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REPORTS

DATE:

N-6 MW REPORT

12/97

Safety & Environmental Solutions, Inc.

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Rice Operating Company

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OIL CONSERVATION DIVISION

Line N - 6 Monitor Well Report

Lea County, New Mexico

For Calendar Year ending December 31, 1999

Safety & Environmental Solutions, Inc.
703 E. Clinton Suite 103
Hobbs, New Mexico 88240
(505) 397-0510

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I. Background

Safety & Environmental Solutions, Inc. (SESI) was engaged by Rice Operating to perform sampling and data collection of the seven (7) ground water monitor wells and one (1) inactive water well at the Line N - 6 leak site. (See Vicinity Map). The subject area is located in Sections 5 & 6, Township 19 S Range 38 E in Lea County, New Mexico. The wells vary in casing size from 2" to 5".

II. Work Performed

SESI environmental technicians performed monitor well sampling on a quarterly basis beginning in the second quarter of 1999. Ground water samples were taken from each well after either hand bailing or a submersible pump developed the wells. Three to five casing volumes of water were removed from each well until pH and temperature of the water were stabilized. The development water was pumped into the Rice Operating disposal line located on-site. The samples were obtained and placed in appropriate containers, preserved and transported under chain of custody to Cardinal Laboratories of Hobbs, New Mexico for analysis. The analyses requested by Rice Operating Company included Benzene, Toulene, Ethyl Benzene, and Xylenes (BTEX) and Major Cations and Anions. (See Analytical Data) Beginning in June of 1999, Monitor Well #1 had free product in it and was not sampled for testing.

In addition to the sampling, SESI also measured the depth to the top of ground water using a Solinst water level indicator. The total depth of each well was measured in order to compute the proper casing volumes. (See TOC and TOW Maps) A summary of this data for 1999, excluding Monitor Well #1, follows (See Ground Water Elevation Tables).

Beginning on September 30, 1999, a *Skim-Rite* skimmer pump was installed in Monitor Well #1 to facilitate the removal of free product from the surface of the well. The system is operated on an intermittent basis to allow recovery of the product level in the well. As time has progressed and the product available has been pumped to lower levels, a longer time period has been allowed for the product in the well to recover. (See Skimmer Pump Recovery Table)

III. Summary

Analysis of the groundwater samples indicated elevated levels of Chlorides and Total Dissolved Solids (TDS) in Monitor Wells #1, #3, #4, #7 and the Inactive Water Well (IWW) as well as elevated levels of Benzene in Monitor Wells #1, #3 and IWW. In addition, Monitor Well #1 showed elevated levels of Ethyl Benzene, Toluene and Total Xylenes on its initial test, which would be expected with free product in the well. The tested analytes throughout the scope of sampling in 1999 followed the standards set by the State of New Mexico Water Quality Control Commission.

The ground water elevation fluctuated slightly throughout the sampling period but the gradient remained constant throughout this same period, trending in a circular pattern with depth extending out from Monitor Well #1.

The skimmer pump installed in Monitor Well #1 has been removing free product and groundwater from the well since installation. As time has progressed, the recovery time for product accumulation in the well has lengthened and the time period between skimmer pump activations has been adjusted to reflect this.

IV. Maps and Figures

Vicinity Map
Top of Casing Maps
Top of Water Maps
Ground Water Contour Maps
Cumulative Well Test Data
Cumulative Water Elevation Table
Skimmer Pump Recovery Table
Laboratory Analytical Results

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Vicinity Map
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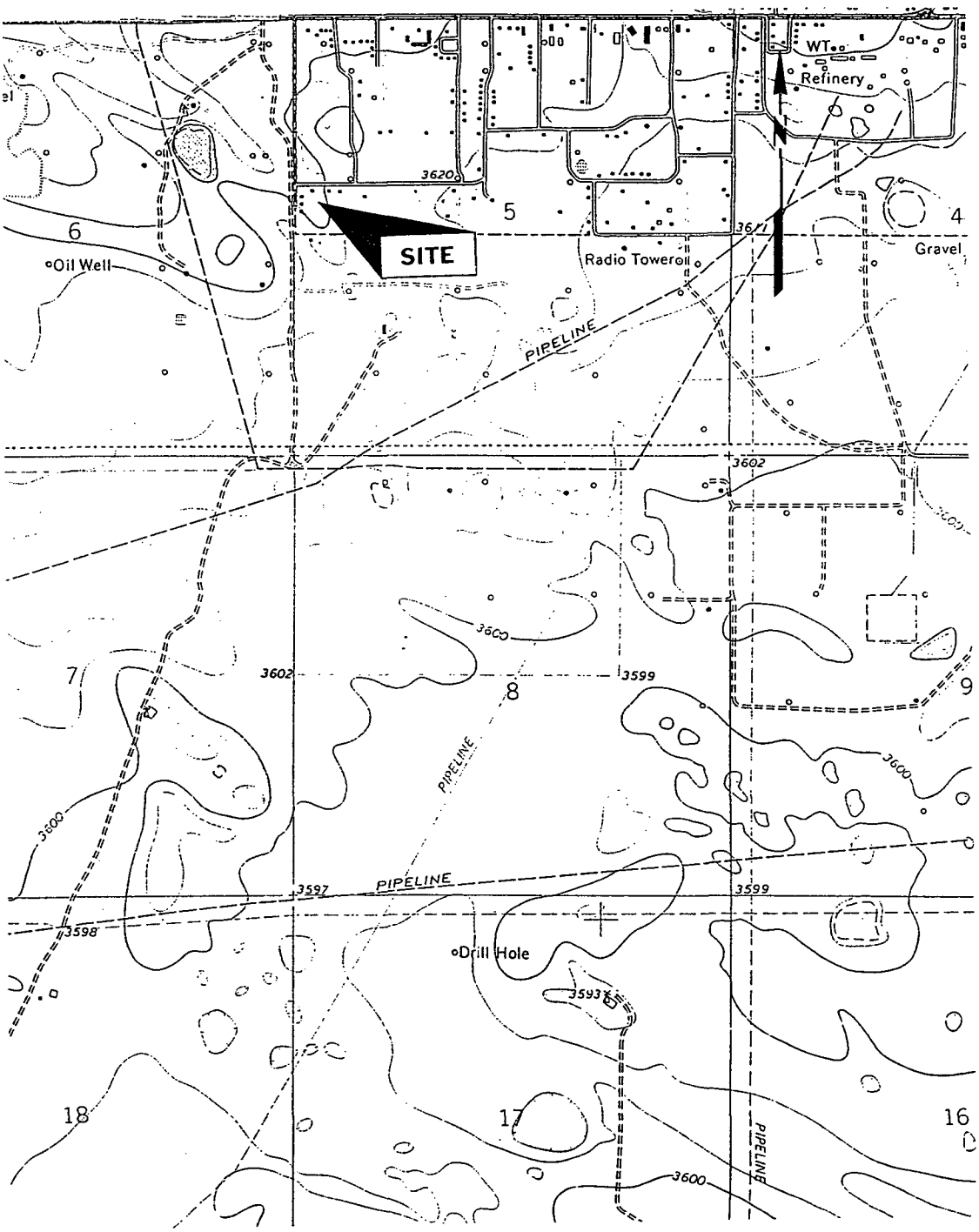
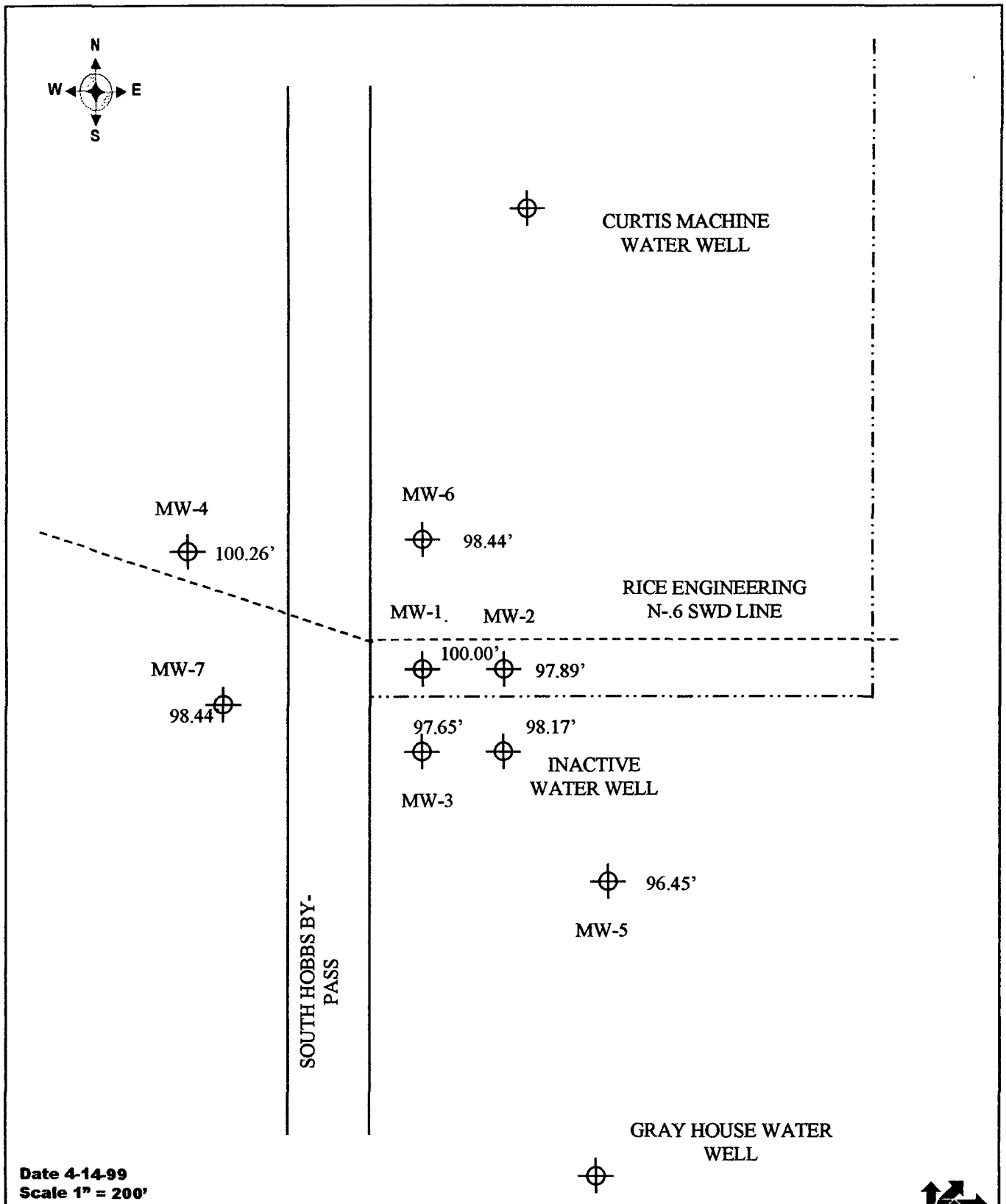
Figure 1
Vicinity Map



