NM2 - 8

MONITORING REPORTS YEAR(S):

2003-1997

Koch Exploration Company, LLC

P.O. Box 489, Aztec, New Mexico 87410
Phone (505) 334-9111

November 5, 2003

Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Attn: Denny Foust

Re: 2003 Annual Pond Inspection and Water Analysis

Dear Mr. Foust:

Enclosed you will find water analysis from Koch Evaporation Pond 1 and Koch Evaporation Pond 2, for the year 2003, as required from us on an annual basis. During our weekly inspections throughout the year, for both ponds, we have not encountered any sick or dead birds or wildlife. If you would like to inspect our reports for each week on either or both of the evaporation ponds, they will be available, upon request at the Koch Exploration Company, LLC office located at 610 South Main in Aztec.

If you have any questions or comments concerning the water analysis, please feel free to contact me at (505) 334-9111 or my mobile phone at (505) 320-0819.

Sincerely,

Don Johnson
Operations Manager

Cc: Roger Anderson
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

612 E. Murray Drive
Farmington, NM 87499

Off: (505) 327-1072
FAX: (505) 327-1496

iiná bá

P.O. Box 3788
Shiprock, NM 87420

Off: (505) 368-4065

October 21, 2003

Don Johnson
Koch Exploration Company, LLC
610 S. Main Avenue
P.O. Box 489
Aztec, NM 87410

TEL: (505) 334-9111
FAX (505) 334-1688

RE: Koch Ponds

Order No.: 0310021

Dear Don Johnson:

iiná bá, Ltd. received 2 samples on 10/10/2003 for the analyses presented in the following report.

This certificate of analysis includes the Analytical Report(s) for the sample(s) received by the laboratory. A Quality Control Summary Report, the Sample Receipt Checklist and an executed Chain of Custody are included as an addendum to this report.

Should you have any questions regarding this certificate of analysis, please contact the laboratory at your convenience.

Report Approved By: _____

David Cox
Laboratory Manager

Heidi Reese
Quality Assurance Officer

612 E. Murray Drive
Farmington, NM 87499

Off: (505) 327-1072
FAX: (505) 327-1496

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Shiprock, NM 87420

Off: (505) 368-4065

iiná bá, Ltd.

Date: *21-Oct-03*

CLIENT: Koch Exploration Company, LLC
Project: Koch Ponds
Lab Order: 0310021

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.
Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983.
Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

Any quality control and/or data qualifiers associated with this laboratory order will be flagged in the analytical result page(s), the quality control summary report(s) or the sample receipt checklist.

Analytical comments for METHOD 8015GRO_W, SAMPLE 0310021-001A: Sample was analyzed at a twenty-fold dilution (D-20X) due to excessive foaming.

Analytical comments for METHOD 8015GRO_W, SAMPLE 0310021-002A: Sample was analyzed at a twenty-fold dilution (D-20X) due to excessive foaming.

Cation-Anion Balance; 0310021-001B: Koch Pond #1
Total Cation-Anion = 2091.45 meq/L
Difference Cation-Anion = 46.68 meq/L
% Difference = 2.2 %

Cation-Anion Balance; 0310021-002B: Koch Pond #2
Total Cation-Anion = 3419.38meq/L
Difference Cation-Anion = 174.88 meq/L
% Difference = 5.1 %

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Off: (505) 368-4065

ANALYTICAL REPORT

Date: *21-Oct-03*

CLIENT:	Koch Exploration Company, LLC	**Client Sample Info:**	Koch Ponds
Work Order:	0310021	**Client Sample ID:**	Pond #1
Project:	Koch Ponds	**Collection Date:**	10/9/2003 3:40:00 PM
Lab ID:	0310021-001A	**Matrix:**	AQUEOUS

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS		**SW8015B**				Analyst: **JEM**
T/R Hydrocarbons: C6-C10	ND	900		µg/L	20	10/20/2003

Qualifiers:

ND - Not Detected at the Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
H - Parameter exceeded Maximum Allowable Holding Time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above Upper Quantitation Limit - UQL

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ANALYTICAL REPORT

Date: *21-Oct-03*

CLIENT:	Koch Exploration Company, LLC	**Client Sample Info:**	Koch Ponds
Work Order:	0310021	**Client Sample ID:**	Pond #1
Project:	Koch Ponds	**Collection Date:**	10/9/2003 3:40:00 PM
Lab ID:	0310021-001B	**Matrix:**	AQUEOUS

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		**SW6010B**		**(SW6010B)**		Analyst: **DWC**
Sodium	23300	65.0		mg/L	500	10/20/2003
Iron	ND	18.0		mg/L	100	10/20/2003
Magnesium	71.9	1.30		mg/L	100	10/20/2003
Calcium	8.60	4.10		mg/L	100	10/20/2003
Potassium	99.6	11.0		mg/L	100	10/20/2003
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **HNR**
Chloride	7450	250		mg/L	2500	10/10/2003
Sulfate	1160	250		mg/L	2500	10/10/2003
ALKALINITY, TOTAL		**M2320 B**				Analyst: **HNR**
Alkalinity, Bicarbonate (As CaCO3)	16521	5		mg/L CaCO3	1	10/16/2003
Alkalinity, Carbonate (As CaCO3)	33846	5		mg/L CaCO3	1	10/16/2003
Alkalinity, Hydroxide	ND	5		mg/L CaCO3	1	10/16/2003
Alkalinity, Total (As CaCO3)	50367	5		mg/L CaCO3	1	10/16/2003
HARDNESS, TOTAL		**M2340 B**				Analyst: **HNR**
Hardness (As CaCO3)	320	1		mg/L	1	10/21/2003
PH		**E150.1**				Analyst: **HNR**
pH	9.56	2.00		pH units	1	10/10/2003
Temperature	23.0	0		Deg C	1	10/10/2003
RESISTIVITY (@ 25 DEG. C)		**M2510 C**				Analyst: **HNR**
Resistivity	0.149	0.001		ohm-m	1	10/10/2003
SALINITY		**M2520 B.**				Analyst: **HNR**
Salinity	46	0.10		Sal	1	10/10/2003
SPECIFIC GRAVITY		**M2710 F**				Analyst: **HNR**
Specific Gravity	1.066	0.001		Units	1	10/10/2003
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **HNR**
Total Dissolved Solids (Residue, Filterable)	67000	40		mg/L	1	10/13/2003
TOTAL DISSOLVED SOLIDS		**M1030F**				Analyst: **HNR**
Total Dissolved Solids (Calculated)	62300	5		mg/L	1	10/21/2003

