATICS					
Benzene					nd
Chlorobenzene					nd
1,2-Dichlorobenzene					nd
1,3-Dichlorobenzene					nd
1,4-Dichlorobenzene					nd
Ethylbenzene					nd
Methyl-t-Butyl Ether					nd
Toluene					nd
Total Xylenes					nd
GBR-24D					
Lab pH	7.6				
Lab Conductivity@25C	4300				
Total Dissolved Solids (Calc)	3400				
Total Alkalinity as CaCO3	230				
Total Hardness as CaCO3	1400				
Bicarbonate as HCO3	230				
Carbonate as CO3	1.0				
Hydroxide	nd				
Chloride	20				
Sulfate	2000				
Calcium	480				
Magnesium	47				
Potassium	12				
Sodium	620				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	19				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				

	JAN	APR	JUL	OCT	DEC
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
PAH					
1-Methylnapthalene	nd				
2-Methylnapthalene	nd				
Benzo(a)pyrene	nd				
Napthalene	nd				
GBR-30					
Lab pH	7.0				
Lab Conductivity@25C	4500				
Total Dissolved Solids (Calc)	3500				
Total Alkalinity as CaCO3	240				
Total Hardness as CaCO3	1500				
Bicarbonate as HCO3	240				
Carbonate as CO3	1.0				
Hydroxide	nd				
Chloride	410				
Sulfate	2000				
Calcium	510				
Magnesium	44				
Potassium	8.8				
Sodium	630				

	JAN	APR	JUL	OCT	DEC
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
PAH					
1-Methylnapthalene	nd				
2-Methylnapthalene	nd				

	JAN	APR	JUL	OCT	DEC
Benzo(a)pyrene	nd				
Napthalene	nd				
GBR-31					
Lab pH	7.5				
Lab Conductivity@25C	3200				
Total Dissolved Solids (Calc)	2600				
Total Alkalinity as CaCO3	200				
Total Hardness as CaCO3	1000				
Bicarbonate as HCO3	200				
Carbonate as CO3	1.0				
Hydroxide	nd				
Chloride	79				
Sulfate	1700				
Calcium	350				
Magnesium	31				
Potassium	5.3				
Sodium	460				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				

	JAN	APR	JUL	OCT	DEC
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
PAH					
1-Methylnapthalene	nd				
2-Methylnapthalene	nd				
Benzo(a)pyrene	nd				
Napthalene	nd				
GBR-32					
Lab pH					6.1
Lab Conductivity@25C					4900
Total Dissolved Solids (Calc)					4200
Total Alkalinity as CaCO3					250
Total Hardness as CaCO3					1600
Bicarbonate as HCO3					250
Carbonate as CO3					nd
Hydroxide					nd
Chloride					470
Sulfate					2100
Calcium					550
Magnesium					58
Potassium					11
Sodium					770
HALOCARBONS					
Bromodichloromethane					nd
Bromoform					nd
Bromomethane					nd
Carbon Tetrachloride					nd
Chloroethane					nd
Chloroform					0.7

	JAN	APR	JUL	OCT	DEC
Chloromethane					nd
Dibromochloromethane					nd
1,2-Dibromomethane (EDB)					nd
1,2-Dichlorobenzene					nd
1,3-Dichlorobenzene					nd
1,4-Dichlorobenzene					nd
1,1-Dichloroethane					nd
1,2-Dichloroethane (EDC)					nd
1,1-Dichoroethene					nd
trans-1,2-Dichloroethene					nd
1,2-Dichloropropane					nd
cis-1,-Dichloropropene					nd
trans-1,2-Dichloropropene					nd
Methylene Chloride					nd
1,1,2,2-Tetrachloroethane					nd
Tetrachloroethane					nd
1,1,1-Trichloroethane					nd
1,1,2-Trichloroethane					nd
Trichloroethene					nd
Trichlorofluoromethane					nd
Vinyl Chloride					nd
AROMATICS					
Benzene					nd
Chlorobenzene					nd
1,2-Dichlorobenzene					nd
1,3-Dichlorobenzene					nd
1,4-Dichlorobenzene					nd
Ethylbenzene					nd
Methyl-t-Butyl Ether					nd
Toluene					nd
Total Xylenes					nd
GBR-48					
Lab pH					5.8
Lab Conductivity@25C					5900
Total Dissolved Solids (Calc)					4800
Total Alkalinity as CaCO3					50
Total Hardness as CaCO3					1800
Bicarbonate as HCO3					50
Carbonate as CO3					nd
Hydroxide					nd
Chloride					890
Sulfate					2100

	JAN	APR	JUL	OCT	DEC
Calcium					620
Magnesium					70
Potassium					11
Sodium					850
HALOCARBONS					
Bromodichloromethane					nd
Bromoform					nd
Bromomethane					nd
Carbon Tetrachloride					nd
Chloroethane					nd
Chloroform					1.1
Chloromethane					nd
Dibromochloromethane					nd
1,2-Dibromomethane (EDB)					nd
1,2-Dichlorobenzene					nd
1,3-Dichlorobenzene					nd
1,4-Dichlorobenzene					nd
1,1-Dichloroethane					nd
1,2-Dichloroethane (EDC)					nd
1,1-Dichoroethene					nd
trans-1,2-Dichloroethene					nd
1,2-Dichloropropane					nd
cis-1,-Dichloropropene					nd
trans-1,2-Dichloropropene					nd
Methylene Chloride					nd
1,1,2,2-Tetrachloroethane					nd
Tetrachloroethane					2.5
1,1,1-Trichloroethane					nd
1,1,2-Trichloroethane					nd
Trichloroethene					1.0
Trichlorofluoromethane					nd
Vinyl Chloride					nd
AROMATICS					
Benzene					nd
Chlorobenzene					nd
1,2-Dichlorobenzene					nd
1,3-Dichlorobenzene					nd
1,4-Dichlorobenzene					nd
Ethylbenzene					nd
Methyl-t-Butyl Ether					nd
Toluene					nd
Total Xylenes					nd