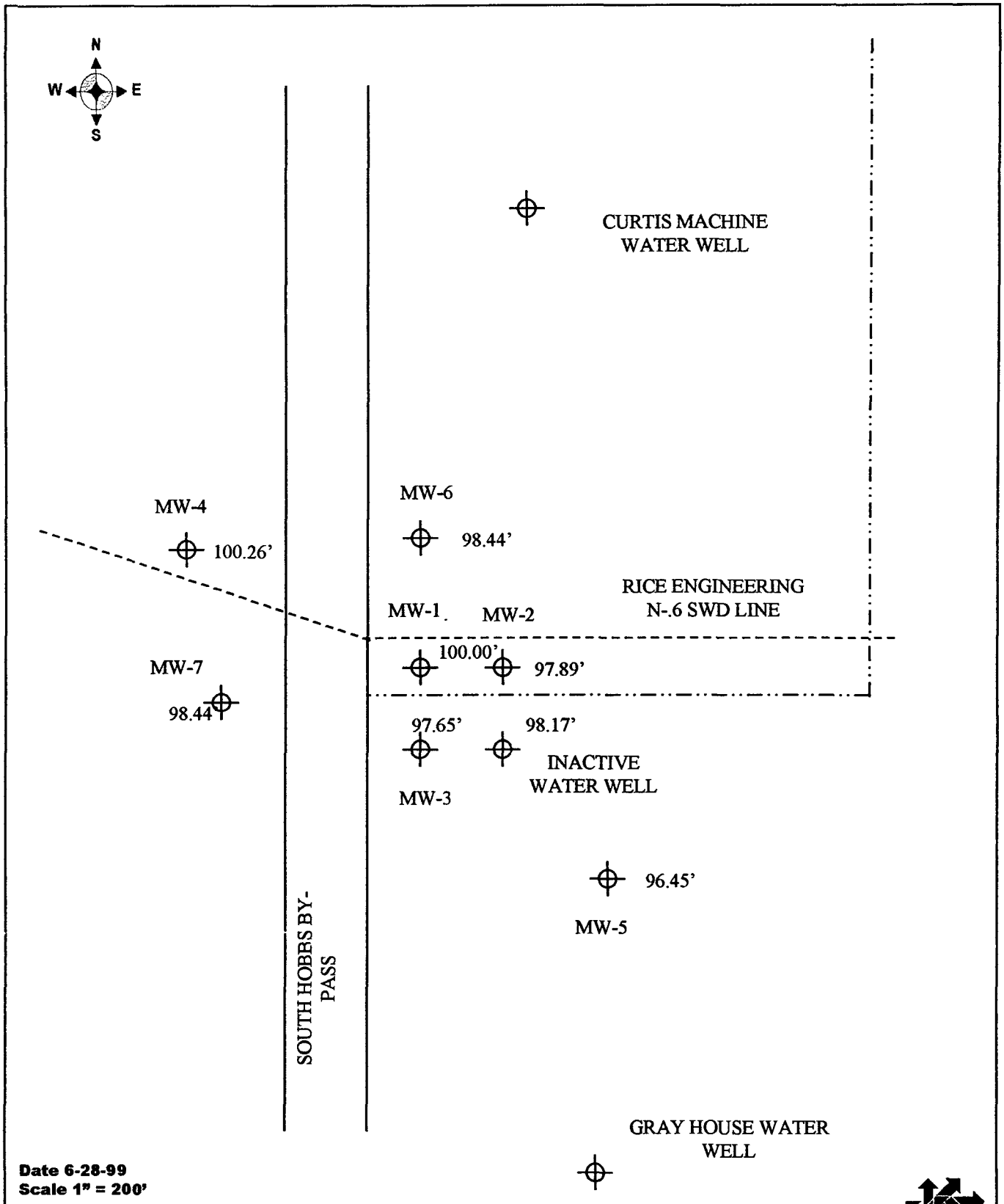
Rice Operating	**Line N-6 Monitor Wells Vicinity Map**	*Safety & Environmental Solutions, Inc. Hobbs, NM*

Figure 2
Top of Casing Maps



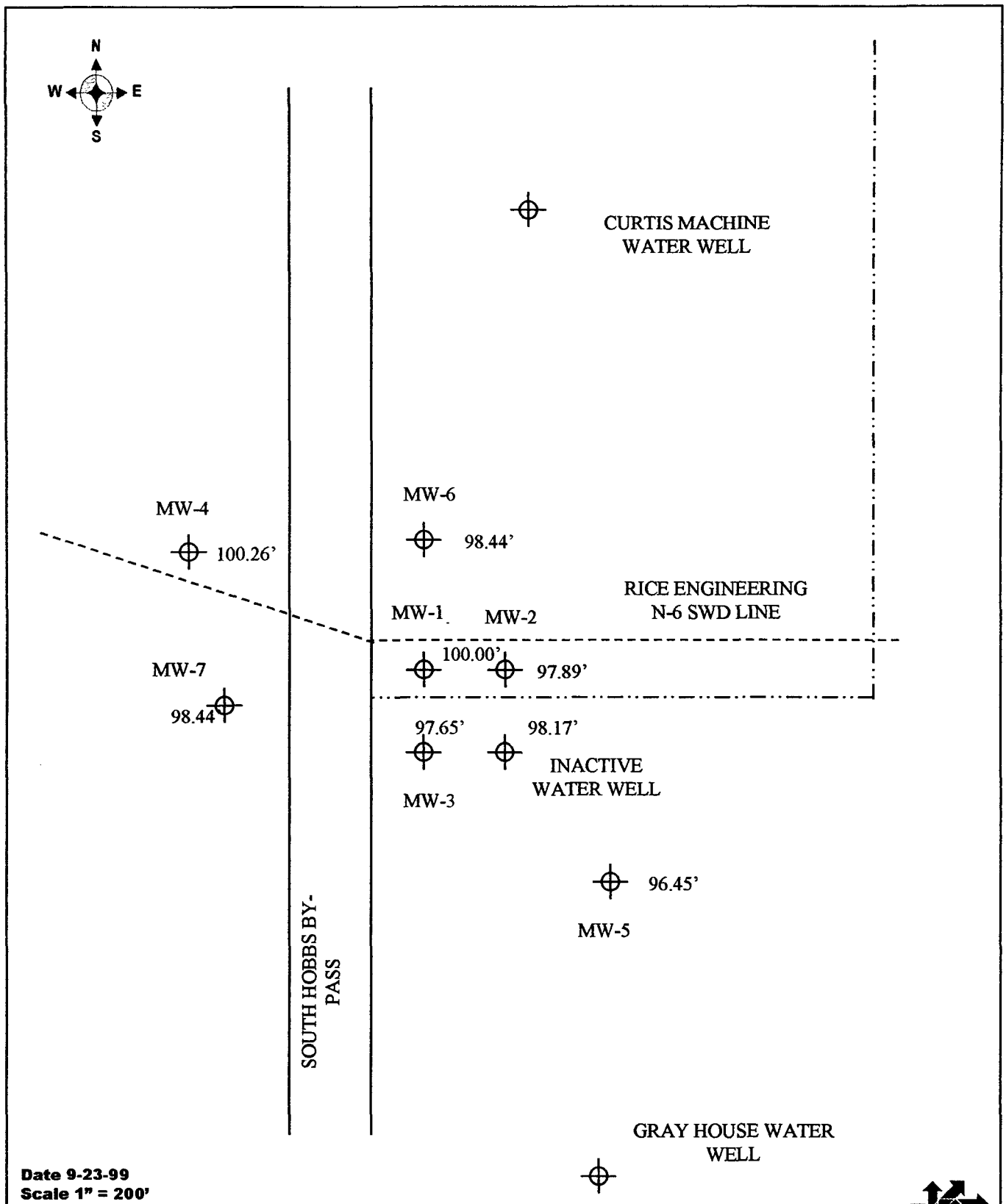
Date 4-14-99
Scale 1" = 200'

Rice Operating Company **Top of Casing Elevations**	**Line N - 6** **Sec 5 & 6, T19S, R38E** **Lea Co., New Mexico**	**Safety & Environmental Solutions, Inc.**



Date 6-28-99
Scale 1" = 200'

Rice Operating Company **Top of Casing Elevations**	**Line N - 6** **Sec 5 & 6, T19S, R38E** **Lea Co., New Mexico**	**Safety & Environmental Solutions, Inc.**



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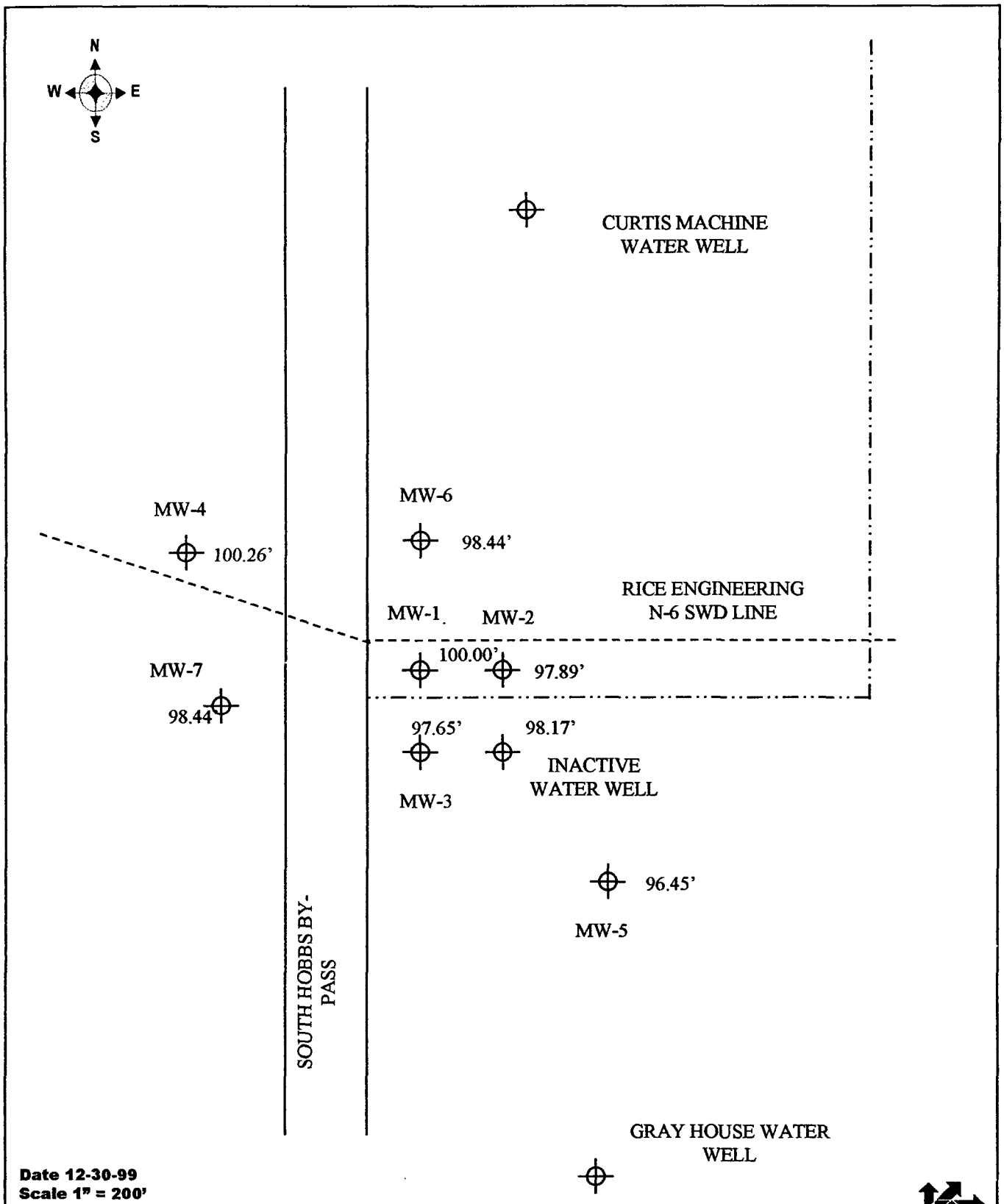
Scale 1" = 200'

Rice Operating Company **Top of Casing Elevations**	**Line N - 6** **Sec 5 & 6, T19S, R38E** **Lea Co., New Mexico**	**Safety & Environmental Solutions, Inc.**