Qualifiers:

ND - Not Detected at the Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
H - Parameter exceeded Maximum Allowable Holding Time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above Upper Quantitation Limit - UQL

612 E. Murray Drive
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FAX: (505) 327-1496

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P.O. Box 3788
Shiprock, NM 87420

Off: (505) 368-4065

ANALYTICAL REPORT

Date: *21-Oct-03*

CLIENT:	Koch Exploration Company, LLC	**Client Sample Info:**	Koch Ponds
Work Order:	0310021	**Client Sample ID:**	Pond #2
Project:	Koch Ponds	**Collection Date:**	10/9/2003 1:14:00 PM
Lab ID:	0310021-002A	**Matrix:**	AQUEOUS

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
GASOLINE RANGE ORGANICS		**SW8015B**				Analyst: **JEM**
T/R Hydrocarbons: C6-C10	ND	900		µg/L	20	10/20/2003

Qualifiers:

ND - Not Detected at the Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
H - Parameter exceeded Maximum Allowable Holding Time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above Upper Quantitation Limit - UQL

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Shiprock, NM 87420

Off: (505) 368-4065

ANALYTICAL REPORT

Date: *21-Oct-03*

CLIENT:	Koch Exploration Company, LLC	**Client Sample Info:**	Koch Ponds
Work Order:	0310021	**Client Sample ID:**	Pond #2
Project:	Koch Ponds	**Collection Date:**	10/9/2003 1:14:00 PM
Lab ID:	0310021-002B	**Matrix:**	AQUEOUS

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		**SW6010B**		**(SW6010B)**		Analyst: **DWC**
Calcium	6.34	0.820		mg/L	20	10/20/2003
Iron	ND	3.60		mg/L	20	10/20/2003
Magnesium	107	0.260		mg/L	20	10/20/2003
Potassium	180	2.20		mg/L	20	10/20/2003
Sodium	41000	65.0		mg/L	500	10/20/2003
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **HNR**
Chloride	8260	250		mg/L	2500	10/10/2003
Sulfate	298	250		mg/L	2500	10/10/2003
ALKALINITY, TOTAL		**M2320 B**				Analyst: **HNR**
Alkalinity, Bicarbonate (As CaCO3)	16273	5		mg/L CaCO3	1	10/16/2003
Alkalinity, Carbonate (As CaCO3)	66992	5		mg/L CaCO3	1	10/16/2003
Alkalinity, Hydroxide	ND	5		mg/L CaCO3	1	10/16/2003
Alkalinity, Total (As CaCO3)	83265	5		mg/L CaCO3	1	10/16/2003
HARDNESS, TOTAL		**M2340 B**				Analyst: **HNR**
Hardness (As CaCO3)	460	1		mg/L	1	10/21/2003
PH		**E150.1**				Analyst: **HNR**
pH	9.64	2.00		pH units	1	10/10/2003
Temperature	23.0	0		Deg C	1	10/10/2003
RESISTIVITY (@ 25 DEG. C)		**M2510 C**				Analyst: **HNR**
Resistivity	0.116	0.001		ohm-m	1	10/10/2003
SALINITY		**M2520 B.**				Analyst: **HNR**
Salinity	61	0.10		Sal	1	10/10/2003
SPECIFIC GRAVITY		**M2710 F**				Analyst: **HNR**
Specific Gravity	1.100	0.001		Units	1	10/10/2003
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **HNR**
Total Dissolved Solids (Residue, Filterable)	105000	40		mg/L	1	10/13/2003
TOTAL DISSOLVED SOLIDS		**M1030F**				Analyst: **HNR**
Total Dissolved Solids (Calculated)	99800	5		mg/L	1	10/21/2003

Qualifiers:

ND - Not Detected at the Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
H - Parameter exceeded Maximum Allowable Holding Time
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above Upper Quantitation Limit - UQL

iiná bá, Ltd.

Sample Receipt Checklist

Client Name: **KOC1001** Date and Time Received: **10/10/2003**

Work Order Number: **0310021** Received by: HNR

Checklist completed by: Heidi R 10/10/03 (Signature / Date) Reviewed by: DWC 10/16/03 (Initials / Date)

Matrix: Carrier name: Courier

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shippping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Water - VOA vials have zero headspace?	No VOA vials submitted ☐	Yes ☑	No ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☒	

Adjusted? _____ Checked by: _____

Any No and/or NA (not applicable) response must be detailed in the comments section below.

Client contacted: _____ Date contacted: _____ Person contacted: _____

Contacted by: _____ Regarding: _____

Comments: GRO water samples had a pH > 2

Corrective Action: _____

CHAIN OF CUSTODY RECORD

3685

Hiná bá (for life's sake)
612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
Phone: (505) 327-1072 • Fax: (505) 327-1496

Date _____ Page _____ of _____

REPORT RESULTS TO:

Report to: Don Johnson
Company: Koch Exploration
Address: Box 489
City: Aztec N. Mex 87410
Phone: 334-9111 Fax: Email:

SEND INVOICE TO:

PO No.: Job No.:
Name:
Company: SAME
Address:
City:

Turnaround Time:
10 days (normal) X
24-48 hours (100%) _____
3-5 days (50%) _____

Sample Integrity
Intact X
On Ice X

Subcontract
Yes _____
No X

Sampling Location: Koch Pond's 1+2

NUMBER OF CONTAINERS:

Analysis Requested

Sample Identification	Sample Date	Sample Time	Matrix	Pres.	TPH Gasoline	BTEX	CATION ANION	Lab ID
Pond #1	10/9	1540			X	X		0310021-001
Pond #2	10/9	1314			X	X		-002