	JAN	APR	JUL	OCT	DEC
GBR-49					
Lab pH					6.3
Lab Conductivity@25C					4500
Total Dissolved Solids (Calc)					3600
Total Alkalinity as CaCO3					250
Total Hardness as CaCO3					1100
Bicarbonate as HCO3					250
Carbonate as CO3					nd
Hydroxide					nd
Chloride					520
Sulfate					1700
Calcium					360
Magnesium					40
Potassium					10
Sodium					450
HALOCARBONS					
Bromodichloromethane					nd
Bromoform					nd
Bromomethane					nd
Carbon Tetrachloride					nd
Chloroethane					nd
Chloroform					1.9
Chloromethane					nd
Dibromochloromethane					nd
1,2-Dibromomethane (EDB)					nd
1,2-Dichlorobenzene					nd
1,3-Dichlorobenzene					nd
1,4-Dichlorobenzene					nd
1,1-Dichloroethane					0.6
1,2-Dichloroethane (EDC)					nd
1,1-Dichoroethene					nd
trans-1,2-Dichloroethene					nd
1,2-Dichloropropane					nd
cis-1,-Dichloropropene					nd
trans-1,2-Dichloropropene					nd
Methylene Chloride					nd
1,1,2,2-Tetrachloroethane					nd
Tetrachloroethane					3.5
1,1,1-Trichloroethane					nd
1,1,2-Trichloroethane					nd
Trichloroethene					1.7
Trichlorofluoromethane					nd

	JAN	APR	JUL	OCT	DEC
Vinyl Chloride					nd
AROMATICS					
Benzene					nd
Chlorobenzene					nd
1,2-Dichlorobenzene					nd
1,3-Dichlorobenzene					nd
1,4-Dichlorobenzene					nd
Ethylbenzene					nd
Methyl-t-Butyl Ether					nd
Toluene					nd
Total Xylenes					nd
GBR-50					
Lab pH					2.0
Lab Conductivity@25C					3300
Total Dissolved Solids (Calc)					2900
Total Alkalinity as CaCO3					160
Total Hardness as CaCO3					1100
Bicarbonate as HCO3					160
Carbonate as CO3					nd
Hydroxide					nd
Chloride					47
Sulfate					1900
Calcium					420
Magnesium					35
Potassium					7.2
Sodium					450
HALOCARBONS					
Bromodichloromethane					nd
Bromoform					nd
Bromomethane					nd
Carbon Tetrachloride					nd
Chloroethane					nd
Chloroform					nd
Chloromethane					nd
Dibromochloromethane					nd
1,2-Dibromomethane (EDB)					nd
1,2-Dichlorobenzene					nd
1,3-Dichlorobenzene					nd
1,4-Dichlorobenzene					nd
1,1-Dichloroethane					nd
1,2-Dichloroethane (EDC)					nd

	JAN	APR	JUL	OCT	DEC
1,1-Dichoroethene					nd
trans-1,2-Dichloroethene					nd
1,2-Dichloropropane					nd
cis-1,-Dichloropropene					nd
trans-1,2-Dichloropropene					nd
Methylene Chloride					nd
1,1,2,2-Tetrachloroethane					nd
Tetrachloroethane					nd
1,1,1-Trichloroethane					nd
1,1,2-Trichloroethane					nd
Trichloroethene					nd
Trichlorofluoromethane					nd
Vinyl Chloride					nd
AROMATICS					
Benzene					nd
Chlorobenzene					nd
1,2-Dichlorobenzene					nd
1,3-Dichlorobenzene					nd
1,4-Dichlorobenzene					nd
Ethylbenzene					nd
Methyl-t-Butyl Ether					nd
Toluene					nd
Total Xylenes					nd
GBR-51					
Lab pH	7.7				
Lab Conductivity@25C	2800				
Total Dissolved Solids (Calc)	2400				
Total Alkalinity as CaCO3	210				
Total Hardness as CaCO3	970				
Bicarbonate as HCO3	210				
Carbonate as CO3	1.0				
Hydroxide	nd				
Chloride	61				
Sulfate	1400				
Calcium	340				
Magnesium	29				
Potassium	nd				
Sodium	330				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				

	JAN	APR	JUL	OCT	DEC
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
GBR-52					
Lab pH	8.0				
Lab Conductivity@25C	3000				
Total Dissolved Solids (Calc)	2600				
Total Alkalinity as CaCO3	200				
Total Hardness as CaCO3	1300				
Bicarbonate as HCO3	200				

	JAN	APR	JUL	OCT	DEC
Carbonate as CO3	1.0				
Hydroxide	nd				
Chloride	64				
Sulfate	1600				
Calcium	470				
Magnesium	34				
Potassium	2.0				
Sodium	340				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				

	JAN	APR	JUL	OCT	DEC
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
SHS-4					
Lab pH	7.4				
Lab Conductivity@25C	3200				
Total Dissolved Solids (Calc)	2700				
Total Alkalinity as CaCO3	200				
Total Hardness as CaCO3	1400				
Bicarbonate as HCO3	200				
Carbonate as CO3	1.0				
Hydroxide	nd				
Chloride	66				
Sulfate	1700				
Calcium	480				
Magnesium	36				
Potassium	5.5				
Sodium	340				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				

	JAN	APR	JUL	OCT	DEC
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
SHS-6					
Lab pH	7.3				
Lab Conductivity@25C	2800				
Total Dissolved Solids (Calc)	2300				
Total Alkalinity as CaCO3	220				
Total Hardness as CaCO3	970				
Bicarbonate as HCO3	220				
Carbonate as CO3	1.0				
Hydroxide	nd				
Chloride	60				
Sulfate	1400				
Calcium	340				
Magnesium	28				
Potassium	2.4				
Sodium	330				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				

	JAN	APR	JUL	OCT	DEC
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
SHS-19					
Lab pH	7.5				
Lab Conductivity@25C	2600				
Total Dissolved Solids (Calc)	1800				
Total Alkalinity as CaCO3	650				
Total Hardness as CaCO3	570				
Bicarbonate as HCO3	650				
Carbonate as CO3	2.0				
Hydroxide	nd				
Chloride	110				
Sulfate	630				
Calcium	190				
Magnesium	24				
Potassium	2.3				
Sodium	450				

	JAN	APR	JUL	OCT	DEC
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
SHS-10					
Lab pH	7.3				
Lab Conductivity@25C	3100				

	JAN	APR	JUL	OCT	DEC
Total Dissolved Solids (Calc)	2400				
Total Alkalinity as CaCO3	440				
Total Hardness as CaCO3	950				
Bicarbonate as HCO3	440				
Carbonate as CO3	1				
Hydroxide	nd				
Chloride	120				
Sulfate	1200				
Calcium	290				
Magnesium	57				
Potassium	11				
Sodium	440				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				

	JAN	APR	JUL	OCT	DEC
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	1.6				
SHS-12					
Lab pH	7.2				
Lab Conductivity@25C	2900				
Total Dissolved Solids (Calc)	2100				
Total Alkalinity as CaCO3	500				
Total Hardness as CaCO3	740				
Bicarbonate as HCO3	500				
Carbonate as CO3	1.0				
Hydroxide	nd				
Chloride	110				
Sulfate	980				
Calcium	260				
Magnesium	21				
Potassium	1.8				
Sodium	450				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				