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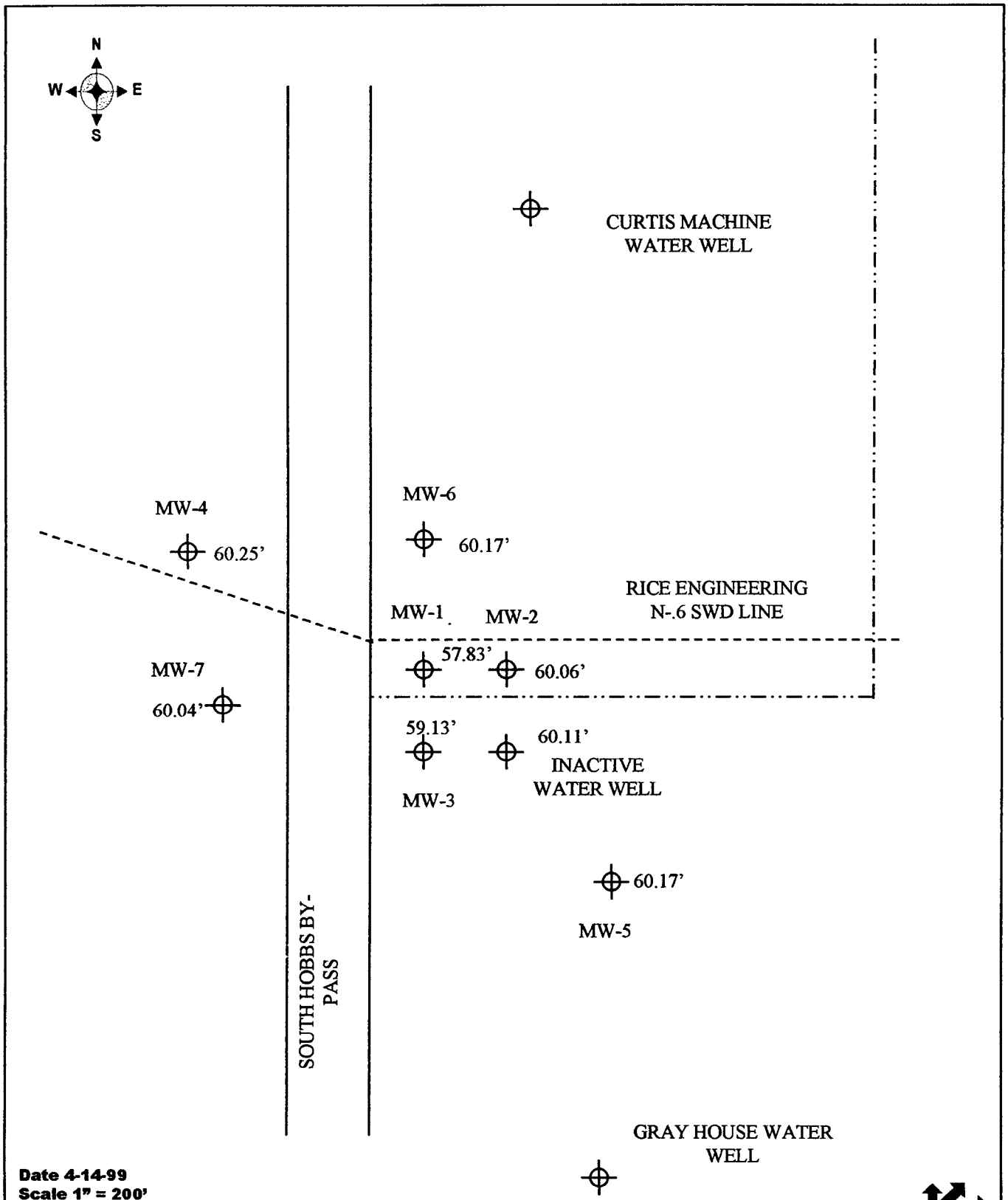
Scale 1" = 200'

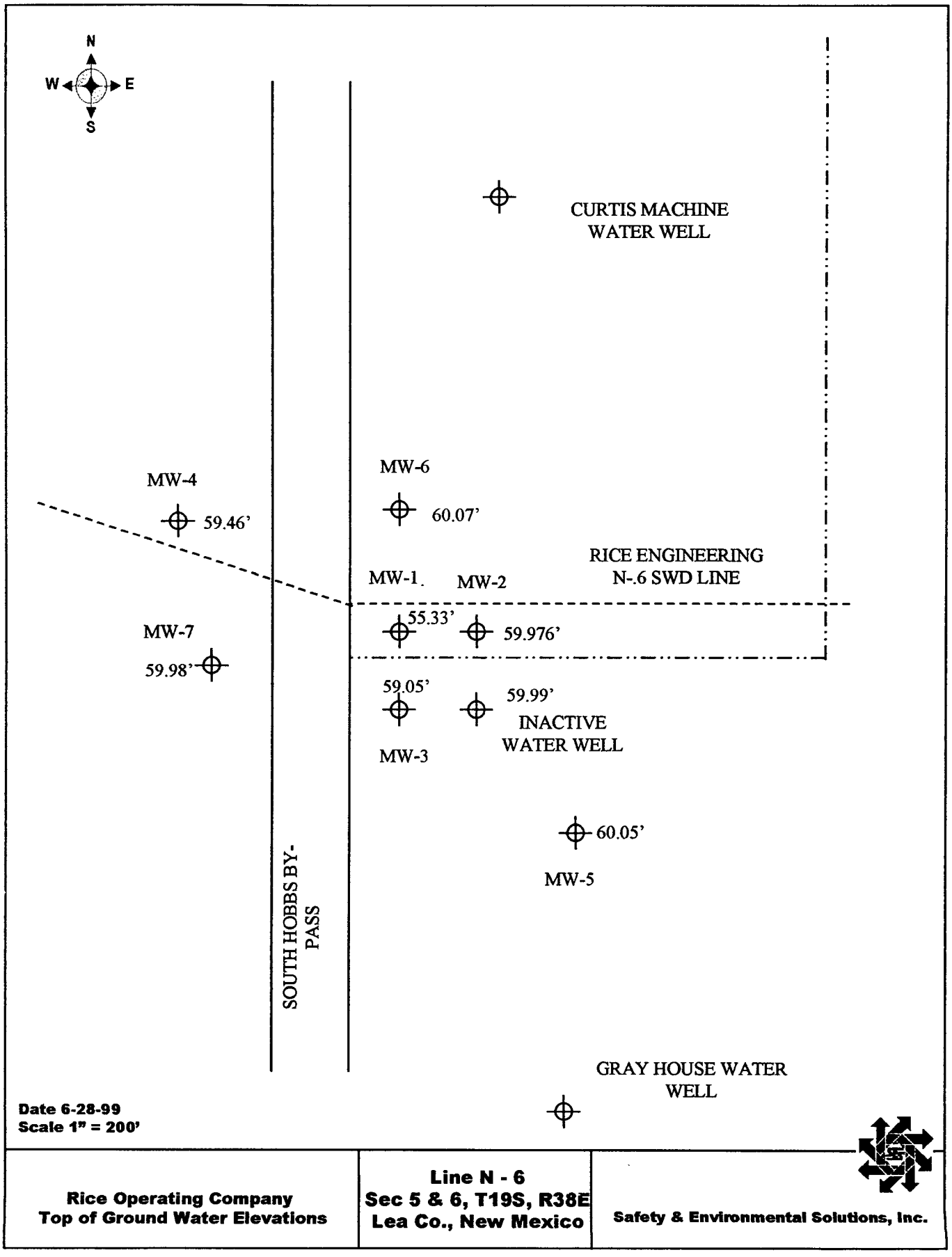
Rice Operating Company **Top of Casing Elevations**	**Line N - 6** **Sec 5 & 6, T19S, R38E** **Lea Co., New Mexico**	**Safety & Environmental Solutions, Inc.**

Figure 3
Top of Water Maps



Date 4-14-99
Scale 1" = 200'

Rice Operating Company **Top of Ground Water Elevations**	**Line N - 6** **Sec 5 & 6, T19S, R38E** **Lea Co., New Mexico**	**Safety & Environmental Solutions, Inc.**



Date 6-28-99
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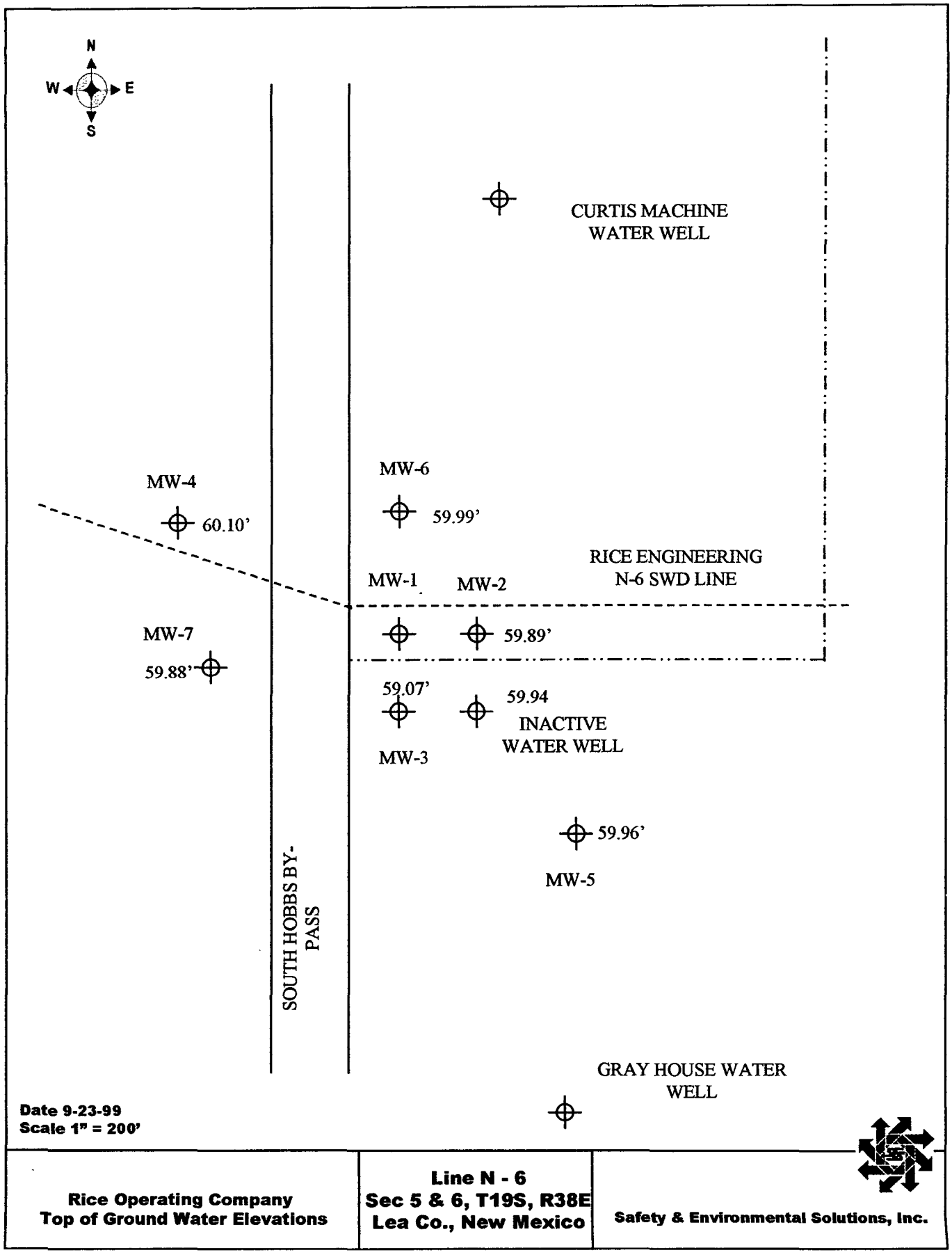