Relinquished by: Kenneth Cagle	Date/Time: 10-10-03/9:07	Received by: Heidi R	Date/Time: 10/10/03 0900
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Comments:

DISTRIBUTION WHITE - Lab • YELLOW - Client • PINK - Courier

san juan reproduction-i

Koch Exploration Company, LLC

P.O. Box 489, Aztec, New Mexico 87410
Phone (505) 334-9111

RECEIVED
NOV 2 2 2002
Environmental Bureau
Oil Conservation Division

November 14,2002

Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

Attn: Denny Foust

Re: 2002 Annual Pond Inspection and Water Analysis

Dear Mr. Foust:

Enclosed you will find water analysis from Koch Evaporation Pond 1 and Koch Evaporation Pond 2, for the year 2002, as required from us on an annual basis. During our weekly inspections throughout the year, for both ponds, we have not encountered any sick or dead birds or wildlife. If you would like to inspect our reports for each week on either or both of the evaporation ponds, they will be available, upon request at the Koch Exploration Company, LLC office located at 610 South Main in Aztec.

If you have any questions or comments concerning these water analysis, please feel free to contact me at (505) 334-9111 or my mobile phone at (505) 320-0819.

Sincerely,

Don Johnson
Operations Manager

Cc: Roger Anderson
Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, NM 87505

612 E. Murray Drive
Farmington, NM 87401

Off: (505) 327-1072

iiná bá

P.O. Box 2606
Farmington, NM 87499

Fax: (505) 327-1496

November 11, 2002

Don Johnson
Koch Exploration Company, LLC
610 S. Main Avenue
P.O. Box 489
Aztec, NM 87410

TEL: (505) 334-9111
FAX (505) 334-1688

RE: Koch Pond #1

Order No.: 0210022

Dear Don Johnson:

iina ba, Ltd. received 1 sample on 10/15/2002 for the analyses presented in the following report.

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative.

If you have any questions regarding these test results, please feel free to call.

Sincerely,

David Cox

612 E. Murray Drive
Farmington, NM 87401

Off: (505) 327-1072

iina ba

P.O. Box 2606
Farmington, NM 87499

Fax: (505) 327-1496

iina ba, Ltd.

Date: *11-Nov-02*

CLIENT: Koch Exploration Company, LLC
Project: Koch Pond #1
Lab Order: 0210022

CASE NARRATIVE

Samples were analyzed using the methods outlined in the following references:

Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW846, 3rd Edition.
Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, March 1983.
Standard Methods for the Examination of Water and Wastewater, 18th Edition, 1992.

All method blanks, laboratory spikes, and/or matrix spikes met quality assurance objectives.

Any quality control and/or data qualifiers associated with this laboratory order will be flagged in the analytical result page(s) or the quality control summary report(s).

Cation-Anion Balance 0210022-001B; Koch Pond #1
Total Cation-Anion = 1693.71 meq/L
Difference Cation-Anion = 16.13 meq/L
% Difference = 1.0 %

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Farmington, NM 87401

Off: (505) 327-1072

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P.O. Box 2606
Farmington, NM 87499

Fax: (505) 327-1496

Date: *11-Nov-02*

CLIENT:	Koch Exploration Company, LLC	**Client Sample Info:**	Koch Exploration
Work Order:	0210022	**Client Sample ID:**	Koch Pond #1
Project:	Koch Pond #1	**Collection Date:**	10/14/2002 1:35:00 PM
Lab ID:	0210022-001A	**Matrix:**	AQUEOUS

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
TPH, T/R		**E418.1**		**(SW3550)**		Analyst: **JEM**
Petroleum Hydrocarbons, T/R	ND	1.1		mg/L	1	11/7/2002

Qualifiers:

ND - Not Detected at the Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
* - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted precision limits
E - Value above Upper Quantitation Limit - UQL

612 E. Murray Drive
Farmington, NM 87401

Off: (505) 327-1072

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P.O. Box 2606
Farmington, NM 87499

Fax: (505) 327-1496

Date: *11-Nov-02*

CLIENT:	Koch Exploration Company, LLC	**Client Sample Info:**	Koch Exploration
Work Order:	0210022	**Client Sample ID:**	Koch Pond #1
Project:	Koch Pond #1	**Collection Date:**	10/14/2002 1:35:00 PM
Lab ID:	0210022-001B	**Matrix:**	AQUEOUS

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
ICP METALS, DISSOLVED		**SW6010B**				Analyst: **DJC**
Calcium	15.2	1.00		mg/L	100	10/17/2002
Iron	0.37	0.24		mg/L	10	10/17/2002
Magnesium	67.0	0.70		mg/L	100	10/17/2002
Potassium	83.4	6.20		mg/L	100	10/17/2002
Sodium	19100	1.80		mg/L	100	10/17/2002
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **HNR**
Chloride	5360	62.0		mg/L	620	10/16/2002
Sulfate	ND	4.90		mg/L	49	10/16/2002
ALKALINITY, TOTAL		**M2320 B**				Analyst: **HNR**
Alkalinity, Bicarbonate (As CaCO3)	16605	5		mg/L CaCO3	1	10/23/2002
Alkalinity, Carbonate (As CaCO3)	25900	5		mg/L CaCO3	1	10/23/2002
Alkalinity, Hydroxide	ND	5		mg/L CaCO3	1	10/23/2002
Alkalinity, Total (As CaCO3)	42505	5		mg/L CaCO3	1	10/23/2002
HARDNESS, TOTAL		**M2340 B**				Analyst: **HNR**
Hardness (As CaCO3)	310	1		mg/L	1	10/23/2002
PH		**E150.1**				Analyst: **HNR**
pH	9.69	2.00		pH units	1	10/16/2002
Temperature	15.0	0		Deg C	1	10/16/2002
RESISTIVITY (@ 25 DEG. C)		**M2510 C**				Analyst: **HNR**
Resistivity	0.181	0.001		ohm-m	1	10/16/2002
SALINITY		**M2520 B.**				Analyst: **HNR**
Salinity	36.9	0.100		Sal	1	10/16/2002
SPECIFIC GRAVITY		**M2710 F**				Analyst: **HNR**
Specific Gravity	1.054	0.001		Units	1	10/16/2002
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **HNR**
Total Dissolved Solids (Residue, Filterable)	53900	40		mg/L	1	10/17/2002
TOTAL DISSOLVED SOLIDS		**CALC**				Analyst: **HNR**
Total Dissolved Solids (Calculated)	50100	5		mg/L	1	10/23/2002