	JAN	APR	JUL	OCT	DEC
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
SHS-13					
Lab pH	7.0				
Lab Conductivity@25C	2800				
Total Dissolved Solids (Calc)	3200				
Total Alkalinity as CaCO3	650				
Total Hardness as CaCO3	1600				
Bicarbonate as HCO3	650				
Carbonate as CO3	1.0				
Hydroxide	nd				
Chloride	200				
Sulfate	1500				
Calcium	570				
Magnesium	49				
Potassium	3.1				
Sodium	410				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				

	JAN	APR	JUL	OCT	DEC
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	1.7				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
SHS-14					
Lab pH	7.3				
Lab Conductivity@25C	2500				
Total Dissolved Solids (Calc)	2100				
Total Alkalinity as CaCO3	300				
Total Hardness as CaCO3	900				
Bicarbonate as HCO3	300				
Carbonate as CO3	1.0				
Hydroxide	nd				
Chloride	56				
Sulfate	1200				

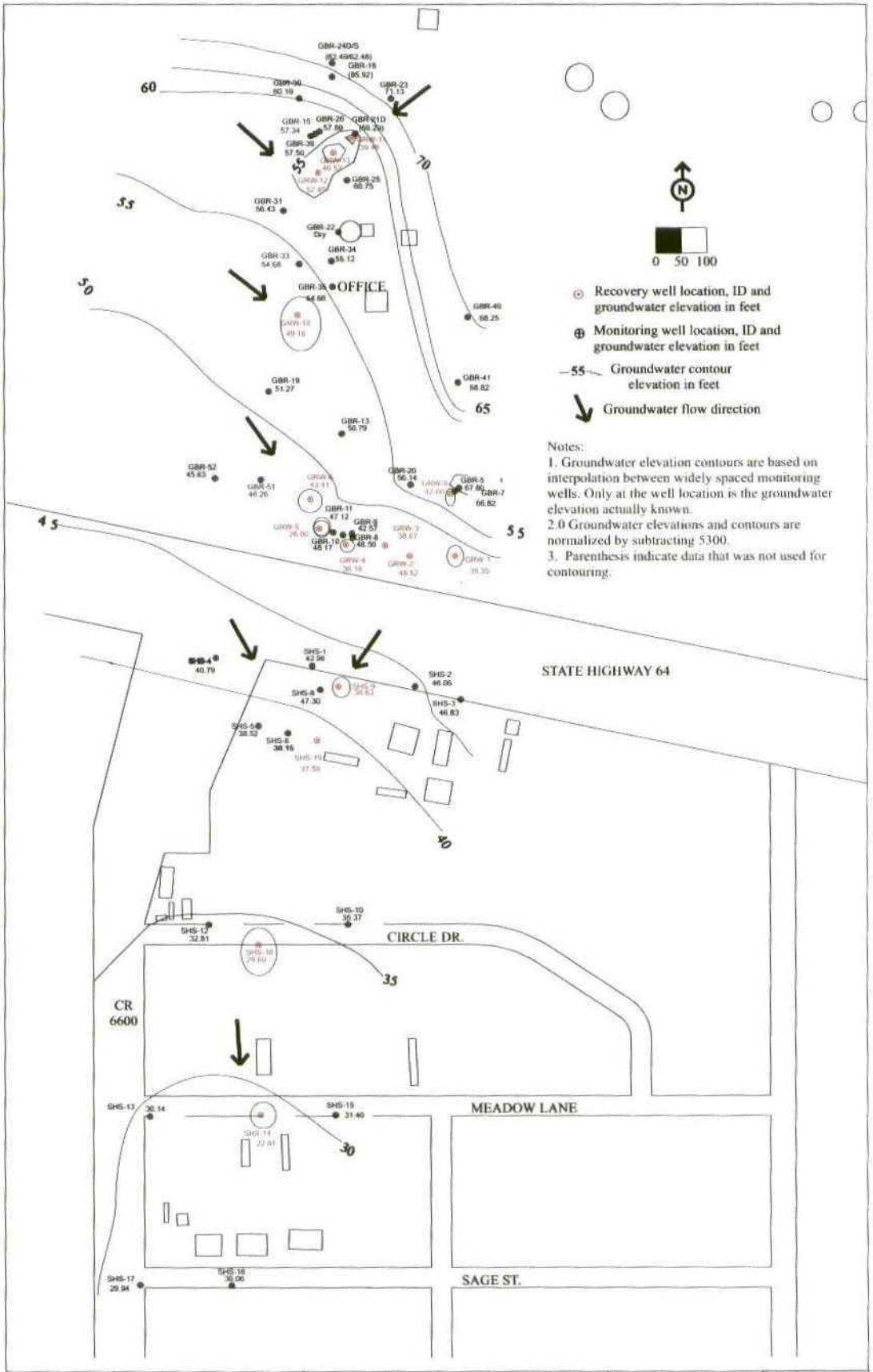
	JAN	APR	JUL	OCT	DEC
Calcium	310				
Magnesium	32				
Potassium	3.0				
Sodium	260				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				

	JAN	APR	JUL	OCT	DEC
SHS-15					
Lab pH	7.4				
Lab Conductivity@25C	2700				
Total Dissolved Solids (Calc)	2300				
Total Alkalinity as CaCO3	270				
Total Hardness as CaCO3	1100				
Bicarbonate as HCO3	270				
Carbonate as CO3	1.0				
Hydroxide	nd				
Chloride	74				
Sulfate	1300				
Calcium	360				
Magnesium	44				
Potassium	3.7				
Sodium	260				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				

	JAN	APR	JUL	OCT	DEC
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
SHS-16					
Lab pH	7.5				
Lab Conductivity@25C	2800				
Total Dissolved Solids (Calc)	2500				
Total Alkalinity as CaCO3	310				
Total Hardness as CaCO3	1100				
Bicarbonate as HCO3	310				
Carbonate as CO3	1.0				
Hydroxide	nd				
Chloride	54				
Sulfate	1400				
Calcium	380				
Magnesium	45				
Potassium	7.2				
Sodium	250				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				