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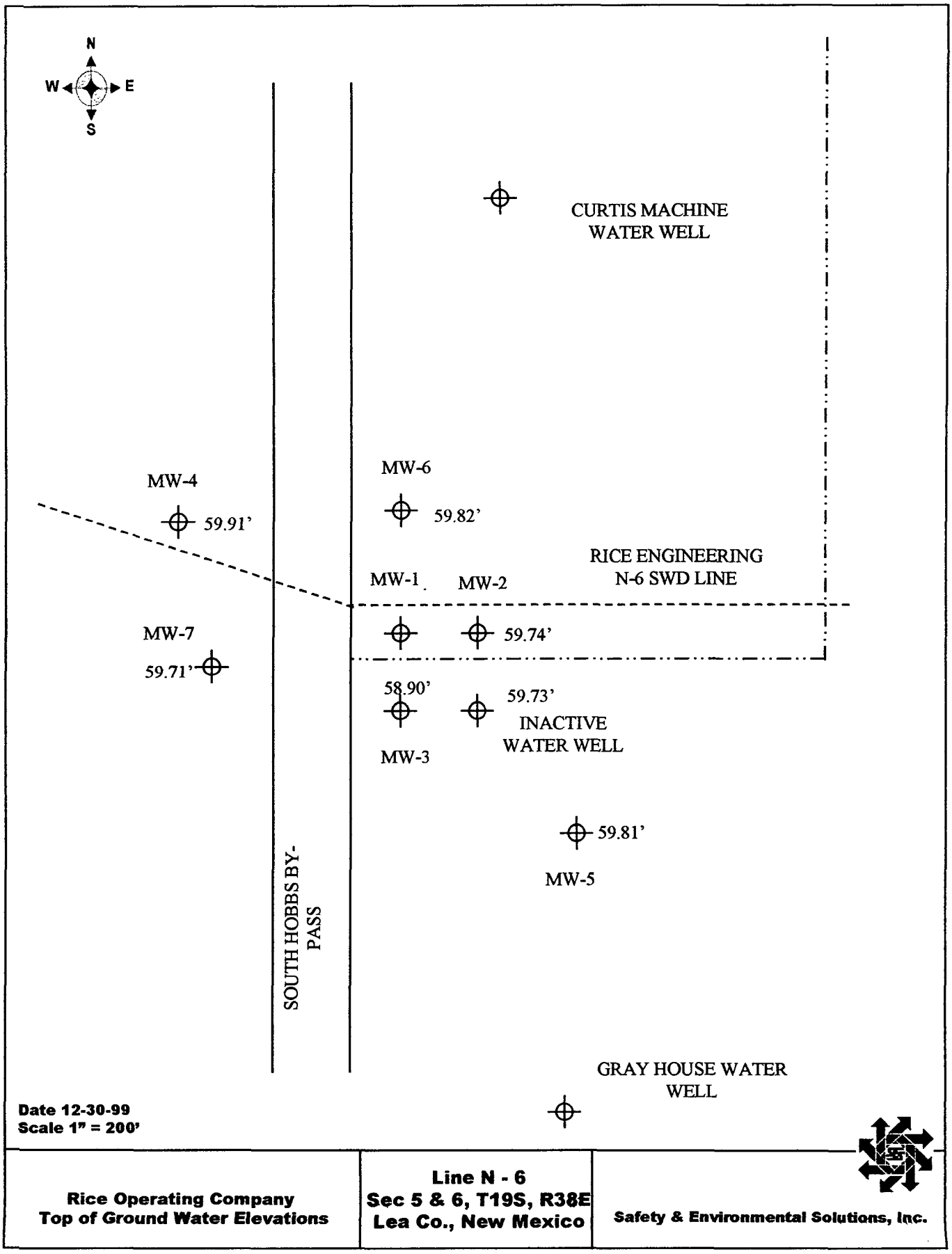
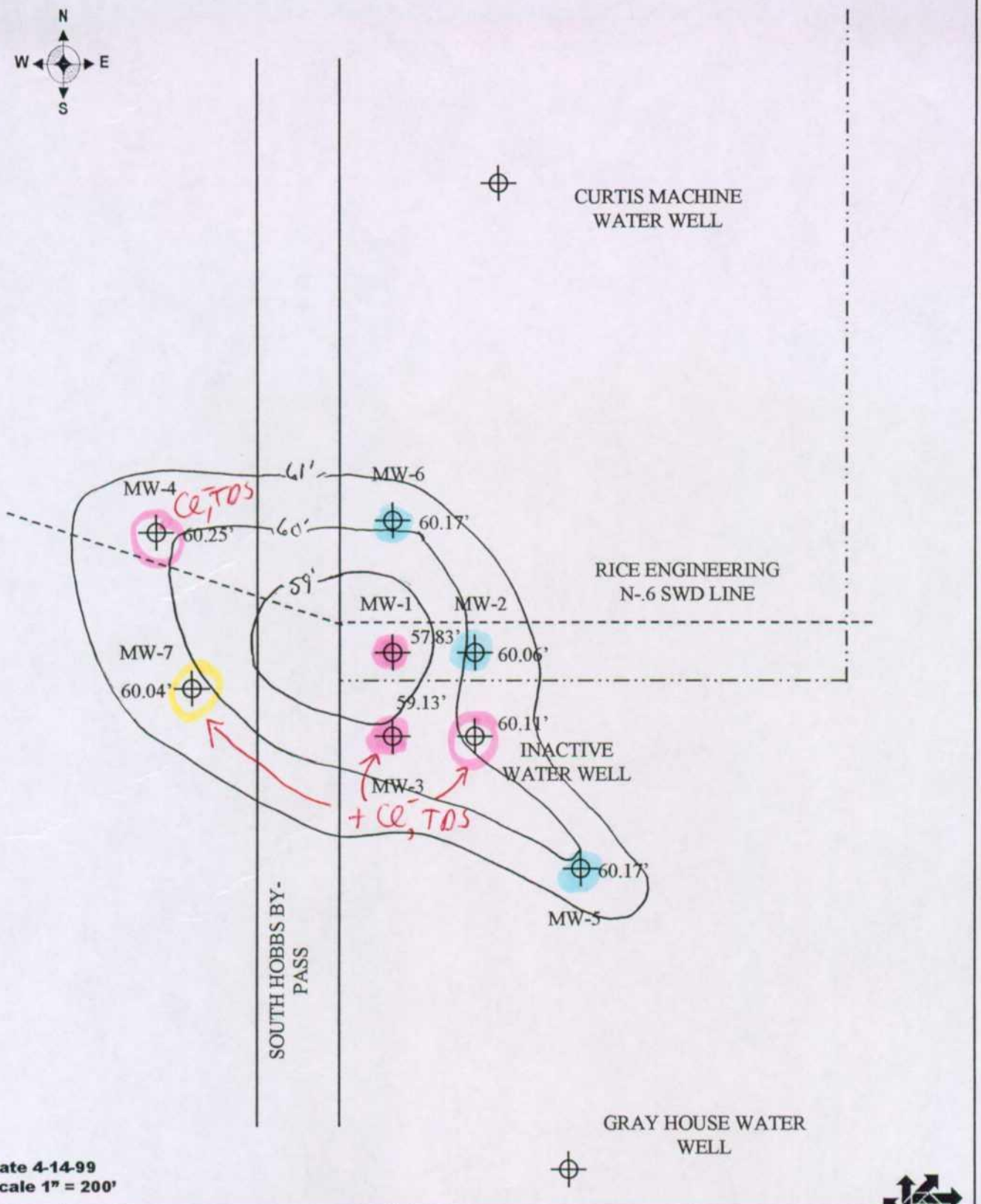


Date 12-30-99
Scale 1" = 200'

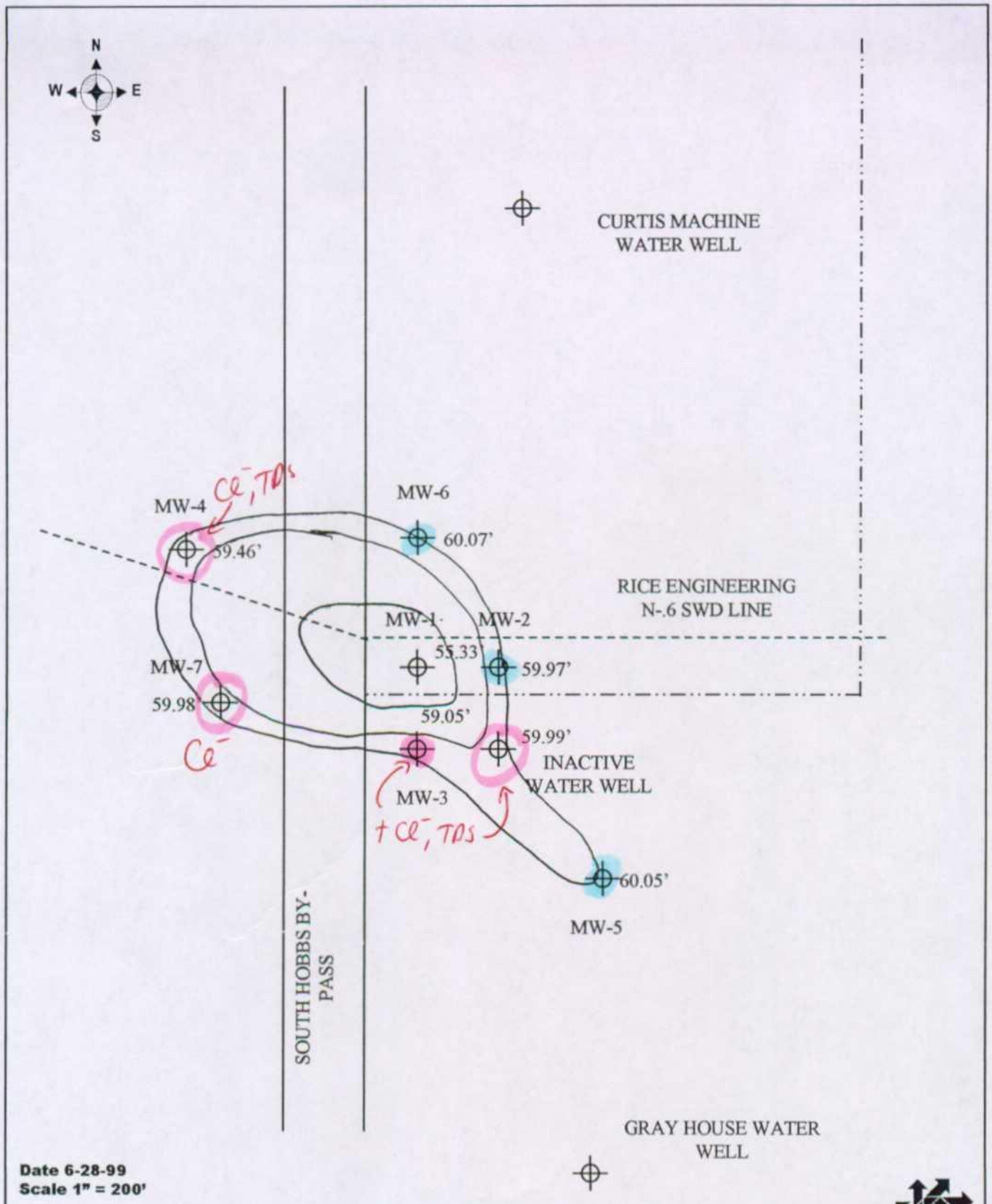
Rice Operating Company **Top of Ground Water Elevations**	**Line N - 6** **Sec 5 & 6, T19S, R38E** **Lea Co., New Mexico**	**Safety & Environmental Solutions, Inc.**