Qualifiers:

ND - Not Detected at the Practical Quantitation Limit

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B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted precision limits

E - Value above Upper Quantitation Limit - UQL

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612 E. Murray Dr. • P. O. Box 2606 • Farmington NM 87499
(505) 327-1072 • FAX: (505) 327-1496

CHAIN OF CUSTODY RECORD

B 1502

Date: 10-14-02

Page 1 of 1

Purchase Order No.:

Job No.:

SEND INVOICE TO

Name:

Company: Koch Exploration

Dept.:

Address:

City, State, Zip: Aztec, NM 87410

REPORT RESULTS TO

Name: Don Johnson

Title: Operations Manager

Company: Koch Exploration Co.

Mailing Address: P.O. Box 489

City, State, Zip: Aztec, NM 87410

Telephone No.: 505-334-9111

Telefax No.: 505-334-1688

Sampling Location: Sec 31, T32N, R8W
Koch Feed #1

Sampler: Kenneth Cagle

ANALYSIS REQUESTED

SAMPLE IDENTIFICATION	SAMPLE DATE	SAMPLE TIME	MATRIX	PRES.	Number of Containers	TDH	Ion/Cation								LAB ID
[illegible]	10/14	1:35pm				1									021022-01A
[illegible] 40	[illegible]	[illegible]					1								↓ -01B

Relinquished by: Ken Cagle	Date/Time: [illegible]	Received by: J Moore	Date/Time: 10/15/02 8:50
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:	Date/Time:	Received by:	Date/Time:

Method of Shipment:

Authorized by: ____________ Date ________
(Client Signature Must Accompany Request)

Rush | 24-48 Hours | 10 Working Days | Special Instructions:

Distribution: White – On Site Yellow – LAB Pink – Sampler Goldenrod – Client

KOCH
INDUSTRIES INC
P.O. Box 489
Aztec, NM 87410

November 19, 2001

Oil Conservation Division
1000 Rio Brazos Road
Aztec, NM 87410

ATTN: Mr. Denny Foust

RE: 2001 Yearly Pond Inspection & Water Analysis

Dear Mr. Foust:

Enclosed you will find water analysis from Pond #1 and Pond #2 for the year of 2001 that is required from us on a yearly basis. During our weekly inspections throughout the year on both ponds we have not encountered any sick or dead birds or wildlife. If you would like to inspect our reports for each week on either or both of the ponds, they will be available upon request at the Koch Exploration Company Office locatated at 610 South Main in Aztec.

If you have any questions or comments concerning these water analysis, please feel free to contact me at (505)-334-9111 or my mobile phone at (505)-320-0819.

Sincerely,

Don Johnson
Operations Manager
Koch Exploration Company

cc: Roger Anderson
Oil Conservation Division
~~2040 South Pacheco~~ 1220 South ST. Francis Drive
Santa Fe, NM 87505

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

ON SITE TECHNOLOGIES, LTD.

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

ANALYTICAL REPORT

Date: *20-Nov-01*

Client:	Koch Exploration	**Client Sample Info:**	Koch Evap. Pond #1
Work Order:	0110041	**Client Sample ID:**	Water Sample
Lab ID:	0110041-01A **Matrix:** AQUEOUS	**Collection Date:**	10/22/2001 3:00:00 PM
Project:	Koch Evap. Pond #1	**COC Record:**	11635

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
ANIONS BY ION CHROMATOGRAPHY		**E300**				Analyst: **HR**
Chloride	3600	300		mg/L	5040	10/29/2001
Sulfate	ND	8		mg/L	100	10/29/2001
ICP METALS, DISSOLVED		**SW6010B**				Analyst: **DC**
Calcium 317.933	13.3	1.9		mg/L	194	11/19/2001
Iron 259.939	ND	0.39		mg/L	194	11/19/2001
Magnesium 285.213	52.1	1.4		mg/L	194	11/19/2001
Potassium 766.490	55.9	12		mg/L	194	11/19/2001
Sodium 589.592	15700	3.7		mg/L	194	11/19/2001
ALKALINITY, TOTAL		**M2320 B**				Analyst: **HR**
Alkalinity, Bicarbonate (As CaCO3)	3990	5		mg/L CaCO3	1	10/25/2001
Alkalinity, Carbonate (As CaCO3)	26100	5		mg/L CaCO3	1	10/25/2001
Alkalinity, Hydroxide	ND	5		mg/L CaCO3	1	10/25/2001
Alkalinity, Total (As CaCO3)	30100	5		mg/L CaCO3	1	10/25/2001
HARDNESS, TOTAL		**M2340 B**				Analyst: **HR**
Hardness (As CaCO3)	248	1		mg/L	1	11/15/2001
PH		**E150.1**				Analyst: **DC**
pH	9.46	2		pH units	1	10/24/2001
Temperature	26			deg. C	1	10/24/2001
RESISTIVITY (@ 25 DEG. C)		**M2510 C**				Analyst: **DC**
Resistivity	0.226	0.001		ohm-m	1	10/24/2001
SALINITY		**M2520 B.**				Analyst: **DM**
Salinity	26	1			1	11/16/2001
SPECIFIC GRAVITY		**M2710 F**				Analyst: **HR**
Specific Gravity	1.038	0.001		Units	1	10/25/2001
TOTAL DISSOLVED SOLIDS		**E160.1**				Analyst: **HR**
Total Dissolved Solids (Residue, Filterable)	39200	40		mg/L	1	10/25/2001
TOTAL DISSOLVED SOLIDS		**CALC**				Analyst: **HR**
Total Dissolved Solids (Calculated)	37500	5		mg/L	1	11/15/2001
TPH, T/R		**E418.1**				Analyst: **DM**
Petroleum Hydrocarbons, T/R	ND	1		mg/L	1	11/2/2001

Qualifiers:

PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

P.O. BOX 2606 • FARMINGTON, NM 87499
EMAIL: ONSITE@ONSITELTD.COM

11635

CHAIN OF CUSTODY RECORD

ON SITE TECHNOLOGIES, LTD.