	JAN	APR	JUL	OCT	DEC
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				
SHS-17					
Lab pH	7.4				
Lab Conductivity@25C	3500				
Total Dissolved Solids (Calc)	2700				
Total Alkalinity as CaCO3	270				
Total Hardness as CaCO3	1100				
Bicarbonate as HCO3	270				
Carbonate as CO3	1.0				
Hydroxide	nd				
Chloride	270				
Sulfate	1200				
Calcium	350				
Magnesium	48				
Potassium	4.4				
Sodium	430				
HALOCARBONS					
Bromodichloromethane	nd				
Bromoform	nd				

	JAN	APR	JUL	OCT	DEC
Bromomethane	nd				
Carbon Tetrachloride	nd				
Chloroethane	nd				
Chloroform	nd				
Chloromethane	nd				
Dibromochloromethane	nd				
1,2-Dibromomethane (EDB)	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
1,1-Dichloroethane	nd				
1,2-Dichloroethane (EDC)	nd				
1,1-Dichoroethene	nd				
trans-1,2-Dichloroethene	nd				
1,2-Dichloropropane	nd				
cis-1,-Dichloropropene	nd				
trans-1,2-Dichloropropene	nd				
Methylene Chloride	nd				
1,1,2,2-Tetrachloroethane	nd				
Tetrachloroethane	nd				
1,1,1-Trichloroethane	nd				
1,1,2-Trichloroethane	nd				
Trichloroethene	nd				
Trichlorofluoromethane	nd				
Vinyl Chloride	nd				
AROMATICS					
Benzene	nd				
Chlorobenzene	nd				
1,2-Dichlorobenzene	nd				
1,3-Dichlorobenzene	nd				
1,4-Dichlorobenzene	nd				
Ethylbenzene	nd				
Methyl-t-Butyl Ether	nd				
Toluene	nd				
Total Xylenes	nd				



Lodestar Services, Inc. PO Box 3861 Farmington, NM 87499	**GROUNDWATER ELEVATION CONTOUR MAP** January 2004	DRWN BY: MN CHKD BY: MN APPVD BY: MN DATE: 01/25/05	Figure 1