Figure 4
Ground Water Elevation Maps



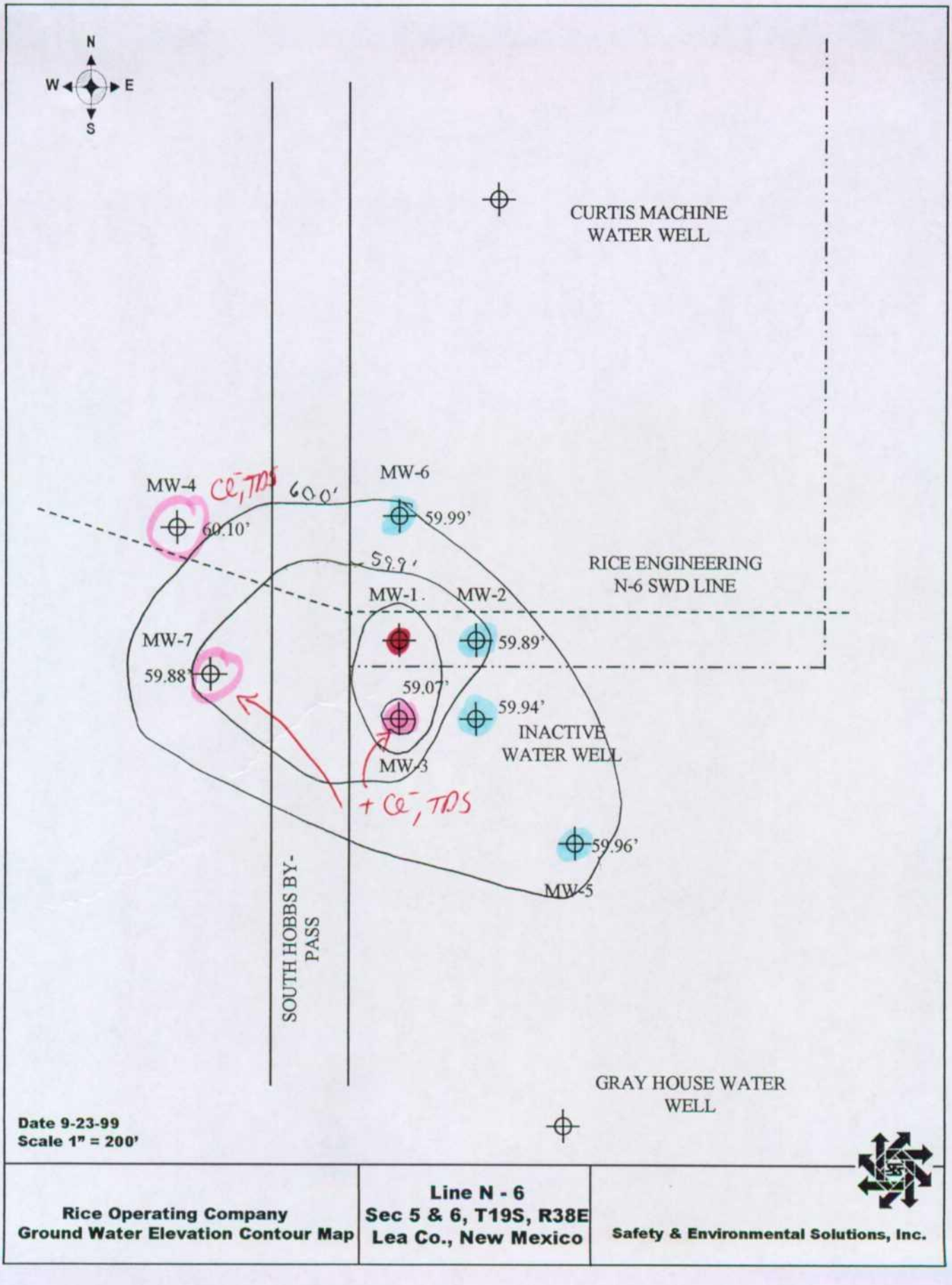
Date 4-14-99
Scale 1" = 200'

Rice Operating Company **Ground Water Elevation Contour Map**	**Line N - 6** **Sec 5 & 6, T19S, R38E** **Lea Co., New Mexico**	**Safety & Environmental Solutions, Inc.**



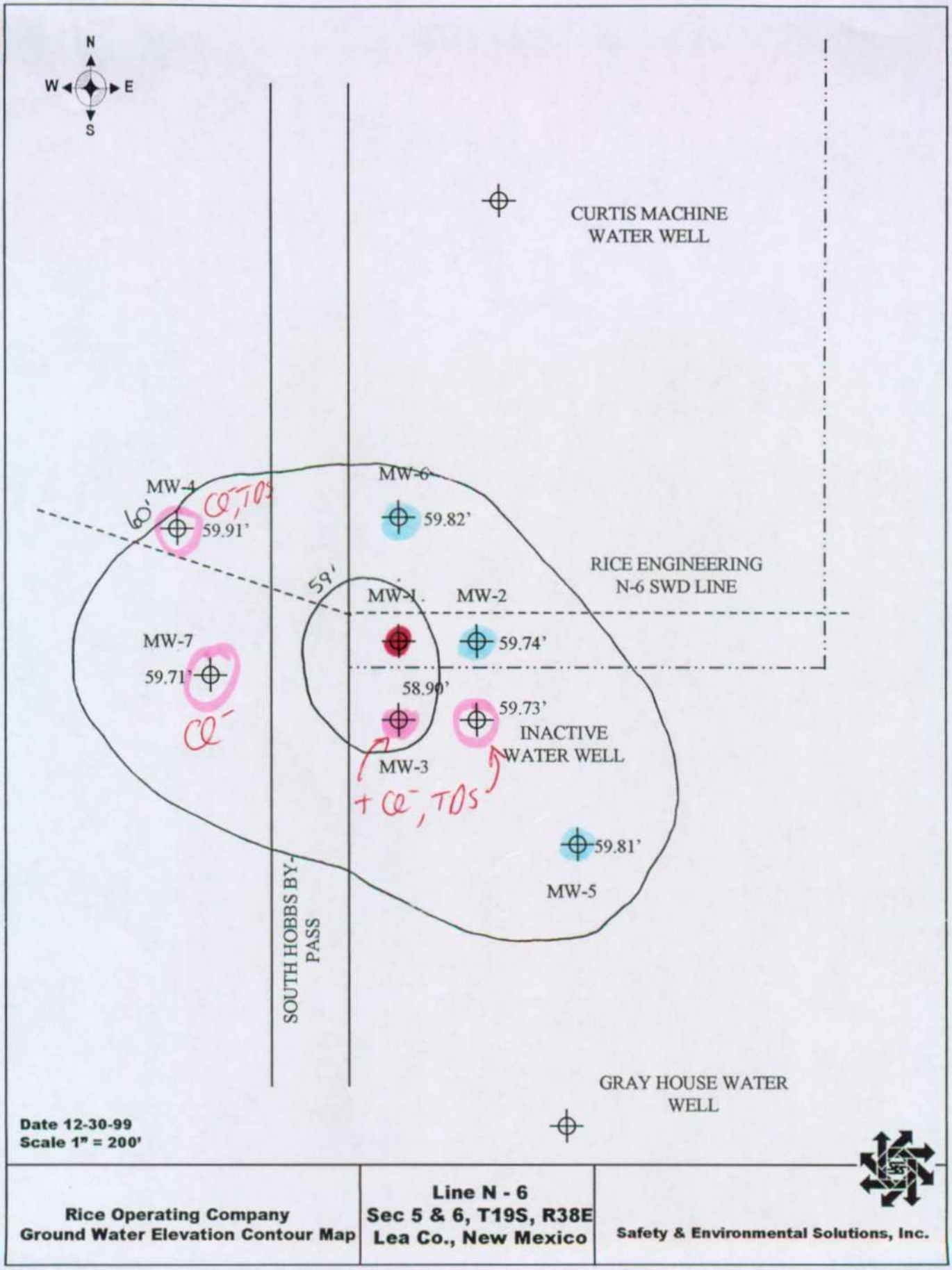
Date 6-28-99
Scale 1" = 200'

Rice Operating Company **Ground Water Elevation Contour Map**	**Line N - 6** **Sec 5 & 6, T19S, R38E** **Lea Co., New Mexico**	**Safety & Environmental Solutions, Inc.**



Date 9-23-99
Scale 1" = 200'

Rice Operating Company **Ground Water Elevation Contour Map**	**Line N - 6** **Sec 5 & 6, T19S, R38E** **Lea Co., New Mexico**	**Safety & Environmental Solutions, Inc.**



Rice Operating Company **Ground Water Elevation Contour Map**	**Line N - 6** **Sec 5 & 6, T19S, R38E** **Lea Co., New Mexico**	**Safety & Environmental Solutions, Inc.**

Figure 5
Cumulative Well Test Data

Cumulative Data on Line N-6 (West County Road) Monitor Wells

Monitor Well #1

Contaminant	WQCC Standard	Initial Test 4/07/99	Test Date 6/28/99	Test Date 9/17/99	Test Date 12/13/99
Sodium	N/A	728 ppm	*	*	*
Calcium	N/A	48 ppm	*	*	*
Magnesium	N/A	79 ppm	*	*	*
Potassium	N/A	37 ppm	*	*	*
Conductivity	N/A	4710 ppm	*	*	*
T-Alkalinity	N/A	200 ppm	*	*	*
Chlorides	250 ppm	1286 ppm	*	*	*
Sulfate (SO_4)	600 ppm	61 ppm	*	*	*
Carbonate (CO_3)	N/A	0 ppm	*	*	*
HCO_3	N/A	244 ppm	*	*	*
TDS	1000.0 ppm	1820 ppm	*	*	*
pH	> 6 & <9	8.12	*	*	*
Benzene	0.01 ppm	2.85 ppm	*	*	*
Toluene	0.75 ppm	1.33 ppm	*	*	*
Ethyl Benzene	0.75 ppm	2.52 ppm	*	*	*
Total Xylenes	0.62 ppm	2.55 ppm	*	*	*

*Free product in well – no water samples obtained.

Monitor Well #2

Contaminant	WQCC Standard	Initial Test 4/06/99	Test Date 6/28/99	Test Date 9/17/99	Test Date 12/14/99
Sodium	N/A	20 ppm	7 ppm	31 ppm	63 ppm
Calcium	N/A	62 ppm	75 ppm	72 ppm	58 ppm
Magnesium	N/A	29 ppm	27 ppm	21 ppm	13 ppm
Potassium	N/A	3.62 ppm	3.41 ppm	3.01 ppm	4.4 ppm
Conductivity	N/A	718 ppm	670 ppm	682 ppm	663 ppm
T-Alkalinity	N/A	184 ppm	188 ppm	188 ppm	204 ppm
Chlorides	250 ppm	40 ppm	44 ppm	45 ppm	41 ppm
Sulfate (SO_4)	600 ppm	80 ppm	66 ppm	83.01 ppm	77.6 ppm
Carbonate (CO_3)	N/A	0 ppm	0 ppm	0 ppm	0 ppm
HCO_3	N/A	224 ppm	229 ppm	229 ppm	249 ppm
TDS	1000.0 ppm	464 ppm	426 ppm	528 ppm	596 ppm
pH	> 6 & <9	7.82	7.37	7.59	7.76
Benzene	0.01 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Toluene	0.75 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Ethyl Benzene	0.75 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Total Xylenes	0.62 ppm	<0.006 ppm	<0.006 ppm	<0.006 ppm	<0.006 ppm

Monitor Well #3

Contaminant	WQCC Standard	Initial Test 4/07/99	Test Date 6/28/99	Test Date 9/17/99	Test Date 12/14/99
Sodium	N/A	6251 ppm	4531 ppm	4614 ppm	6074 ppm
Calcium	N/A	928 ppm	916 ppm	1120 ppm	138 ppm
Magnesium	N/A	388 ppm	301 ppm	243 ppm	29 ppm
Potassium	N/A	68 ppm	56.3 ppm	52.19 ppm	34.9 ppm
Conductivity	N/A	37800 ppm	21500 ppm	1856 ppm	23900 ppm
T-Alkalinity	N/A	340 ppm	272 ppm	236 ppm	300 ppm
Chlorides	250 ppm	11770 ppm	8567 ppm	8922 ppm	9093 ppm
Sulfate (SO_4)	600 ppm	640 ppm	1067 ppm	1052 ppm	581 ppm
Carbonate (CO_3)	N/A	0 ppm	0 ppm	0 ppm	0 ppm
HCO_3	N/A	415 ppm	332 ppm	288 ppm	366 ppm
TDS	1000.0 ppm	20470 ppm	15660 ppm	17730 ppm	18120 ppm
pH	> 6 & <9	6.87	6.62	6.86	7.12
Benzene	0.01 ppm	.953 ppm	0.673 ppm	0.715 ppm	0.761 ppm
Toluene	0.75 ppm	0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Ethyl Benzene	0.75 ppm	0.004 ppm	0.002 ppm	<0.002 ppm	0.003 ppm
Total Xylenes	0.62 ppm	<0.006 ppm	<0.006 ppm	<0.006 ppm	<0.006 ppm

