

#3



ARDINAL LABORATORIES

PHONE (915) 873-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR
MARALO, LLC
ATTN: PHILLIP SMITH
P.O. BOX 832

Receiving Date: 02/13/01

Reporting Date: 02/19/01

Project Number: NOT GIVEN

Project Name: JALMAT YATES FRESH H2O TEST

Project Location: JAL, NM

Lab Number: H5606-1

Sample ID: WELL #1

MIDLAND, TX 79703

FAX TO: (915) 684-8836

Analysis Date: 02/16/01

Sampling Date: 02/13/01

Sample Type: GROUNDWATER

Sample Condition: COOL & INTACT

Sample Received By: GP

Analyzed By: BC

POLYNUCLEAR AROMATIC

HYDROCARBON - 8270 (mg/L)

	Sample Result H5606-1	Method Blank	QC	% Recov.	True Value QC
1 Naphthalene	<0.002	<0.002	0.041	82	0.050
2 Acenaphthylene	<0.002	<0.002	0.042	84	0.050
3 Acenaphthene	<0.002	<0.002	0.048	82	0.050
4 Fluorene	<0.002	<0.002	0.063	106	0.050
5 Phenanthrene	<0.002	<0.002	0.044	88	0.050
6 Anthracene	<0.002	<0.002	0.047	84	0.050
7 Fluoranthene	<0.002	<0.002	0.040	80	0.050
8 Pyrene	<0.002	<0.002	0.054	108	0.050
9 Benzo(a)anthracene	<0.002	<0.002	0.043	86	0.050
10 Chrysene	<0.002	<0.002	0.040	80	0.050
11 Benzo(b)fluoranthene	<0.002	<0.002	0.038	76	0.050
12 Benzo(k)fluoranthene	<0.002	<0.002	0.045	90	0.050
13 Benzo(a)pyrene	<0.002	<0.002	0.042	84	0.050
14 Indeno(1,2,3-cd)pyrene	<0.002	<0.002	0.044	88	0.050
15 Dibenzo(a,h)anthracene	<0.002	<0.002	0.042	84	0.050
16 Benzo(g,h,i)perylene	<0.002	<0.002	0.045	90	0.050

% Recovery

17 Nitrobenzene-d5	95
18 2-Fluorobiphenyl	78
19 Terphenyl-d14	100

METHODS: EPA SW-846 8270

BEFORE THE
OIL CONSERVATION DIVISION
Case No. 13142 Exhibit No. 13
Submitted By:
Maralo
Hearing Date: November 10, 2004

Philip Smith
Chemist

2/19/01
Date



ARDINAL LABORATORIES

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ANALYTICAL RESULTS FOR

MARALO, LLC

ATTN: PHILLIP SMITH

P.O. BOX 832

MIDLAND, TX 79703

FAX TO: (915) 684-9836

Receiving Date: 02/13/01

Reporting Date: 02/19/01

Project Number: NOT GIVEN

Project Name: JALMAT YATES FRESH H2O TEST

Project Location: JAL, NM

Lab Number: H5606-2

Sample ID: WELL #2

Analysis Date: 02/16/01

Sampling Date: 02/13/01

Sample Type: GROUNDWATER

Sample Condition: COOL & INTACT

Sample Received By: GP

Analyzed By: BC

POLYNUCLEAR AROMATIC

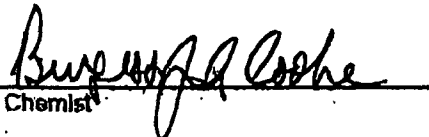
HYDROCARBON - 8270 (mg/L)

	Sample Result H5606-2	Method Blank	QC	% Recov.	True Value QC
1 Naphthalene	0.011	<0.002	0.041	82	0.050
2 Acenaphthylene	<0.002	<0.002	0.042	84	0.050
3 Acenaphthene	<0.002	<0.002	0.046	82	0.050
4 Fluorene	0.010	<0.002	0.053	106	0.050
5 Phenanthrene	0.027	<0.002	0.044	88	0.050
6 Anthracene	<0.002	<0.002	0.047	94	0.050
7 Fluoranthene	<0.002	<0.002	0.040	80	0.050
8 Pyrene	<0.002	<0.002	0.054	108	0.050
9 Benzo(a)anthracene	<0.002	<0.002	0.043	86	0.050
10 Chrysene	<0.002	<0.002	0.040	80	0.050
11 Benzo(b)fluoranthene	<0.002	<0.002	0.038	76	0.050
12 Benzo(k)fluoranthene	<0.002	<0.002	0.045	90	0.050
13 Benzo(a)pyrene	<0.002	<0.002	0.042	84	0.050
14 Indeno(1,2,3-cd)pyrene	<0.002	<0.002	0.044	88	0.050
15 Dibenzo(a,h)anthracene	<0.002	<0.002	0.042	84	0.050
16 Benzo(g,h,i)perylene	<0.002	<0.002	0.045	90	0.050

% Recovery

17 Nitrobertzene-d5	104
18 2-Fluorobiphenyl	89
19 Terphenyl-d14	101

METHODS: EPA SW-846.8270


 Chemist

 2/19/01
 Date



PHONE (915) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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ANALYTICAL RESULTS FOR

MARALO, LLC.