GIANT REFINING BLOOMFIELD REFINERY
QUARTERLY POTENTIOMETRIC SURFACE

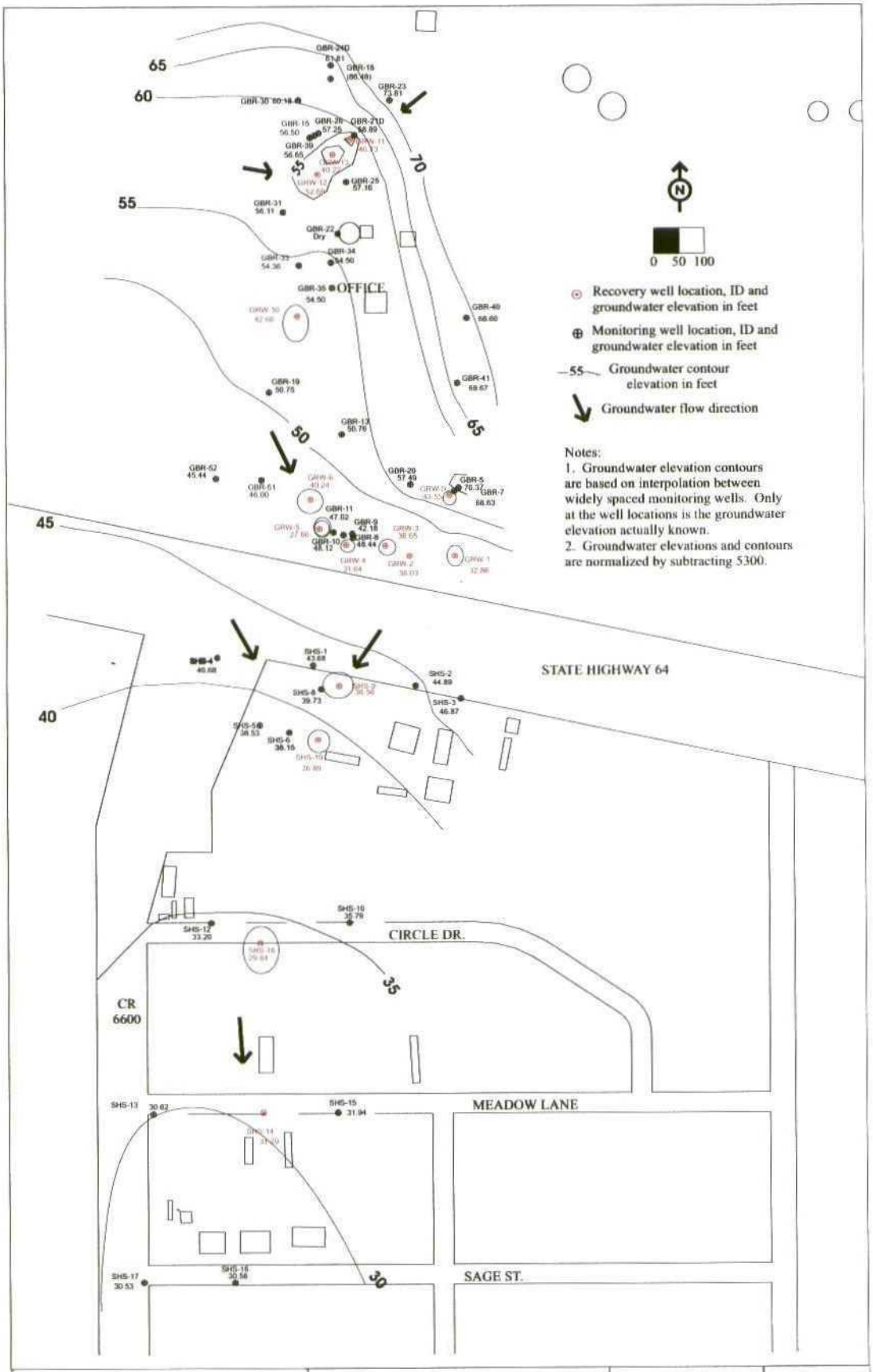
JANUARY, 2004

WELL #	WELLHEAD ELEVATION IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	ADJUSTED WSEL* IN FEET
GRW-1	5394.30	54.95	54.95	0.00	5339.35
GRW-2	5391.28	42.76	42.76	0.00	5348.52
GRW-3	5388.77	50.10	50.10	0.00	5338.67
GRW-4	5390.02	53.84	53.84	0.00	5336.18
GRW-5	5390.56	64.56	64.56	0.00	5326.00
GRW-6	5390.81	47.40	47.40	0.00	5343.41
GRW-9	5395.70	53.10	53.10	0.00	5342.60
GRW-10	5395.02	48.50	45.20	3.30	5349.16
GRW-11	5397.85	58.37	58.37	0.00	5339.48
GRW-12	5397.24	44.75	44.75	0.00	5352.49
GRW-13	5396.90	50.38	50.38	0.00	5346.52
GBR-5	5395.07	27.27	27.27	0.00	5367.80
GBR-7	5395.85	29.06	29.02	0.04	5366.82
GBR-8	5390.50	42.00	42.00	0.00	5348.50
GBR-9	5389.92	47.35	47.35	0.00	5342.57
GBR-10	5390.57	42.40	42.40	0.00	5348.17
GBR-11	5389.43	42.34	42.30	0.04	5347.12
GBR-13	5393.04	42.25	42.25	0.00	5350.79
GBR-15	5397.99	40.65	40.65	0.00	5357.34
GBR-18	5421.68	35.76	35.76	0.00	5385.92
GBR-19	5393.83	42.56	42.56	0.00	5351.27
GBR-20	5393.47	37.37	37.32	0.05	5356.14
GBR-21S	5400.65	26.57	26.57	0.00	5374.08
GBR-21D	5400.19	40.90	40.90	0.00	5359.29
GBR-22	5395.91	DRY	DRY	0.00	5395.91
GBR-23	5403.72	30.13	29.12	1.01	5371.13
GBR-24S	5396.08	34.25	33.40	0.85	5362.48
GBR-24D	5396.77	34.28	34.28	0.00	5362.49
GBR-25	5396.72	40.65	38.05	2.60	5360.75
GBR-26	5395.59	37.90	37.90	0.00	5357.69
GBR-30	5396.58	36.39	36.39	0.00	5360.19
GBR-31	5394.86	38.43	38.43	0.00	5356.43
GBR-33	5396.28	41.60	41.60	0.00	5354.68
GBR-34	5394.00	39.80	38.65	1.15	5355.12
GBR-35	5393.66	40.19	38.70	1.49	5354.66
GBR-39	5397.55	40.05	40.05	0.00	5357.50
GBR-40	5400.76	32.51	32.51	0.00	5368.25
GBR-41	5396.35	27.53	27.53	0.00	5368.82
GBR-51	5389.68	43.42	43.42	0.00	5346.26
GBR-52	5387.74	42.11	42.11	0.00	5345.63

GIANT REFINING BLOOMFIELD REFINERY
QUARTERLY POTENTIOMETRIC SURFACE
JANUARY, 2004

WELL #	WELLHEAD ELEVATION IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	ADJUSTED WSEL* IN FEET
SHS-1	5383.54	40.64	40.57	0.07	5342.96
SHS-2	5381.66	35.60	35.60	0.00	5346.06
SHS-3	5383.33	36.50	36.50	0.00	5346.83
SHS-4	5383.62	42.83	42.83	0.00	5340.79
SHS-5	5378.36	39.84	39.84	0.00	5338.52
SHS-6	5378.17	40.02	40.02	0.00	5338.15
SHS-8	5380.25	41.31	40.26	1.05	5339.78
SHS-9	5380.79	42.16	42.16	0.00	5338.63
SHS-10	5373.80	38.43	38.43	0.00	5335.37
SHS-12	5373.94	41.13	41.13	0.00	5332.81
SHS-13	5367.81	37.67	37.67	0.00	5330.14
SHS-14	5367.07	44.26	44.26	0.00	5322.81
SHS-15	5366.21	34.81	34.81	0.00	5331.40
SHS-16	5362.58	32.52	32.52	0.00	5330.06
SHS-17	5364.35	34.41	34.41	0.00	5329.94
SHS-18	5373.64	44.20	44.20	0.00	5329.44
SHS-19	5378.89	50.00	50.00	0.00	5328.89

* WSEL - WATER SURFACE ELEVATION ADJUSTED FOR PRODUCT DEPTH



Lodestar Services, Inc. PO Box 3861 Farmington, NM 87499	**GROUNDWATER ELEVATION CONTOUR MAP** **APRIL 2004**	**DRWN BY: MN** **CHKD BY: MN** **APPVD BY: MN** **DATE: 01/25/05**	Figure 2