Monitor Well #4

Contaminant	WQCC Standard	Initial Test 4/06/99	Test Date 6/28/99	Test Date 9/17/99	Test Date 12/13/99
Sodium	N/A	44 ppm	46 ppm	61 ppm	191 ppm
Calcium	N/A	142 ppm	142 ppm	138 ppm	113 ppm
Magnesium	N/A	51 ppm	49 ppm	50 ppm	26 ppm
Potassium	N/A	5.44 ppm	5.82 ppm	4.87 ppm	5.3 ppm
Conductivity	N/A	1536 ppm	1500 ppm	1436 ppm	1499 ppm
T-Alkalinity	N/A	168 ppm	180 ppm	176 ppm	204 ppm
Chlorides	250 ppm	297 ppm	279 ppm	300 ppm	372 ppm
Sulfate (SO_4)	600 ppm	78 ppm	88 ppm	87.56 ppm	79.3 ppm
Carbonate (CO_3)	N/A	0 ppm	0 ppm	0 ppm	0 ppm
HCO_3	N/A	205 ppm	220 ppm	215 ppm	249 ppm
TDS	1000.0 ppm	1088 ppm	1080 ppm	1187 ppm	1260 ppm
pH	> 6 & <9	7.65	7.18	7.38	7.55
Benzene	0.01 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Toluene	0.75 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Ethyl Benzene	0.75 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Total Xylenes	0.62 ppm	<0.006 ppm	<0.006 ppm	<0.006 ppm	<0.006 ppm

Monitor Well #5

Contaminant	WQCC Standard	Initial Test 4/06/99	Test Date 6/28/99	Test Date 9/17/99	Test Date 12/13/99
Sodium	N/A	7 ppm	26 ppm	33 ppm	54 ppm
Calcium	N/A	75 ppm	85 ppm	83 ppm	67 ppm
Magnesium	N/A	33 ppm	23 ppm	21 ppm	22 ppm
Potassium	N/A	3.01 ppm	2.71 ppm	2.92 ppm	4.9 ppm
Conductivity	N/A	770 ppm	763 ppm	718 ppm	693 ppm
T-Alkalinity	N/A	196 ppm	208 ppm	208 ppm	228 ppm
Chlorides	250 ppm	40 ppm	44 ppm	49 ppm	45 ppm
Sulfate (SO_4)	600 ppm	87 ppm	93 ppm	88.59 ppm	84.4 ppm
Carbonate (CO_3)	N/A	0 ppm	0 ppm	0 ppm	0 ppm
HCO_3	N/A	239 ppm	254 ppm	254 ppm	278 ppm
TDS	1000.0 ppm	491 ppm	449 ppm	484 ppm	596 ppm
pH	> 6 & <9	7.78	7.63	7.75	7.75
Benzene	0.01 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Toluene	0.75 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Ethyl Benzene	0.75 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Total Xylenes	0.62 ppm	<0.006 ppm	<0.006 ppm	<0.006 ppm	<0.006 ppm

Monitor Well #6

Contaminant	WQCC Standard	Initial Test 4/06/99	Test Date 6/28/99	Test Date 9/17/99	Test Date 12/13/99
Sodium	N/A	21 ppm	25 ppm	18 ppm	39 ppm
Calcium	N/A	59 ppm	66 ppm	69 ppm	56 ppm
Magnesium	N/A	24 ppm	23 ppm	25 ppm	22 ppm
Potassium	N/A	3.18 ppm	2.86 ppm	3.22 ppm	3.8 ppm
Conductivity	N/A	663 ppm	644 ppm	643 ppm	586 ppm
T-Alkalinity	N/A	192 ppm	196 ppm	208 ppm	216 ppm
Chlorides	250 ppm	20 ppm	28 ppm	24 ppm	24 ppm
Sulfate (SO_4)	600 ppm	74 ppm	78 ppm	74.32 ppm	68.2 ppm
Carbonate (CO_3)	N/A	0 ppm	0 ppm	0 ppm	0 ppm
HCO_3	N/A	234 ppm	239 ppm	254 ppm	264 ppm
TDS	1000.0 ppm	436 ppm	378 ppm	428 ppm	576 ppm
pH	> 6 & <9	7.84	7.43	7.33	7.59
Benzene	0.01 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Toluene	0.75 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Ethyl Benzene	0.75 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Total Xylenes	0.62 ppm	<0.006 ppm	<0.006 ppm	<0.006 ppm	<0.006 ppm

Monitor Well #7

Contaminant	WQCC Standard	Initial Test 4/06/99	Test Date 6/28/99	Test Date 9/17/99	Test Date 12/13/99
Sodium	N/A	79 ppm	122 ppm	140 ppm	233 ppm
Calcium	N/A	120 ppm	126 ppm	118 ppm	73 ppm
Magnesium	N/A	57 ppm	33 ppm	32 ppm	9.3 ppm
Potassium	N/A	6.55 ppm	5.00 ppm	5.21 ppm	4.4 ppm
Conductivity	N/A	1663 ppm	1568 ppm	1535 ppm	1401 ppm
T-Alkalinity	N/A	252 ppm	248 ppm	260 ppm	264 ppm
Chlorides	250 ppm	245 ppm	255 ppm	255 ppm	258 ppm
Sulfate (SO_4)	600 ppm	114 ppm	111 ppm	113.11 ppm	101 ppm
Carbonate (CO_3)	N/A	0 ppm	0 ppm	0 ppm	0 ppm
HCO_3	N/A	307 ppm	303 ppm	317 ppm	322 ppm
TDS	1000.0 ppm	1000 ppm	938 ppm	1685 ppm	996 ppm
pH	> 6 & <9	7.57	7.23	7.42	7.46
Benzene	0.01 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Toluene	0.75 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Ethyl Benzene	0.75 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Total Xylenes	0.62 ppm	<0.006ppm	<0.006 ppm	<0.006 ppm	<0.006 ppm

Inactive Water Well #1

Contaminant	WQCC Standard	Initial Test 4/07/99	Test Date 6/28/99	Test Date 9/17/99	Test Date 12/14/99
Sodium	N/A	930 ppm	1149 ppm	104 ppm	345 ppm
Calcium	N/A	80 ppm	116 ppm	74 ppm	54 ppm
Magnesium	N/A	316 ppm	79 ppm	21 ppm	26 ppm
Potassium	N/A	17 ppm	14.94 ppm	5.44 ppm	10.1 ppm
Conductivity	N/A	7790 ppm	5690 ppm	1028 ppm	1990 ppm
T-Alkalinity	N/A	160 ppm	208 ppm	184 ppm	212 ppm
Chlorides	250 ppm	2275 ppm	1893 ppm	166 ppm	505 ppm
Sulfate (SO_4)	600 ppm	173 ppm	248 ppm	84.31 ppm	78.1 ppm
Carbonate (CO_3)	N/A	0 ppm	0 ppm	0 ppm	0 ppm
HCO_3	N/A	195 ppm	254 ppm	224 ppm	259 ppm
TDS	1000.0 ppm	3310 ppm	2780 ppm	626 ppm	1260 ppm
pH	> 6 & <9	6.97	7.23	7.61	7.78
Benzene	0.01 ppm	0.063 ppm	0.013 ppm	<0.002 ppm	0.004 ppm
Toluene	0.75 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Ethyl Benzene	0.75 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm	<0.002 ppm
Total Xylenes	0.62 ppm	<0.006ppm	<0.006 ppm	<0.006 ppm	<0.006 ppm

Figure 6
Cumulative Water Elevation Table

Cumulative Water Elevation Tables on Line N-6 (West County Road)
Monitor Wells

Monitor Well	Casing Elevation	Elevation 4/07/99	Elevation 6/28/99	Elevation 9/17/99	Elevation 12/13/99
#1	100.0'	57.83'	55.33'	*	*
#2	97.89'	60.06'	59.97'	59.89	59.74'
#3	97.65'	59.13'	59.05'	59.07'	58.90'
#4	100.26'	60.25'	59.46'	60.10'	59.91'
#5	96.45'	60.17'	60.05'	59.96'	59.81'
#6	98.44'	60.17'	60.07'	59.99'	59.82'
#7	98.44'	60.04'	59.98'	59.88'	59.71'
IWW	98.17'	60.11'	59.99'	59.94'	59.73'

***Free product in well – no water level obtained.**

Figure 7
Skimmer Pump Recovery Table

Line N-6 Site
Monitor Well #1

Skimmer Pump
Recovery Table

December 31, 1999

Date	Time	TOO (Feet)	TOW (Feet)	Oil Column (Feet)	Fluid Recovered	YTD Oil Recovered	YTD Water Recovered
9/30/99	8:00am						
10/1/99	5:00pm	40.13	40.13	0.00			
10/4/99	6:55am	40.02	41.13	1.11			
10/4/99	3:45pm	40.13	40.14	0.01			
10/5/99	7:15am	40.13	40.40	0.27			
10/5/99	3:40pm	40.13	40.14	0.01			
10/6/99	6:55am	40.13	40.40	0.27			
10/6/99	3:45pm	40.16	40.17	0.01			
10/7/99	7:10am	40.14	40.40	0.26			
10/7/99	3:35pm	40.175	40.180	0.005			
10/14/99	8:00am	40.14	40.69	0.55	28gal.	18gal.	10gal.
10/15/99	8:00am	40.18	40.18	0.00	12gal.	24gal.	16 gal.
10/18/99	8:00am	40.06	41.00	0.94			
10/19/99	8:00am	40.02	40.02	0.00	18gal.	30gal.	28gal.
10/26/99	8:00am	38.68	39.33	0.65	10gal.	32gal.	36gal.
10/26/99	2:00pm				6.5gal.		
11/1/99	7:30am	40.01	41.09	1.08			
11/2/99	9:30am	40.22	40.22	0.00			
11/4/99	9:30am	40.15	40.73	0.58			
11/5/99	9:30am	41.18	41.18	0.00			
11/8/99	1:30pm	40.12	40.90	0.78	73gal.		
11/9/99	5:00pm	40.15	40.15	0.00	33.5gal.		
11/16/99	8:20am	39.97	42.11	2.14			
11/16/99	5:20pm	38.97	39.45	0.48	11gal.		
11/19/99	8:45am	40.10	41.41	1.31			
11/19/99	4:45pm	40.14	40.86	0.72	.5gal		
11/22/99	7:30am	40.10	41.45	1.35			
11/22/99	4:00pm	40.10	40.60	0.50	14.5gal.		
11/29/99	8:00am	40.14	41.41	1.27			
11/29/99	4:00pm	40.19	40.91	0.72	18.5gal.		
12/6/99	8:00am	40.13	41.55	1.42			
12/6/99	5:00pm	40.22	41.02	0.80	4.5gal.		
12/13/99	10:00am	40.03	42.23	2.20			
12/13/99	5:00pm	40.23	41.05	0.82	4.5gal.		
12/17/99	8:00am	40.12	41.85	1.73			
12/17/99	6:00pm	40.27	41.05	0.78	2gal.		
12/20/99	8:00am	40.17	41.55	1.38			
12/20/99	4:30pm	40.34	40.65	0.31	3gal.		
12/23/99	8:30am	40.23	41.21	0.98			
12/24/99	7:30am	40.27	41.15	0.88	5gal.		