612 E. Murray Dr. • P.O. Box 2606 • Farmington, NM 87499
LAB: (505) 325-5667 • FAX: (505) 327-1496

Date: 10-22-01

Page: _____ of _____

Purchase Order No.:	Project No.		
SEND INVOICE TO: Name: Koch		REPORT RESULTS TO: Name	Title
Company	Dept.	Company	
Address		Mailing Address	
City, State, Zip		City, State, Zip	
		Telephone No.	Telefax No.

PROJECT LOCATION: Koch Evap. Pond #1

SAMPLER'S SIGNATURE:

SAMPLE IDENTIFICATION	SAMPLE DATE	TIME	MATRIX	PRES.	Number of Containers	ANALYSIS REQUESTED: RCRA Water	418.1	LAB ID
Water Sample	10-22	3:00pm	AQ	—	1	✓		0110041-01A
Water Sample	10-22	3:00pm	AQ	—	1		✓	↓ -01B

Relinquished by: Ken Coyle	Date/Time 10-24 9:30	Received by: David D. Martin	Date/Time 10/24/01 0930
Relinquished by:	Date/Time	Received by:	Date/Time
Relinquished by:	Date/Time	Received by:	Date/Time

Method of Shipment:

Rush | 24-48 Hours | 10 Working Days | By Date

Authorized by: Ken Coyle Date 10-24-01
(Client Signature Must Accompany Request)

Special Instructions / Remarks:

Distribution: White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client

KOCH
INDUSTRIES INC
P.O. Box 489
Aztec, NM 87410

November 22, 1999

Oil Consersvation Division
1000 Rio Brazos RD
Aztec, NM 87410

ATTN: Mr. Denny Foust

RE: 1999 Yearly Pond Inspection & Water Analysis

Dear Mr. Foust:

Enclosed you will find water analysis from Pond #1 and Pond #2 for the year of 1999 that is required from us on a yearly basis. During our weekly inspections through out the year on both ponds we have not encountered any sick or dead birds or wildlife. If you would like to inspect our reports for each week on either or both of the ponds, they will be available upon request at the Koch Exploration Company's Aztec Office locatated at 610 South Main in Aztec.

If you have any questions or comments concerning these water analysis, please feel free to contact me at (505)-334-9111 or in my mobile phone at (505)-320-0819.

Sincerely,

Don Johnson
Operations Manager
Koch Exploration Company

cc: Roger Anderson
Oil Conservation Division
~~PO Box 2088~~ 2040 S. Pacheco
Santa Fe, NM 87505

mjk
12-14-99

iml

Inter-Mountain Laboratories, Inc.

Phone (505) 326-4737 Fax (505) 325-4182

2506 West Main Street, Farmington, NM 87401

Date: 10/25/99

Client: Koch Exploration Co.

Lab ID: 0399W05060 - 61

Project: Pond 1 + Pond 2

Dear Client:

The samples were received for analysis at Inter-Mountain Laboratories (IML), Farmington, New Mexico. Enclosed are the results of these analyses.

Comment:

Analytical results were obtained by approved methods. Sample analyses were obtained within the method specific holding times. Practical Quantitation Limits (PQL's) are based on method requirements, and any dilutions necessary to maintain proper method response without matrix interference.

If you have any questions, please call me at (505) 326-4737.

William Lipps
IML-Farmington, NM

Inter-Mountain Laboratories, Inc.
Phone (505) 326-4737 Fax (505) 325-4182
2506 West Main Street Farmington, NM 87401

Client: Koch Exploration Co.
Project: Pond 1 + Pond 2
Sample ID: Pond #2
Lab ID: 0399W05060
Matrix: Water
Condition: Cool/Intact

Date Received: 10/07/99
Date Reported: 10/22/99
Date Sampled: 10/07/99
Time Sampled: 1145

Parameter	Analytical Result	Units		Units	PQL	Method	Analysis Date	Time	Init.
GENERAL PARAMETERS									
pH	9.4	s.u.			0.1	EPA 150.1	10/08/99	1410	JP
Electrical Conductivity	30,800	µmhos/cm			10	EPA 120.1	10/08/99	1410	JP
Solids - Total Dissolved	25,056	mg/L			10	EPA 160.1	10/13/99	0923	JP
Alkalinity	20,521	mg/L			1	EPA 310.1	10/12/99	0834	GD
Hardness	200	mg/L			0.2	Calculation	10/21/99	1100	BJ
MAJOR ANIONS									
Bicarbonate (HCO3)	13,200	mg/L	216	meq/L	1	EPA 310.1	10/12/99	0834	GD
Carbonate (CO3)	5,840	mg/L	194.53	meq/L	1	EPA 310.1	10/12/99	0834	GD
Hydroxide (OH)	<1	mg/L	<0.01	meq/L	1	EPA 310.1	10/12/99	0834	GD
Chloride	2,240	mg/L	63.1	meq/L	1	EPA 300.0	10/21/99	0800	BJ
Sulfate	<5	mg/L	<0.01	meq/L	5	EPA 300.0	10/22/99	0800	BJ
MAJOR CATIONS									
Calcium	9.4	mg/L	0.47	meq/L	0.2	EPA 200.7	10/18/99	1233	WL
Magnesium	42.8	mg/L	3.52	meq/L	0.2	EPA 200.7	10/18/99	1233	WL
Potassium	37.5	mg/L	0.96	meq/L	0.2	EPA 200.7	10/18/99	1233	WL
Sodium	10,100	mg/L	441	meq/L	0.2	EPA 200.7	10/18/99	1233	WL
CATION / ANION BALANCE QC INFORMATION									
Anion Sum	474	meq/L	474	meq/L	0.1	Calculation	10/22/99	1430	BJ
Cation Sum	446.3	meq/L	446	meq/L	0.1	Calculation	10/22/99	1430	BJ
Cation/Anion Balance	2.96		2.96	%	N/A	N/A	10/22/99	1430	BJ

Reference: EPA - "Methods for Chemical Analysis of Water and Wastes (MCAWW)" - EPA/600/4-79-020 - March, 1983.
EPA - "Methods for the Determination of Metals in Environmental Samples" - Supplement I - 600/R-94-111 - May, 1994.