GIANT REFINING BLOOMFIELD REFINERY
QUARTERLY POTENTIOMETRIC SURFACE

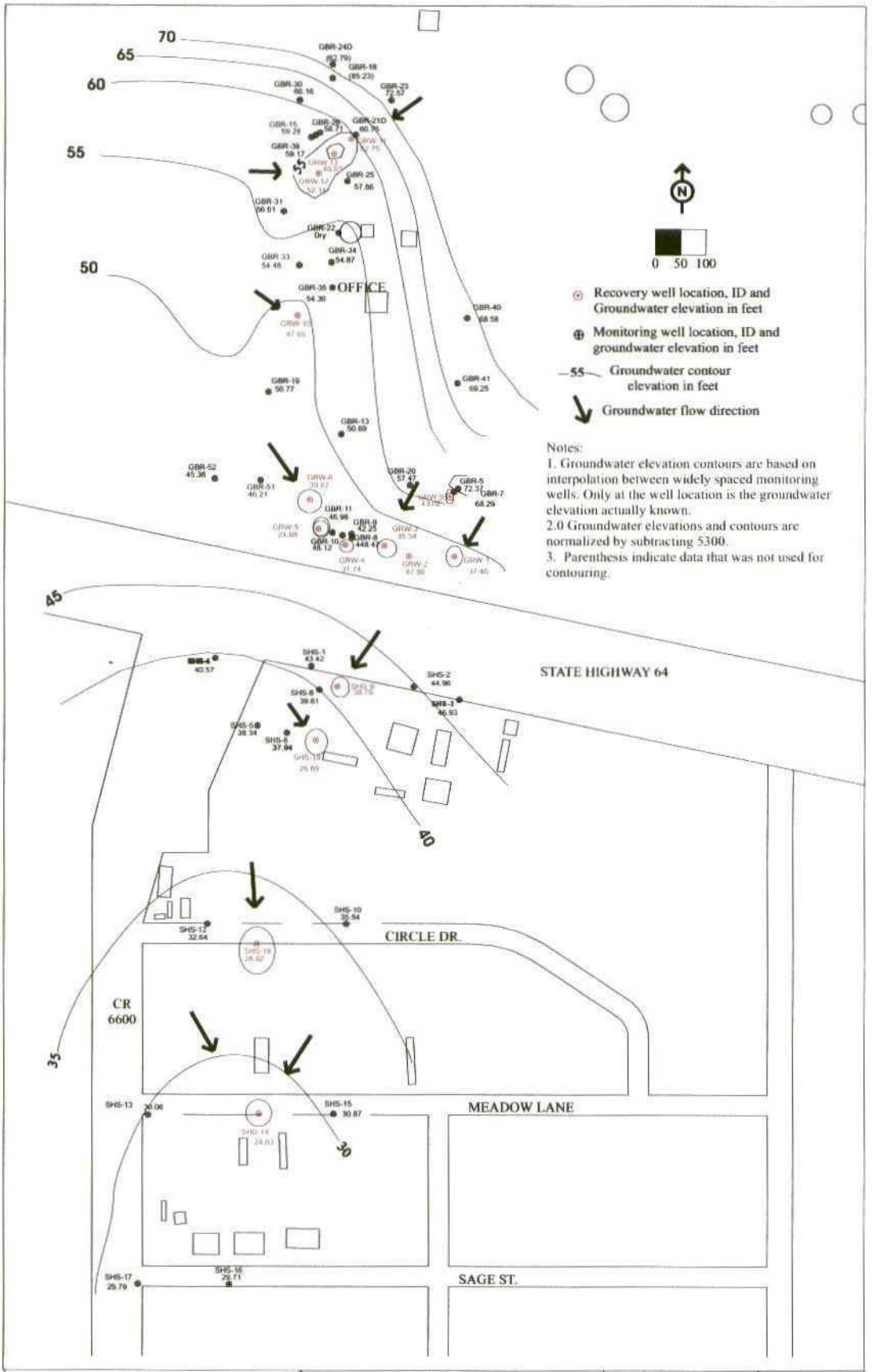
APRIL, 2004

WELL #	WELLHEAD ELEVATION IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	ADJUSTED WSEL* IN FEET
GRW-1	5394.30	61.44			5332.86
GRW-2	5391.28	41.25			5350.03
GRW-3	5388.77	52.12			5336.65
GRW-4	5390.02	58.38			5331.64
GRW-5	5390.56	62.90			5327.66
GRW-6	5390.81	50.57			5340.24
GRW-9	5395.70	52.15			5343.55
GRW-10	5395.02	52.42			5342.60
GRW-11	5397.85	57.12			5340.73
GRW-12	5397.24	44.55			5352.69
GRW-13	5396.90	56.68			5340.22
GBR-5	5395.07	24.70			5370.37
GBR-7	5395.85	27.24	27.22	0.02	5368.63
GBR-8	5390.50	42.06			5348.44
GBR-9	5389.92	47.74			5342.18
GBR-10	5390.57	42.45			5348.12
GBR-11	5389.43	42.45	42.40	0.05	5347.02
GBR-13	5393.04	42.28			5350.76
GBR-15	5397.99	41.49			5356.50
GBR-18	5421.68	35.20			5386.48
GBR-19	5393.83	43.10	43.07	0.03	5350.75
GBR-20	5393.47	35.98			5357.49
GBR-21S	5400.65	27.08	27.04	0.04	5373.60
GBR-21D	5400.19	41.30			5358.89
GBR-22	5395.91	Dry			5395.91
GBR-23	5403.72	30.55	29.75	0.80	5373.81
GBR-24S	5396.08	32.42	32.00	0.42	5364.00
GBR-24D	5396.77	34.96			5361.81
GBR-25	5396.72	41.80	39.00	2.80	5357.16
GBR-26	5395.59	38.34			5357.25
GBR-30	5396.58	36.40			5360.18
GBR-31	5394.86	38.75			5356.11
GBR-33	5396.28	41.92			5354.36
GBR-34	5394.00	39.61	39.47	0.14	5354.50
GBR-35	5393.66	40.15	39.48	0.67	5354.05
GBR-39	5397.55	40.90			5356.65
GBR-40	5400.76	32.16			5368.60
GBR-41	5396.35	26.68			5369.67
GBR-51	5389.68	43.68			5346.00
GBR-52	5387.74	42.30			5345.44

GIANT REFINING BLOOMFIELD REFINERY
QUARTERLY POTENTIOMETRIC SURFACE
APRIL, 2004

WELL #	WELLHEAD ELEVATION IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	ADJUSTED WSEL* IN FEET
SHS-1	5383.54	39.99	39.83	0.16	5343.68
SHS-2	5381.66	36.77			5344.89
SHS-3	5383.33	36.46			5346.87
SHS-4	5383.62	42.94			5340.68
SHS-5	5378.36	39.83			5338.53
SHS-6	5378.17	40.02			5338.15
SHS-8	5380.25	41.34	40.31	1.03	5339.73
SHS-9	5380.79	42.29			5338.50
SHS-10	5373.80	38.01			5335.79
SHS-12	5373.94	40.74			5333.20
SHS-13	5367.81	37.19			5330.62
SHS-14	5367.07	35.78			5331.29
SHS-15	5366.21	34.27			5331.94
SHS-16	5362.58	32.00			5330.58
SHS-17	5364.35	33.92			5330.43
SHS-18	5373.64	44.60			5329.04
SHS-19	5378.89	51.53			5327.36

* WSEL - WATER SURFACE ELEVATION ADJUSTED FOR PRODUCT THICKNESS



Lodestar Services, Inc. PO Box 3861 Farmington, NM 87499	GROUNDWATER ELEVATION CONTOUR MAP JULY 2004	DRWN BY: MN CHKD BY: MN APPVD BY: MN DATE: 01/22/05	Figure 3