Figure 8
Laboratory Analytical Results

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: BOB ALLEN
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO:

Receiving Date: 04/07/99
Reporting Date: 04/09/99
Project Number: NOT GIVEN
Project Name: MONITOR WELLS
Project Location: RICE OPERATING, WEST CO. RD.

Sampling Date: 04/07/99
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (u mhos/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:		04/08/99	04/08/99	04/08/99	04/08/99	04/08/99	04/08/99
H4093-6	MW-3	6251	928	388	68	37800	340
H4093-7	MW-1	728	48	79	37	4710	200
H4093-8	WATER WELL	930	80	316	17	7790	160
Quality Control		NR	40	51	9.65	1402	NR
True Value QC		NR	50	50	8.00	1413	NR
% Accuracy		NR	80	102	119	99	NR
Relative Percent Difference		NR	0.2	9.8	-	0.1	NR
METHODS:			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

		Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		04/08/99	04/08/99	04/08/99	04/08/99	04/08/99	04/09/99
H4093-6	MW-3	11770	649	0	415	6.87	20470
H4093-7	MW-1	1286	61	0	244	8.12	1820
H4093-8	WATER WELL	2275	173	0	195	6.97	3310
Quality Control		1127	48.87	112	221	7.06	NR
True Value QC		1319	50.00	124	259	7.00	NR
% Accuracy		85	98	90	85	101	NR
Relative Percent Difference		1.8	1.6	-	-	5.7	1.2
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Gayle A. Potter, Chemist

04/08/99
Date

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: BOB ALLEN
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO:

Receiving Date: 04/07/99
Reporting Date: 04/08/99
Project Number: NOT GIVEN
Project Name: MONITOR WELLS
Project Location: RICE OPERATING, WEST CO. RD.

Sampling Date: 04/07/99
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		04/07/99	04/07/99	04/07/99	04/07/99
H4093-6	MW-3	0.953	0.002	0.004	<0.006
H4093-7	MW-1	2.85	1.33	2.52	2.55
H4093-8	WATER WELL	0.063	<0.002	<0.002	<0.006
Quality Control		0.090	0.096	0.090	0/275
True Value QC		0.100	0.100	0.100	0.300
% Recovery		89.7	95.7	90.0	91.6
Relative Percent Difference		1.6	4.3	4.8	2.2

METHOD: EPA SW 846-8260

Chemist

4/8/99
Date

H4093C.XLS

CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 (915) 673-7001 Fax (915) 673-7020
101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

H4093

Page ____ of ____

Company Name:	SESE	BILL TO	PO #:
Project Manager:	Bob Allen	Company:	SESE
Address:		Attn:	
City: Hobbs	State: NM Zip:	Address:	
Phone #:	397-0510	City:	
Fax #:		State:	Zip:
Project #:	Project Owner: Rice	Phone #:	
Project Name:		Fax #:	
Project Location:			

ANALYSIS REQUEST

FOR LAB USE ONLY LAB I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRES.: ACID:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME	Cations / Anions	BTEX											
H4093-6	MW-3		3	✓									04/07/99	11:30	✓	✓											
H4093-7	MW-1		2	✓										3:40	✓	✓											
H4093-8	WATER WELL		3	✓										1:18	✓	✓											

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Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Date:	Received By:	Phone Result ☐ Yes ☐ No Additional Fax #:
	Time:		Fax Result: ☐ Yes ☐ No
Relinquished By:	Date: 04/07/99	Received By: (Lab Staff)	REMARKS:
	Time: 4:30		
Delivered By: (Circle One)	Sample Condition: Cool ☒ Yes ☐ No; Intact ☒ Yes ☐ No	CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other:			

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.

CARDINAL LABORATORIES

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PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: BOB ALLEN
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO:

Receiving Date: 04/06/99
Reporting Date: 04/08/99
Project Number: NOT GIVEN
Project Name: MONITOR WELLS
Project Location: RICE OPERATING, WEST CO. RD.

Sampling Date: 04/06/99
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (u mhos/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:		04/07/99	04/07/99	04/07/99	04/07/99	04/08/99	04/07/99
H4093-1	MW-2	20	62	29	3.62	718	184
H4093-2	MW-4	44	142	51	5.44	1536	168
H4093-3	MW-5	7	75	33	3.01	770	196
H4093-4	MW-6	21	59	24	3.18	663	192
H4093-5	MW-7	79	120	57	6.55	1663	252
Quality Control		NR	40	51	9.65	1402	NR
True Value QC		NR	50	50	8.00	1413	NR
% Accuracy		NR	80	102	119	99	NR
Relative Percent Difference		NR	0.2	9.8	-	0.1	NR
METHODS:			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

		Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		04/07/99	04/07/99	04/07/99	04/07/99	04/08/99	04/08/99
H4093-1	MW-2	40	80	0	224	7.82	464
H4093-2	MW-4	297	78	0	205	7.65	1088
H4093-3	MW-5	40	87	0	239	7.78	491
H4093-4	MW-6	20	74	0	234	7.84	436
H4093-5	MW-7	245	114	0	307	7.57	1000
Quality Control		1127	48.87	112	221	7.06	NR
True Value QC		1319	50.00	124	259	7.00	NR
% Accuracy		85	98	90	85	101	NR
Relative Percent Difference		1.8	1.6	-	-	5.7	1.2
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Gayle A. Potter, Chemist

04/06/99
Date

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: BOB ALLEN
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO:

Receiving Date: 04/06/99
Reporting Date: 04/07/99
Project Number: NOT GIVEN
Project Name: MONITOR WELLS
Project Location: RICE OPERATING, WEST CO. RD.

Sampling Date: 04/06/99
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		04/06/99	04/06/99	04/06/99	04/06/99
H4093-1	MW-2	<0.002	<0.002	<0.002	<0.006
H4093-2	MW-4	<0.002	<0.002	<0.002	<0.006
H4093-3	MW-5	<0.002	<0.002	<0.002	<0.006
H4093-4	MW-6	<0.002	<0.002	<0.002	<0.006
H4093-5	MW-7	<0.002	<0.002	<0.002	<0.006
Quality Control		0.091	0.100	0.094	0.281
True Value QC		0.100	0.100	0.100	0.300
% Recovery		91.2	99.8	94.3	93.6
Relative Percent Difference		0.5	2.7	3.4	2.2

METHOD: EPA SW 846-8260

Chemist

4/7/99
Date

H4093A.XLS

CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 (915) 673-7001 Fax (915) 673-7020
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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

H4093

Page ____ of ____

Company Name:	SESI	BILL TO	PO #:
Project Manager:	Bob Allen	Company:	
Address:		Attn:	
City:	State: Zip:	Address:	
Phone #:		City:	
Fax #:		State:	Zip:
Project #:	Project Owner:	Phone #:	
Project Name:	Monitor Wells	Fax #:	
Project Location:	Rice Operating West Co. Rd		

FOR LAB USE ONLY				MATRIX							PRES.			SAMPLING		ANALYSIS REQUEST										
LAB I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID:	ICE / COOL	OTHER:	DATE	TIME	Cation & Anion	BTEX										
H-4093-1	MW-2		3	✓							✓		4-6-99	5:00pm	✓	✓										
H-4093-2	MW-4		3	✓							✓		"	"	✓	✓										
H-4093-3	MW-5		3	✓							✓		"	"	✓	✓										
H-4093-4	MW-6		3	✓							✓		"	"	✓	✓										
H-4093-5	MW-7		3	✓							✓		"	"	✓	✓										
				✓																						

Sampler Relinquished:	Date: 4-6-99	Received By:	Phone Result ☐ Yes ☐ No Additional Fax #:
	Time: 5:00 pm		Fax Result: ☐ Yes ☐ No
Relinquished By:	Date:	Received By: (Lab Staff)	REMARKS:
	Time:		
Delivered By: (Circle One)	Sample Condition: Cool ☒ Yes ☐ No; Intact ☒ Yes ☐ No	CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other:			

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: BOB ALLEN
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO:

Receiving Date: 06/28/99
Reporting Date: 06/30/99
Project Number: NOT GIVEN
Project Name: WEST CO. ROAD
Project Location: NOT GIVEN

Sampling Date: 06/28/99
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: JP
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (u mhos/cm)	T-Alkalinity (mgCaCO3/L)
ANALYSIS DATE:		06/29/99	06/29/99	06/29/99	06/29/99	06/30/99	06/29/99
H4213-1	MW-2	7	75	27	3.41	670	188
H4213-2	MW-3	4531	916	301	56.3	21500	272
H4213-3	MW-4	46	142	49	5.82	1500	180
H4213-4	MW-5	26	85	23	2.71	763	208
H4213-5	MW-6	25	66	23	2.86	644	196
H4213-6	MW-7	122	126	33	5.00	1568	248
H4213-7	IWW-1	1149	116	79	14.94	5690	208
Quality Control		NR	40	58	4.96	1402	NR
True Value QC		NR	50	50	5.00	1413	NR
% Accuracy		NR	80	116	99	99.2	NR
Relative Percent Difference		NR	0	1.6	0	0.1	NR
METHODS: EPA 600/4-79-020			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

LAB NUMBER	SAMPLE ID	Cl (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		06/29/99	06/29/99	06/29/99	06/29/99	06/29/99	06/30/99
H4213-1	MW-2	44	66	0	229	7.37	426
H4213-2	MW-3	8567	1067	0	332	6.62	15660
H4213-3	MW-4	279	88	0	220	7.18	1080
H4213-4	MW-5	44	93	0	254	7.63	449
H4213-5	MW-6	28	78	0	239	7.43	378
H4213-6	MW-7	255	111	0	303	7.23	938
H4213-7	IWW-1	1893	248	0	254	7.23	2780
Quality Control		1295	48.48	112	221	6.96	NR
True Value QC		1319	50.00	124	259	7.00	NR
% Accuracy		98	97	90.3	85.4	99.4	NR
Relative Percent Difference		2.3	4.4	-	-	1.4	0.4
METHODS: EPA 600/4-79-020		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Burgess J. A. Cooke
Chemist

6/30/99
Date

H4213B.XLS

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: BOB ALLEN
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO:

Receiving Date: 06/28/99
Reporting Date: 06/29/99
Project Number: NOT GIVEN
Project Name: WEST CO. ROAD
Project Location: NOT GIVEN

Sampling Date: 06/28/99
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: JP
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		06/28/99	06/28/99	06/28/99	06/28/99
H4213-1	MW-2	<0.002	<0.002	<0.002	<0.006
H4213-2	MW-3	0.673	<0.002	0.002	<0.006
H4213-3	MW-4	<0.002	<0.002	<0.002	<0.006
H4213-4	MW-5	<0.002	<0.002	<0.002	<0.006
H4213-5	MW-6	<0.002	<0.002	<0.002	<0.006
H4213-6	MW-7	<0.002	<0.002	<0.002	<0.006
H4213-7	IWW-1	0.013	<0.002	<0.002	<0.006
Quality Control		0.092	0.100	0.104	0.309
True Value QC		0.100	0.100	0.100	0.300
% Recovery		92.0	99.9	104	103
Relative Percent Difference		7.0	2.4	3.2	2.9

METHOD: EPA SW 846-8021B, 5030, 5021 Gas Chromatography

Chemist

6/29/99
Date

H4213A.XLS

CARDINAL LABORATORIES, INC.