Reviewed By: William Lipps

jml

Inter-Mountain Laboratories, Inc.

Phone (505) 326-4737 Fax (505) 325-4182

2506 West Main Street, Farmington, NM 87401

Client: Koch Exploration Co.
Project: Pond 1 + Pond 2
Sample ID: Pond #2
Lab ID: 0399W05060
Matrix: Water
Condition: Cool/Intact

Date Received: 10/07/99
Date Reported: 10/22/99
Date Sampled: 10/07/99
Time Sampled: 1145

Parameter	Analytical Result	Units	Units	PQL	Method	Analysis Date	Analysis Time	Analysis Init.
TPH - EPA Method 418.1								
Total Petroleum Hydrocarbons	<1	mg/L		1	EPA 418.1	10/22/99		SW

Reference: EPA - "Methods for Chemical Analysis of Water and Wastes (MCAWW)" - EPA/600/4-79-020 - March, 1983.

Reviewed By: William Lipps

Inter-Mountain Laboratories, Inc.
Phone (505) 326-4737 Fax (505) 325-4182
2506 West Main Street, Farmington, NM 87401

Client: Koch Exploration Co.
Project: Pond 1 + Pond 2
Sample ID: Pond #1
Lab ID: 0399W05061
Matrix: Water
Condition: Cool/Intact

Date Received: 10/07/99
Date Reported: 10/22/99
Date Sampled: 10/07/99
Time Sampled: 1230

Parameter	Analytical Result	Units		Units	PQL	Method	Analysis Date	Time	Init.
GENERAL PARAMETERS									
pH	9.4	s.u.			0.1	EPA 150.1	10/08/99	1410	JP
Electrical Conductivity	31,300	µmhos/cm			10	EPA 120.1	10/08/99	1410	JP
Solids - Total Dissolved	25,702	mg/L			10	EPA 160.1	10/13/99	0923	JP
Alkalinity	20,454	mg/L			1	EPA 310.1	10/12/99	0834	GD
Hardness	191	mg/L			0.2	Calculation	10/21/99	1100	BJ
MAJOR ANIONS									
Bicarbonate (HCO3)	13,100	mg/L	215	meq/L	1	EPA 310.1	10/12/99	0834	GD
Carbonate (CO3)	5,840	mg/L	194.53	meq/L	1	EPA 310.1	10/12/99	0834	GD
Hydroxide (OH)	<1	mg/L	<0.01	meq/L	1	EPA 310.1	10/12/99	0834	GD
Chloride	2,590	mg/L	73.1	meq/L	1	EPA 300.0	10/21/99	0800	BJ
Sulfate	7.3	mg/L	0.15	meq/L	5	EPA 300.0	10/22/99	0800	BJ
MAJOR CATIONS									
Calcium	9.9	mg/L	0.49	meq/L	0.2	EPA 200.7	10/18/99	1235	WL
Magnesium	40.5	mg/L	3.33	meq/L	0.2	EPA 200.7	10/18/99	1235	WL
Potassium	38.9	mg/L	1.00	meq/L	0.2	EPA 200.7	10/18/99	1235	WL
Sodium	10,400	mg/L	451	meq/L	0.2	EPA 200.7	10/18/99	1235	WL
CATION / ANION BALANCE QC INFORMATION									
Anion Sum	482	meq/L	482	meq/L	0.1	Calculation	10/22/99	1430	BJ
Cation Sum	455.8	meq/L	456	meq/L	0.1	Calculation	10/22/99	1430	BJ
Cation/Anion Balance	2.82		2.82	%	N/A	N/A	10/22/99	1430	BJ

Reference: EPA - "Methods for Chemical Analysis of Water and Wastes (MCAWW)" - EPA/600/4-79-020 - March, 1983.
EPA - "Methods for the Determination of Metals in Environmental Samples" - Supplement I - 600/R-94-111 - May, 1994.

Reviewed By: William Lipps

Inter-Mountain Laboratories, Inc.
Phone (505) 326-4737 Fax (505) 325-4182
2506 West Main Street, Farmington, NM 87401

Client: Koch Exploration Co.
Project: Pond 1 + Pond 2
Sample ID: Pond #1
Lab ID: 0399W05061
Matrix: Water
Condition: Cool/Intact

Date Received: 10/07/99
Date Reported: 10/22/99
Date Sampled: 10/07/99
Time Sampled: 1230

Parameter	Analytical Result	Units	Units	PQL	Method	Analysis Date	Analysis Time	Analysis Init.
TPH - EPA Method 418.1								
Total Petroleum Hydrocarbons	<1	mg/L		1	EPA 418.1	10/22/99		SW

Reference: EPA - "Methods for Chemical Analysis of Water and Wastes (MCAWW)" - EPA/600/4-79-020 - March, 1983.