GIANT REFINING BLOOMFIELD REFINERY
QUARTERLY POTENTIOMETRIC SURFACE

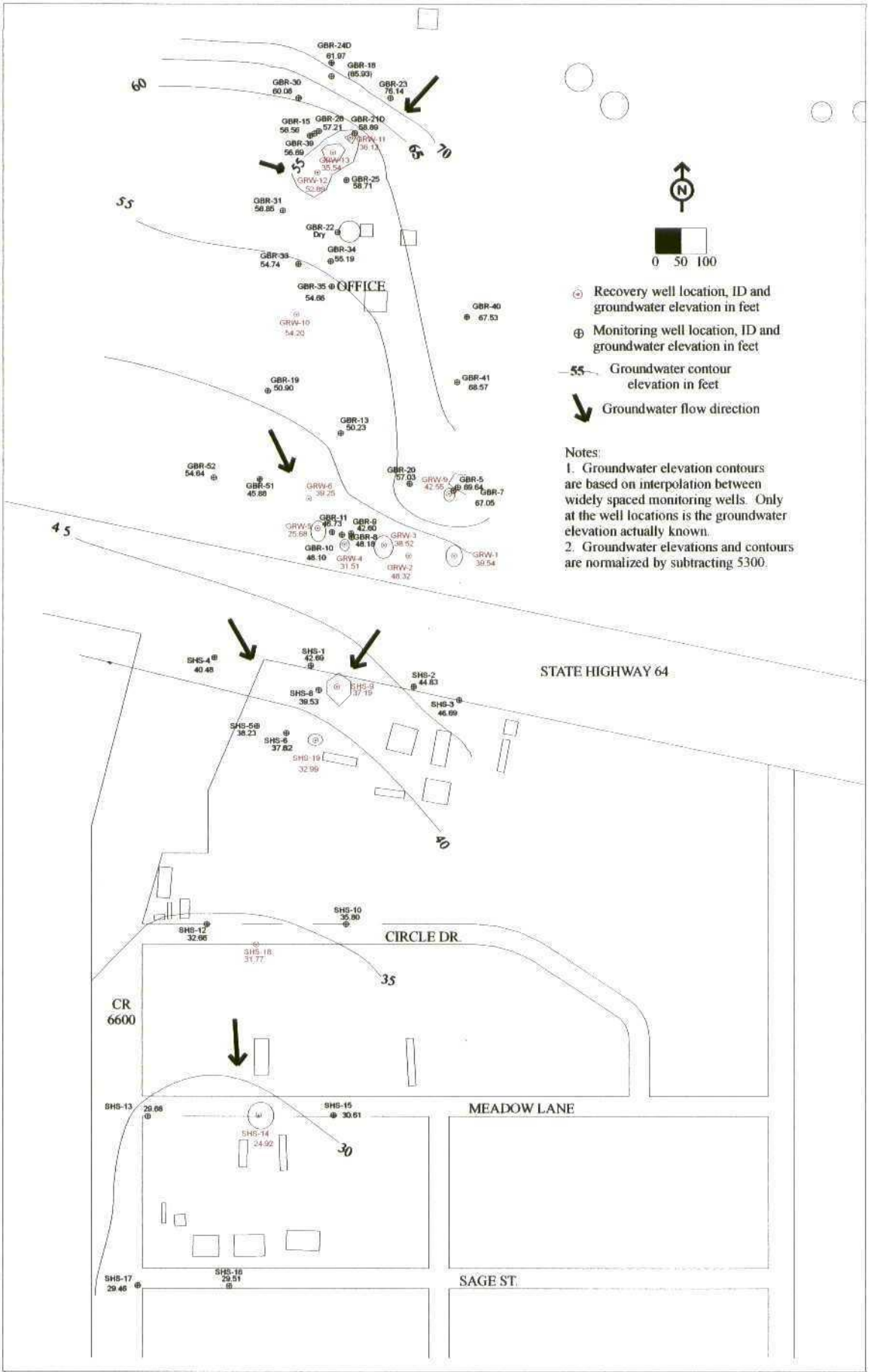
JULY, 2004

WELL #	WELLHEAD ELEVATION IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	ADJUSTED WSEL* IN FEET
GRW-1	5394.30	56.84		0.00	5337.46
GRW-2	5391.28	43.42		0.00	5347.86
GRW-3	5388.77	53.23		0.00	5335.54
GRW-4	5390.02	58.28		0.00	5331.74
GRW-5	5390.56	65.68		0.00	5324.88
GRW-6	5390.81	51.14		0.00	5339.67
GRW-9	5395.70	52.68		0.00	5343.02
GRW-10	5395.02	47.50	47.34	0.16	5347.65
GRW-11	5397.85	45.10		0.00	5352.75
GRW-12	5397.24	45.10		0.00	5352.14
GRW-13	5396.90	56.60		0.00	5340.30
GBR-5	5395.07	22.70		0.00	5372.37
GBR-7	5395.85	27.56		0.00	5368.29
GBR-8	5390.50	42.03		0.00	5348.47
GBR-9	5389.92	47.67		0.00	5342.25
GBR-10	5390.57	42.45		0.00	5348.12
GBR-11	5389.43	42.45		0.00	5346.98
GBR-13	5393.04	42.35		0.00	5350.69
GBR-15	5397.99	38.71		0.00	5359.28
GBR-18	5421.68	36.45		0.00	5385.23
GBR-19	5393.83	43.10	43.05	0.05	5350.77
GBR-20	5393.47	36.00		0.00	5357.47
GBR-21S	5400.65	26.46		0.00	5374.19
GBR-21D	5400.19	39.44		0.00	5360.75
GBR-22	5395.91	Dry		0.00	5395.91
GBR-23	5403.72	30.37	30.10	0.27	5373.57
GBR-24S	5396.08	32.66	32.61	0.05	5363.46
GBR-24D	5396.77	33.98		0.00	5362.79
GBR-25	5396.72	38.89	38.85	0.04	5357.86
GBR-26	5395.59	36.88		0.00	5358.71
GBR-30	5396.58	36.42		0.00	5360.16
GBR-31	5394.86	38.85		0.00	5356.01
GBR-33	5396.28	41.80		0.00	5354.48
GBR-34	5394.00	39.13		0.00	5354.87
GBR-35	5393.66	39.42	39.35	0.07	5354.30
GBR-39	5397.55	38.38		0.00	5359.17
GBR-40	5400.76	32.18		0.00	5368.58
GBR-41	5396.35	27.10		0.00	5369.25
GBR-51	5389.68	43.47		0.00	5346.21
GBR-52	5387.74	42.36		0.00	5345.38

GIANT REFINING BLOOMFIELD REFINERY
QUARTERLY POTENTIOMETRIC SURFACE
JULY, 2004

WELL #	WELLHEAD ELEVATION IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	ADJUSTED WSEL* IN FEET
SHS-1	5383.54	40.12		0.00	5343.42
SHS-2	5381.66	36.70		0.00	5344.96
SHS-3	5383.33	36.40		0.00	5346.93
SHS-4	5383.62	43.05		0.00	5340.57
SHS-5	5378.36	40.02		0.00	5338.34
SHS-6	5378.17	40.23		0.00	5337.94
SHS-8	5380.25	40.68	40.63	0.05	5339.61
SHS-9	5380.79	42.00		0.00	5338.79
SHS-10	5373.80	38.26		0.00	5335.54
SHS-12	5373.94	41.30		0.00	5332.64
SHS-13	5367.81	37.75		0.00	5330.06
SHS-14	5367.07	42.24		0.00	5324.83
SHS-15	5366.21	35.34		0.00	5330.87
SHS-16	5362.58	32.87		0.00	5329.71
SHS-17	5364.35	34.56		0.00	5329.79
SHS-18	5373.64	44.82		0.00	5328.82
SHS-19	5378.89	48.33		0.00	5330.56