2111 Beechwood, Abilene, TX 79603 (915) 673-7001 Fax (915) 673-7020
101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 1 of 1

Company Name:	Safety & Env. Solutions	BILL TO	PO #:
Project Manager:	Allen	Company:	
Address:	703 E Clinton Suite 103	Attn:	
City:	Hobbs State: NM Zip: 88240	Address:	
Phone #:	(505) 397-0510	City:	
Fax #:		State:	Zip:
Project #:	Project Owner:	Phone #:	
Project Name:	West Co Rd	Fax #:	
Project Location:			

FOR LAB USE ONLY				MATRIX							PRES.			SAMPLING		ANALYSIS REQUEST														
LAB I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID:	ICE / COOL	OTHER:	DATE	TIME	BTEX	Major Cats - Anions														
H4213-1	MW-2	G	1	X									6-28-99	11:50	X	X														
H4213-2	MW-3	G	1	X									6-28-99	10:30	X	X														
H4213-3	MW-4	G	1	X									6-28-99	12:46	X	X														
H4213-4	MW-5	G	1	X									6-28-99	11:18	X	X														
H4213-5	MW-6	G	1	X									6-28-99	12:10	X	X														
H4213-6	MW-7	G	1	X									6-28-99	1:00	X	X														
H4213-7	TMW-1	G	1	X									6-28-99	9:15	X	X														
4213																														

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Date: 6-28-99	Received By:	Phone Result ☐ Yes ☐ No Additional Fax #:
	Time: 5:55		Fax Result: ☐ Yes ☐ No
Relinquished By:	Date: 6/28/99	Received By: (Lab Staff)	REMARKS:
	Time: 3:55P	Jo Diane Potter	
Delivered By: (Circle One)		Sample Condition Cool ☒ Yes ☐ No Intact ☒ Yes ☐ No	CHECKED BY: (Initials)
Sampler - UPS - Bus - Other:			

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: DEE WHATLEY
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO:

Receiving Date: 09/17/99
Reporting Date: 09/21/99
Project Owner: RICE
Project Name: WEST CO. ROAD
Project Location: WEST CO. ROAD

Sampling Date: 09/17/99
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (u mhos/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:		09/20/99	09/20/99	09/20/99	09/20/99	09/20/99	09/20/99
H4333-1	WATER WELL	104	74	21	5.44	1028	184
H4333-2	MW #2	31	72	21	3.01	682	188
H4333-3	MW #3	4614	1120	243	52.19	1856	236
H4333-4	MW #4	61	138	50	4.87	1436	176
H4333-5	MW #5	33	83	21	2.92	718	208
H4333-6	MW #6	18	69	25	3.22	643	208
H4333-7	MW #7	140	118	32	5.21	1535	260
Quality Control		NR	48	49	4.96	1443	NR
True Value QC		NR	50	50	5.00	1413	NR
% Accuracy		NR	96	98	99	102	NR
Relative Percent Difference		NR	6.3	5.1	0	0.4	NR
METHODS:			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

LAB NUMBER	SAMPLE ID	Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		09/20/99	09/20/99	09/20/99	09/20/99	09/20/99	09/21/99
H4333-1	WATER WELL	166	84.31	0	224	7.61	626
H4333-2	MW #2	45	83.01	0	229	7.59	528
H4333-3	MW #3	8922	1052	0	288	6.86	17730
H4333-4	MW #4	300	87.56	0	215	7.38	1187
H4333-5	MW #5	49	88.59	0	254	7.75	484
H4333-6	MW #6	24	74.32	0	254	7.33	428
H4333-7	MW #7	255	113.11	0	317	7.42	1685
Quality Control		1024	47.47	112	221	6.99	NR
True Value QC		1000	50.00	124	259	7.00	NR
% Accuracy		102	94.9	90.3	85.4	100	NR
Relative Percent Difference		9.8	5.2	-	-	0	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Chemist

9/21/99
Date

H4333B.XLS

CARDINAL LABORATORIES

PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: DEE WHATLEY
703 E. CLINTON, SUITE 103
HOBBS, NM 88240
FAX TO:

Receiving Date: 09/17/99
Reporting Date: 09/18/99
Project Owner: RICE
Project Name: WEST CO. ROAD
Project Location: WEST CO. ROAD

Sampling Date: 09/17/99
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: BC
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		09/17/99	09/17/99	09/17/99	09/17/99
H4333-1	WATER WELL	<0.002	<0.002	<0.002	<0.006
H4333-2	MW #2	<0.002	<0.002	<0.002	<0.006
H4333-3	MW #3	0.715	<0.002	<0.002	<0.006
H4333-4	MW #4	<0.002	<0.002	<0.002	<0.006
H4333-5	MW #5	<0.002	<0.002	<0.002	<0.006
H4333-6	MW #6	<0.002	<0.002	<0.002	<0.006
H4333-7	MW #7	<0.002	<0.002	<0.002	<0.006
Quality Control		0.091	0.096	0.091	0.280
True Value QC		0.100	0.100	0.100	0.300
% Recovery		90.9	95.7	90.6	93.3
Relative Percent Difference		2.3	0.3	5.1	3.4

METHOD: EPA SW 846-8021B, 5030, 5021 Gas Chromatography

Burgess J. A. Cooke
Chemist

9/18/99
Date

H4333A.XLS

CARDINAL LABORATORIES, INC.

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101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page____ of ____

Company Name:	Safety + Environmental	BILL TO	PO #:
Project Manager:	Dee Whatley	Company:	
Address:	701 S. Clinton Suite 103	Attn:	
City:	Hobbs State: NM Zip: 88240	Address:	
Phone #:		City:	
Fax #:		State: Zip:	
Project #:	Project Owner: Rice	Phone #:	
Project Name:	West Co. Road	Fax #:	
Project Location:	West Co. Road		

ANALYSIS REQUEST: BTEX ✓ ; Major Cations + Anions ✓

FOR LAB USE ONLY LAB I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRES.: ACID:	ICE / COOL	OTHER:	SAMPLING: DATE	TIME
H4433-1	Water Well	6	3	✓							✓		9-17-99	3:20pm
-2	MW #2	6	3	✓							✓			
-3	MW #3	6	3	✓							✓			
-4	MW #4	6	3	✓							✓			
-5	MW #5	6	3	✓							✓			
-6	MW #6	6	3	✓							✓			
-7	MW #7	6	3	✓							✓			

Sampler Relinquished:	Date: 9-17-99	Received By:	Phone Result ☐ Yes ☐ No Additional Fax #:
	Time: 3:20pm		Fax Result: ☐ Yes ☐ No
Relinquished By:	Date:	Received By: (Lab Staff)	REMARKS:
	Time: 3:30pm		
Delivered By: (Circle One)	Sample Condition: Cool / Intact	CHECKED BY: (Initials)	
Sampler - UPS - Bus - Other:	☒ Yes ☒ Yes ☐ No ☐ No		

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.

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PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: BETH ALDRICH
703 E. CLINTON, SUITE #103
HOBBS, NM 88240
FAX TO: (505) 393-4388

Receiving Date: 12/14/99
Reporting Date: 12/17/99
Project Owner: RICE
Project Name: RICE WEST COUNTY ROAD
Project Location: WEST COUNTY ROAD

Sampling Date: 12/13 & 12/14/99
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: GP

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (u mhos/cm)	T-Alkalinity ($mgCaCO_3/L$)
ANALYSIS DATE:		12/17/99	12/16/99	12/16/99	12/16/99	12/17/99	12/16/99
H4509-1	MW #2	63	58	13	4.4	663	204
H4509-2	MW #4	191	113	26	5.3	1499	204
H4509-3	MW #5	54	67	22	4.9	693	228
H4509-4	MW #6	39	56	22	3.8	586	216
H4509-5	MW #7	233	73	9.3	4.4	1401	264
H4509-6	MW #3	6074	138	29	34.9	23900	300
H4509-7	WATER WELL	345	54	26	10.1	1990	212
Quality Control		NR	80	49	4.96	1392	NR
True Value QC		NR	80	50	5.00	1413	NR
% Accuracy		NR	100	98	99	99	NR
Relative Percent Difference		NR	0	2.0	0	0.2	NR
METHODS:			SM3500-Ca-D	3500-Mg E	8049	120.1	310.1

		Cl^- (mg/L)	SO_4 (mg/L)	CO_3 (mg/L)	HCO_3 (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		12/15/99	12/15/99	12/16/99	12/16/99	12/17/99	12/15/99
H4509-1	MW #2	41	77.6	0	249	7.76	596
H4509-2	MW #4	372	79.3	0	249	7.55	1260
H4509-3	MW #5	45	84.4	0	278	7.75	596
H4509-4	MW #6	24	68.2	0	264	7.59	576
H4509-5	MW #7	258	101	0	322	7.46	996
H4509-6	MW #3	9093	581	0	366	7.12	18120
H4509-7	WATER WELL	505	78.1	0	259	7.78	1260
Quality Control		1010	48.63	NR	971	7.02	NR
True Value QC		1000	50.00	NR	1000	7.00	NR
% Accuracy		101	97	NR	97	100	NR
Relative Percent Difference		2.0	2.9	NR	-	0.1	NR
METHODS:		SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1

Gayle A. Potter, Chemist

12/20/99
Date

H4509B.XLS

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PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR
SAFETY & ENVIRONMENTAL SOLUTIONS, INC.
ATTN: BETH ALDRICH
703 E. CLINTON, SUITE #103
HOBBS, NM 88240
FAX TO: (505) 393-4388

Receiving Date: 12/14/99
Reporting Date: 12/15/99
Project Owner: RICE
Project Name: RICE WEST COUNTY ROAD
Project Location: WEST COUNTY ROAD

Sampling Date: 12/13 & 12/14/99
Sample Type: GROUNDWATER
Sample Condition: COOL & INTACT
Sample Received By: GP
Analyzed By: BC

LAB NO.	SAMPLE ID	BENZENE (mg/L)	TOLUENE (mg/L)	ETHYL BENZENE (mg/L)	TOTAL XYLENES (mg/L)
ANALYSIS DATE		12/14/99	12/14/99	12/14/99	12/14/99
H4509-1	MW #2	<0.002	<0.002	<0.002	<0.006
H4509-2	MW #4	<0.002	<0.002	<0.002	<0.006
H4509-3	MW #5	<0.002	<0.002	<0.002	<0.006
H4509-4	MW #6	<0.002	<0.002	<0.002	<0.006
H4509-5	MW #7	<0.002	<0.002	<0.002	<0.006
H4509-6	MW #3	0.761	<0.002	0.003	<0.006
H4509-7	WATER WELL	0.004	<0.002	<0.002	<0.006
Quality Control		0.089	0.101	0.099	0.302
True Value QC		0.100	0.100	0.100	0.300
% Recovery		88.7	101	99.1	101
Relative Percent Difference		1.2	9.6	7.3	5.6

METHOD: EPA SW-846 8260

Chemist

12/15/99
Date

H4509A.XLS

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101 East Marland, Hobbs, NM 88240 (505) 393-2326 Fax (505) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page____ of ____

Company Name: SESI	BILL TO PO #:
Project Manager:	Company: SAME
Address: 703 E. CLINTON, #103	Attn:
City: HOBBS State: NM Zip: 88240	Address:
Phone #: (505) 397-0510	City:
Fax #: (505) 393-4388	State: Zip:
Project #: Project Owner: Rice	Phone #:
Project Name: Rice West County Road	Fax #:
Project Location: West County Road	

FOR LAB USE ONLY LAB I.D.	Sample I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	PRES.: ACID:	ICE / COOL	OTHER:	SAMPLING DATE	TIME	ANALYSIS REQUEST: BTEX	MAJOR CATIONS & ANIONS
H4509-1	MW #2	C	4	X							X		12-13-99	12:38 pm	X	X
-2	MW #4	C	4	X							X			11:50 AM	X	X
-3	MW #5	C	4	X							X			1:10 pm	X	X
-4	MW #6	C	4	X							X			10:30 AM	X	X
-5	MW #7	C	4	X							X		↓	11:10 AM	X	X
-6	MW #3	C	4	X							X		12-14-99	8:30 AM	X	X
-7	Water Well	C	4	X							X		12-14-99	7:55 AM	X	X

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Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished:	Date:	Received By:	Phone Result ☐ Yes ☐ No Additional Fax #:
	Time:		Fax Result: ☐ Yes ☐ No
Relinquished By: Sergio Contreras	Date: 12/14/99 Time: 11:10 A	Received By: (Lab Staff)	REMARKS:
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Sample Condition Cool: ☒ Yes ☐ No Intact: ☒ Yes ☐ No	CHECKED BY: (Initials)

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