Reviewed By: William Lipps

Inter-Mountain Laboratories, Inc.
Phone (505) 326-4737 Fax (505) 325-4182
2506 West Main Street, Farmington, NM 87401

Quality Assurance / Quality Control

Total Petroleum Hydrocarbons

Client:	**Koch**	Date Reported:	10/22/99
Project:	Pond 1 & Pond 2	Date Sampled:	10/07/99
Matrix:	Water	Date Received:	10/07/99
Condition:	Intact/Cool	Date Extracted:	10/22/99
		Date Analyzed:	10/22/99

Method Blank Analysis

Lab ID	Result	Units	Detection Limit
Method Blank	ND	mg/L	1.0

Spike Analysis

Lab ID	Found Conc. mg/L	Sample Conc. mg/L	Spike Amount mg/L	Percent Recovery	Acceptance Limits
MB	31	ND	25.0	125%	70-130%

Known Analysis

Lab ID	Found Conc. mg/L	Known Conc. mg/L	Percent Recovery	Acceptance Limits
QC	17.8	19.6	91%	70-130%

Method 418.1: Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.

Method 3550: Ultrasonic Extraction of Non-Volatile and Semi-Volatile Organic Compounds from Solids, USEPA SW -846, rev.1, July 1992.

Reported By: _____ Reviewed By: _____

KOCH INDUSTRIES INC
P.O. Box 489
Aztec, NM 87410

January 15, 1998

Oil Conservsation Division
1000 Rio Brazos RD
Aztec, NM 87410

ATTN: Mr. Denny Foust

RE: 1997 Yearly Pond Inspection & Water Analysis

Dear Mr. Foust:

Enclosed you will find water analysis from Pond #1 and Pond #2 for the year of 1997 that is required from us on a yearly basis. During our weekly inspections through out the year on both ponds we have not encountered any sick or dead birds or wildlife. If you would like to inspect our reports for each week on either or both of the ponds, they will be available upon request at the Koch Exploration Company's Aztec Office locatated at 610 South Main in Aztec.

If you have any questions or comments concerning these water analysis, please feel free to contact me at (505)-334-9111 or in my mobile phone at (505)-320-0819.

Sincerely,

Don Johnson
Operations Manager
Koch Exploration Company

cc: Roger Anderson
Oil Conservation Division
~~PO Box 2088~~
Santa Fe, NM 87505

Inter·Mountain Laboratories, Inc.

Sheridan, WY -- Gillette, WY -- Farmington, NM -- College Station, TX -- Bozeman, MT

2506 W Main Street
Farmington, New Mexico 87401

***** PACKING SLIP ***** 1644 PAGE: 1

INTER-MOUNTAIN LABORATORIES, INC.
P.O. BOX 4006
SHERIDAN, WY

(307) 674-7506

INVOICE NUMBER: 1644
INVOICE DATE: 11/07/97
LAB LOCATION: 0003
2506 West Main Street
Farmington, NM 87401

Koch Exploration Co.
P.O. Box 489

Aztec NM 87410

CUSTOMER NO: 030000669 IN
Customer P.O. :

TERMS: NET 30
Attn: Don Johnson:

SALES CD	DESCRIPTION	QUANTITY	PRICE	AMOUNT
	COC#01-50580, Pond #1&2 Rcd:10/21/97 Lab#0397 W02463-2464 COC#01-50585 Rcd: 10/22/97 Lab#0397 G02482-2483 PS# 1644			
200530	Cation Anion Balance	2.00	75.00	150.00
301300	TPH-Method 418.1	2.00	55.00	110.00
900060	Sales Tax 6%	1.00	15.44	15.44

Balances past due are subject to a late payment charge of 1.5% or $2.00 minimum per month.

NET INVOICE: 275.44

RInvoice.frx 950130

Inter·Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

Koch Exploration Company

Case Narrative

On October 22, 1997, two water samples were submitted to Inter-Mountain Laboratories - Farmington for analysis. The samples were received cool and intact. Analysis for Total Petroleum Hydrocarbons (TPH) was performed on the samples as per the accompanying Chain of Custody document # 50585.

The samples were extracted by Method 3510, "Separatory Funnel Liquid - Liquid Extraction", with 1,1,2-trichloro 1,2,2-trifluoroethane (Freon) as the extraction solvent. Analysis was by Method 418.1, "Total Recoverable Petroleum Hydrocarbons", using a Beckman Acculab 10 Infrared Spectro-photometer.

It is the policy of this laboratory to employ, whenever possible, preparatory and analytical methods which have been approved by regulatory agencies. The methods used in the analysis of the samples reported herein are found in Test Methods for Evaluation of Solid Waste, SW-846, USEPA, 1986 and Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, USEPA, 1983.

Quality control reports appear at the end of the analytical package and may be identified by title. If there are any questions regarding the information presented in this package, please feel free to call at your convenience.

Sincerely,

Sharon Williams

Sharon Williams
Organic Analyst

Inter·Mountain Laboratories, Inc.

2506 Main Street
Farmington, New Mexico 87401

TOTAL PETROLEUM HYDROCARBONS
EPA METHOD 418.1

Client:	**Koch Exploration Company**	Date Reported:	11/06/97
Project:	Pond #1 & 2	Date Sampled:	10/21/97
Matrix:	Water	Date Received:	10/22/97
Condition:	Intact/Cool	Date Extracted:	11/04/97
		Date Analyzed:	11/04/97

Sample ID	Lab ID	Result mg/L	Detection Limit mg/L
Pond #1 P1	0397G02482	ND	1.0
Pond #2 P2	0397G02483	ND	1.0

ND - Analyte not detected at stated detection level.

Method 418.1:

Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of Water and Waste, 1978.

Method 3510:

Separatory Funnel Liquid - Liquid Extraction, USEPA SW-846, Test Methods for Evaluating Solid Waste, Rev. 1, July 1992.

Reported By _____

Reveiwed By _____

Inter·Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

Quality Assurance / Quality Control

Total Petroleum Hydrocarbons

Client:	**Koch Exploration Company**	Date Reported:	11/06/97
Project:	Pond #1 & 2	Date Sampled:	10/21/97
Matrix:	Water	Date Received:	10/22/97
Condition:	Intact/Cool	Date Extracted:	11/04/97
		Date Analyzed:	11/04/97

Method Blank Analysis

Lab ID	Result	Units	Detection Limit
Method Blank	ND	mg/L	1

Spike Analysis

Lab ID	Found Conc. mg/L	Sample Conc. mg/L	Spike Amount mg/L	Percent Recovery	Acceptance Limits
MB	434	ND	500	87%	70-130%

Known Analysis

Lab ID	Found Conc. mg/L	Known Conc. mg/L	Percent Recovery	Acceptance Limits
QC	28.9	25.2	115%	70-130%

Method 418.1: Petroleum Hydrocarbons, Total Recoverable, USEPA Chemical Analysis of water and waste, 1978.