ATTN: PHILLIP SMITH

P.O. BOX 832

MIDLAND, TX 79703

FAX TO: (915) 684-9838

Receiving Date: 02/13/01

Reporting Date: 02/19/01

Project Number: NOT GIVEN

Project Name: JALMAT YATES FRESH H2O TEST

Project Location: JAL, NM

Lab Number: H5806-3

Sample ID: WELL #4

Analysis Date: 02/16/01

Sampling Date: 02/13/01

Sample Type: GROUNDWATER

Sample Condition: COOL & INTACT

Sample Received By: GP

Analyzed By: BC

POLYNUCLEAR AROMATIC

HYDROCARBON - 8270 (mg/L)

	Sample Result H5806-3	Method Blank	QC	% Recov.	True Value QC
1 Naphthalene	<0.002	<0.002	0.041	82	0.050
2 Acenaphthylene	<0.002	<0.002	0.042	84	0.050
3 Acenaphthene	<0.002	<0.002	0.046	92	0.050
4 Fluorene	<0.002	<0.002	0.053	106	0.050
5 Phenanthrene	<0.002	<0.002	0.044	88	0.050
6 Anthracene	<0.002	<0.002	0.047	94	0.050
7 Fluoranthene	<0.002	<0.002	0.040	80	0.050
8 Pyrene	<0.002	<0.002	0.054	108	0.050
9 Benzo(a)anthracene	<0.002	<0.002	0.043	86	0.050
10 Chrysene	<0.002	<0.002	0.040	80	0.050
11 Benzo(b)fluoranthene	<0.002	<0.002	0.038	76	0.050
12 Benzo(k)fluoranthene	<0.002	<0.002	0.045	90	0.050
13 Benzo(a)pyrene	<0.002	<0.002	0.042	84	0.050
14 Indeno(1,2,3-cd)pyrene	<0.002	<0.002	0.044	88	0.050
15 Dibenzo(a,h)anthracene	<0.002	<0.002	0.042	84	0.050
16 Benzo(g,h,i)perylene	<0.002	<0.002	0.045	90	0.050

% Recovery

17 Nitrobenzene-d5	49
18 2-Fluorobiphenyl	35
19 Terphenyl-d14	80

METHODS: EPA SW-846 8270

Burgess R. Koche
Chemist

2/19/01
Date



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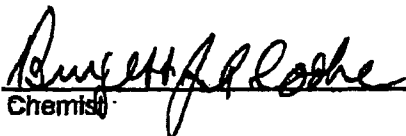
ANALYTICAL RESULTS FOR
 MARALO, LLC
 ATTN: PHILLIP SMITH
 P.O. BOX 832
 MIDLAND, TX 79703
 FAX TO: (815) 684-9838

Receiving Date: 02/13/01
 Reporting Date: 02/19/01
 Project Number: NOT GIVEN
 Project Name: JALMAT YATES FRESH H2O TEST
 Project Location: JAL, NM

Sampling Date: 02/13/01
 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		02/14/01	02/14/01	02/14/01	02/14/01
H5608-1	WELL #1	<0.002	<0.002	<0.002	<0.008
H5608-2	WELL #2	0.008	0.005	0.145	0.248
H5608-3	WELL #4	<0.002	<0.002	<0.002	<0.008
Quality Control		0.097	0.097	0.101	0.302
True Value QC		0.100	0.100	0.100	0.308
% Recovery		97.3	97.3	101	101
Relative Percent Difference		1.1	3.3	0.1	<0.1

METHOD: EPA SW-846 8260



 Chemist



 Date

H5608B.XLS
 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 client for 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 thirty (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.



ARDINAL LABORATORIES, INC.

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Page _____ of _____

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

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PHONE (815) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR
MARALO, LLC.
ATTN: PHILLIP SMITH
P.O. BOX 832
MIDLAND, TX 79703
FAX TO: (815) 684-9836

Receiving Date: 02/13/01
Reporting Date: 02/19/01
Project Number: NOT GIVEN
Project Name: JALMAT YATES FRESH H2O TEST
Project Location: JAL, NM

Sampling Date: 02/13/01
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 (mS/cm)	T-Alkalinity (mgCaCO ₃ /L)
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ANALYSIS DATE:	02/15/01	02/16/01	02/16/01	02/16/01	02/16/01	02/18/01
H5606-1 WELL #1	143	38	44	7.07	1148	312
H5606-2 WELL #2	110	34	44	7.74	1057	387
H5606-3 WELL #4	172	38	48	6.84	1227	303
Quality Control	1.030	47	52	5.04	1489	NR
True Value QC	1.000	50	50	5.00	1413	NR
% Recovery	103	94.3	104	101	105	NR
Relative Percent Difference	0.5	8.5	0	2.0	0.3	NR

METHODS:	273.1	3500-Ca-D	3500-Mg E	8049	120.1	310.1
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CF (mg/L)	SO ₄ (mg/L)	CO ₃ (mg/L)	HCO ₃ (mg/L)	pH (s.u.)	TDS (mg/L)
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ANALYSIS DATE:	02/16/01	02/16/01	02/16/01	02/16/01	02/16/01	02/19/01
H5606-1 WELL #1	63	187	0	381	7.72	736
H5606-2 WELL #2	18	102	58	358	8.37	665
H5606-3 WELL #4	78	242	0	370	7.80	800
Quality Control	1051	63.03	NR	995	7.05	NR
True Value QC	1000	60.00	NR	1000	7.00	NR
% Recovery	105	106	NR	99.5	101	NR
Relative Percent Difference	6.8	3.0	NR	0	0.3	NR

METHODS:	8M4500-Cl-B	375.4	310.1	310.1	150.1	160.1
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Amy Hill
Chemist

2-19-01
Date