* WSEL - WATER SURFACE ELEVATION ADJUSTED FOR PRODUCT DEPTH



Lodestar Services, Inc. **PO Box 3861** **Farmington, NM 87499**	**GROUNDWATER ELEVATION CONTOUR MAP** **OCTOBER 2004**	**DRWN BY: MN** **CHKD BY: MN** **APPVD BY: MN** **DATE: 01/27/05**	Figure 4

GIANT REFINING BLOOMFIELD REFINERY
QUARTERLY POTENTIOMETRIC SURFACE

OCTOBER, 2004

WELL #	WELLHEAD ELEVATION IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	ADJUSTED WSEL* IN FEET
GRW-1	5394.30	54.76		0.00	5339.54
GRW-2	5391.28	42.96		0.00	5348.32
GRW-3	5388.77	50.25		0.00	5338.52
GRW-4	5390.02	58.51		0.00	5331.51
GRW-5	5390.56	64.88		0.00	5325.68
GRW-6	5390.81	51.56		0.00	5339.25
GRW-9	5395.70	53.15		0.00	5342.55
GRW-10	5395.02	40.84	40.81	0.03	5354.20
GRW-11	5397.85	61.73		0.00	5336.12
GRW-12	5397.24	44.35		0.00	5352.89
GRW-13	5396.90	61.36		0.00	5335.54
GBR-5	5395.07	25.43		0.00	5369.64
GBR-7	5395.85	28.80		0.00	5367.05
GBR-8	5390.50	42.32		0.00	5348.18
GBR-9	5389.92	47.32		0.00	5342.60
GBR-10	5390.57	42.47		0.00	5348.10
GBR-11	5389.43	42.70		0.00	5346.73
GBR-13	5393.04	42.81		0.00	5350.23
GBR-15	5397.99	41.43		0.00	5356.56
GBR-18	5421.68	35.75		0.00	5385.93
GBR-19	5393.83	42.99	42.92	0.07	5350.90
GBR-20	5393.47	36.44		0.00	5357.03
GBR-21S	5400.65	26.30		0.00	5374.35
GBR-21D	5400.19	41.30		0.00	5358.89
GBR-22	5395.91	Dry		0.00	5395.91
GBR-23	5403.72	27.70	27.55	0.15	5376.14
GBR-24S	5396.08	33.36	33.16	0.20	5362.88
GBR-24D	5396.77	34.80		0.00	5361.97
GBR-25	5396.72	38.13	37.98	0.15	5358.71
GBR-26	5395.59	38.38		0.00	5357.21
GBR-30	5396.58	36.50		0.00	5360.08
GBR-31	5394.86	36.01		0.00	5358.85
GBR-33	5396.28	41.54		0.00	5354.74
GBR-34	5394.00	38.81		0.00	5355.19
GBR-35	5393.66	39.19	38.95	0.24	5354.66
GBR-39	5397.55	40.86		0.00	5356.69
GBR-40	5400.76	33.23		0.00	5367.53
GBR-41	5396.35	27.78		0.00	5368.57
GBR-51	5389.68	43.80		0.00	5345.88
GBR-52	5387.74	42.10		0.00	5345.64

GIANT REFINING BLOOMFIELD REFINERY
QUARTERLY POTENTIOMETRIC SURFACE
OCTOBER, 2004

WELL #	WELLHEAD ELEVATION IN FEET	DEPTH TO WATER IN FEET	DEPTH TO PRODUCT IN FEET	PRODUCT THICKNESS IN FEET	ADJUSTED WSEL* IN FEET
SHS-1	5383.54	40.85		0.00	5342.69
SHS-2	5381.66	36.83		0.00	5344.83
SHS-3	5383.33	36.64		0.00	5346.69
SHS-4	5383.62	43.14		0.00	5340.48
SHS-5	5378.36	40.13		0.00	5338.23
SHS-6	5378.17	40.35		0.00	5337.82
SHS-8	5380.25	40.73	40.72	0.01	5339.53
SHS-9	5380.79	42.95		0.00	5337.84
SHS-10	5373.80	38.50		0.00	5335.30
SHS-12	5373.94	44.58		0.00	5329.36
SHS-13	5367.81	38.13		0.00	5329.68
SHS-14	5367.07	42.15		0.00	5324.92
SHS-15	5366.21	35.60		0.00	5330.61
SHS-16	5362.58	33.07		0.00	5329.51
SHS-17	5364.35	34.89		0.00	5329.46
SHS-18	5373.64	41.87		0.00	5331.77
SHS-19	5378.89	45.90		0.00	5332.99

* WSEL - WATER SURFACE ELEVATION ADJUSTED FOR PRODUCT DEPTH

GIANT REFINING COMPANY
BLOOMFIELD REFINERY
TANKAGE VOLUME CHANGE

2004

Tank Number	Beginning Volume Gallons	Ending Volume Gallons	Change
102	13,029	14,984	1,955
106	8,010	-	(8,010)
21	230,133	-	(230,133)
22	427,878	-	(427,878)
Total Net Volume Change			(664,066)

GIANT REFINING COMPANY
BIOOMFIELD REFINERY
RECOVERY WELL
VOLUME TABULATION

2004

Well	Jan-Jul	Jul-Dec	Total
GRW-1	73,460	69,690	143,150
GRW-2	37,370	36,290	73,660
GRW-3	95,780	57,840	153,620
GRW-4	65,230	57,970	123,200
GRW-5	116,340	146,215	262,555
GRW-6	58,400	58,650	117,050
GRW-9	na	na	105,010
GRW-10	840,010	779,160	1,619,170
GRW-11	79,350	76,490	155,840
GRW-12	3,860	3,080	6,940
GRW-13	16,190	22,750	38,940
SHS-9	600,777	4,198	604,975
SHS-14	76,249	312,279	388,528
SHS-18	100,567	18,421	118,988
SHS-19	430,876	531,415	962,291
Total Volume Pumped in Gallons			**4,873,917**

GIANT REFINING COMPANY
BLOOMFIELD REFINERY
TOTAL VOLUME SUMMARY

2004

Total Volume of Water Recovered	4,873,917	gallons
Net Change In Storage Volume	664,066	gallons
Total Water Treated and Pumped to the Infiltration Gallery	5,537,983	gallons