Method 3550: Ultrasonic extraction of Non-Volatile and Semi-Volatile Organic Compounds from Solids, USEPA SW -846, rev.1, July 1992.

Reported By: _____ Reveiwed By: _____

Inter-Mountain Laboratories, Inc.

2506 W. Main Street
Farmington, New Mexico 87401

Client: Koch Exploration Co.
Project: Cation/anion
Sample ID: Pond #2
Lab ID: 0397W02463
Matrix: Water
Condition: Cool/Intact

Date Received: 10/21/97
Date Reported: 11/03/97
Date Sampled: 10/20/97
Time Sampled: 1540

Parameter	Analytical Result	Units		Units	PQL	Method	Analysis Date	Time	Init.
GENERAL PARAMETERS									
pH	9.3	s.u.			0.1	EPA 150.1	10/21/97	1630	AP
Electrical Conductivity	27,300	µmhos/cm			10	EPA 120.1	10/21/97	1630	AP
Solids - Total Dissolved	20,680	mg/L			10	EPA 160.1	10/22/97	0940	KA
Alkalinity	17,144	mg/L			1	EPA 310.1	10/27/97	1218	BJ
Hardness	147	mg/L			0.2	Calculation	11/03/97	1315	JG
MAJOR ANIONS									
Bicarbonate (HCO3)	13,000	mg/L	213	meq/L	1	EPA 310.1	10/27/97	1218	BJ
Carbonate (CO3)	3,890	mg/L	129.73	meq/L	1	EPA 310.1	10/27/97	1218	BJ
Hydroxide (OH)	<1	mg/L	<0.01	meq/L	1	EPA 310.1	10/27/97	1218	BJ
Chloride	1,300	mg/L	36.7	meq/L	1	EPA 300.0	10/28/97	0915	AP
Sulfate	<5	mg/L	<0.01	meq/L	5	EPA 300.0	11/01/97	1400	AP
MAJOR CATIONS									
Calcium	6.1	mg/L	0.30	meq/L	0.2	EPA 200.7	10/28/97	2358	ST
Magnesium	32.1	mg/L	2.64	meq/L	0.2	EPA 200.7	10/28/97	2358	ST
Potassium	28.1	mg/L	0.72	meq/L	0.2	EPA 200.7	10/28/97	2358	ST
Sodium	9,030	mg/L	393	meq/L	0.2	EPA 200.7	10/28/97	2358	ST
CATION / ANION BALANCE QC INFORMATION									
Anion Sum			380	meq/L	N/A	Calculation	11/03/97	1315	JG
Cation Sum			397	meq/L	N/A	Calculation	11/03/97	1315	JG
Cation/Anion Balance			2.19	%	N/A	Calculation	11/03/97	1315	JG

Reference: EPA - "Methods for Chemical Analysis of Water and Wastes", United States Environmental Protection Agency, EPA 600/4-79-020, Revised March, 1983.

Reviewed By: John Green

John Green, Water Lab Supervisor

Inter·Mountain Laboratories, Inc.

2506 W Main Street
Farmington, New Mexico 87401

Client: Koch Exploration Co.
Project: *Cation/anion*
Sample ID: Pond #1
Lab ID: 0397W02472
Matrix: Water
Condition: Cool/Intact

Date Received: 10/21/97
Date Reported: 11/03/97
Date Sampled: 10/20/97
Time Sampled: 1610

Parameter	Analytical Result	Units		Units	PQL	Method	Analysis Date	Time	Init.
GENERAL PARAMETERS									
pH	9.2	s.u.			0.1	EPA 150.1	10/21/97	1630	AP
Electrical Conductivity	25,000	µmhos/cm			10	EPA 120.1	10/21/97	1630	AP
Solids - Total Dissolved	14,884	mg/L			10	EPA 160.1	10/22/97	0940	KA
Alkalinity	15,005	mg/L			1	EPA 310.1	10/27/97	1218	BJ
Hardness	97	mg/L			1	Calculation	11/03/97	1315	JG
MAJOR ANIONS									
Bicarbonate (HCO3)	13,000	mg/L	213	meq/L	1	EPA 310.1	10/27/97	1218	BJ
Carbonate (CO3)	2,610	mg/L	87.15	meq/L	1	EPA 310.1	10/27/97	1218	BJ
Hydroxide (OH)	<1	mg/L	<0.01	meq/L	1	EPA 310.1	10/27/97	1218	BJ
Chloride	1,300	mg/L	36.8	meq/L	1	EPA 300.0	10/28/97	0915	AP
Sulfate	<5	mg/L	<0.01	meq/L	5	EPA 300.0	11/01/97	1400	AP
MAJOR CATIONS									
Calcium	<0.2	mg/L	<0.01	meq/L	0.2	EPA 200.7	10/28/97	2358	ST
Magnesium	23.4	mg/L	1.93	meq/L	0.2	EPA 200.7	10/28/97	2358	ST
Potassium	22.3	mg/L	0.57	meq/L	0.2	EPA 200.7	10/28/97	2358	ST
Sodium	7,900	mg/L	343	meq/L	0.2	EPA 200.7	10/28/97	2358	ST
CATION / ANION BALANCE QC INFORMATION									
Anion Sum			337	meq/L	N/A	Calculation	11/03/97	1315	JG
Cation Sum			346	meq/L	N/A	Calculation	11/03/97	1315	JG
Cation/Anion Balance			1.33	%	N/A	Calculation	11/03/97	1315	JG

Reference: EPA - "Methods for Chemical Analysis of Water and Wastes", United States Environmental Protection Agency, EPA 600/4-79-020, Revised March, 1983.

Reviewed By: John Green

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