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August 31, 1994

The Branch Chief
High Level Waste & Uranium Recovery Projects Branch
Division of Waste Management, NMSS (5 E2)
11555 Rockville Pike
Rockville, Maryland 20850

re: **License SUA-1472, Docket 40-8904**
L-Bar Semi-Annual Ground-water Data Report

Dear Sir:

Please find enclosed five copies of the L-Bar Semi-Annual Ground-Water Monitoring Report for the first half of 1994.

If you have any questions regarding this report, please do not hesitate to contact me.

Sincerely,

Thomas G. Osborn
Group Manager

Enclosures

cc: David Crouch, Kennecott Corporation
Richard Ohrbom, NMED
The Director, Division of Radiation Safety & Safeguards, Region IV
Uranium Field Recovery Office, Denver, CO

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Semi-Annual Ground-Water Monitoring Report — First Half, 1994

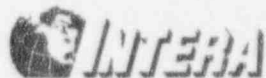
L-Bar Uranium Mine, Cibola County, New Mexico

Prepared for

Sohio Western Mining Company

10 East South Temple
Salt Lake City, Utah 84133

Prepared by



INTERA Inc.

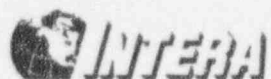
6850 Austin Center Boulevard, Suite 300
Austin, Texas 78731

August 31, 1994

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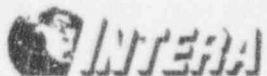
1.0 INTRODUCTION



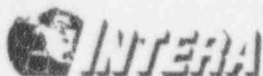
1.0 INTRODUCTION

The enclosed Semi-Annual Ground-Water Monitoring Report contains results of sample analyses for the first half of 1994 for the L-Bar Uranium facility, as required by conditions 12 and 31 of NRC Materials License SUA-1472, Amendment 22, and 10 CFR 40, Section 40.65.

The laboratories used for this round of analyses were Core Laboratories of Aurora, Colorado, for most non-radiological analyses, and Core Laboratories of Casper, Wyoming, for radiological and selenium analyses.



2.0 MONITOR WELL SAMPLING RESULTS FIRST HALF — 1994

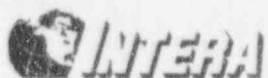


L-BAR MINE
Well MW-1A

Ground-Water Sample
Date Sampled: 04/12/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6222.94
Elevation Top of Casing (TOC) (ft AMSL)	6224.44
Depth to Water from TOC (ft)	108.83
Water Level (ft AMSL)	6115.61
Temp (°C)	17
pH	7.82
Conductivity (µmhos/cm @ 25°C)	4690
Cl (mg/l)	113
SO ₄ (mg/l)	1940
NO ₃ (mg/l)	< 0.1
Ni (mg/l)	< 0.04
Sb (mg/l)	< 0.005
Se (mg/l)	< 0.01
U (ng/l)	0.002
Ra226 (pCi/l)	0.3
Ra228 (pCi/l)	0.3
Th230 (pCi/l)	0.6

(<) = Result less than detection limit

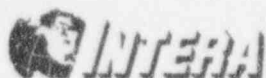


L-BAR MINE
Well MW-2A

Ground-Water Sample
Date Sampled: 04/12/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6186.58
Elevation Top of Casing (TOC) (ft AMSL)	6189.56
Depth to Water from TOC (ft)	NA
Water Level (ft AMSL)	NA
Temp (°C)	16
pH	6.71
Conductivity (μ mhos/cm @ 25°C)	13,600
Cl (mg/l)	838
SO ₄ (mg/l)	6090
NO ₃ (mg/l)	312

NA = Not Applicable - pumpback well
(<) = Result less than detection limit



L-BAR MINE
Well MW-3A

Ground-Water Sample
Date Sampled: 04/13/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6155.76
Elevation Top of Casing (TOC) (ft AMSL)	6157.51
Depth to Water from TOC (ft)	24.8
Water Level (ft AMSL)	6132.71
Temp (°C)	15
pH	7.26
Conductivity (μ mhos/cm @ 25°C)	18,400
Cl (mg/l)	696
SO ₄ (mg/l)	11,700

(<) = Result less than detection limit

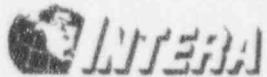


L-BAR MINE
Well MW-14

Ground-Water Sample
Date Sampled: 04/12/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6154
Elevation Top of Casing (TOC) (ft AMSL)	6155.7
Depth to Water from TOC (ft)	38.38
Water Level (ft AMSL)	6117.32
Temp (°C)	17
pH	7.17
Conductivity (μ mhos/cm @ 25°C)	10,800
Cl (mg/l)	451
SO ₄ (mg/l)	5,600

(<) = Result less than detection limit



L-BAR MINE
Well MW-i7B

Ground-Water Sample
Date Sampled: 04/12/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6180.37
Elevation Top of Casing (TOC) (ft AMSL)	6181.62
Depth to Water from TOC (ft)	40.87
Water Level (ft AMSL)	6140.75
Temp (°C)	17
pH	7.14
Conductivity (µmhos/cm @ 25°C)	12,900
Cl (mg/l)	476
SO ₄ (mg/l)	4930
NO ₃ (mg/l)	938
Ni (mg/l)	<0.04
Sb (mg/l)	0.006
Se (mg/l)	<0.01
U (mg/l)	0.036
Ra226 (pCi/l)	1.4
Ra228 (pCi/l)	2.1
Th230 (pCi/l)	0.3
CN (mg/l)	< 0.01

(<) = Result less than detection limit

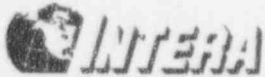


L-BAR MINE
Well MW-29A

Ground-Water Sample
Date Sampled: 04/13/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6194
Elevation Top of Casing (TOC) (ft AMSL)	6194.84
Depth to Water from TOC (ft)	57.24
Water Level (ft AMSL)	6137.6
Temp (°C)	16
pH	7.78
Conductivity (µmhos/cm @ 25°C)	6,660
Cl (mg/l)	100
SO ₄ (mg/l)	3,250
NO ₃ (mg/l)	< 0.1
Ni (mg/l)	< 0.04
Sb (mg/l)	< 0.005
Se (mg/l)	< 0.01
U (mg/l)	0.001
Ra226 (pCi/l)	1.3
Ra228 (pCi/l)	3.2
Th230 (pCi/l)	0.9

(<) = Result less than detection limit

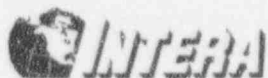


L-BAR MINE
Well MW-50

Ground-Water Sample
Date Sampled: 04/11/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6186.689
Elevation Top of Casing (TOC) (ft AMSL)	6188.339
Depth to Water from TOC (ft)	47.691
Water Level (ft AMSL)	6140.648
Temp (°C)	15
pH	6.93
Conductivity (µmhos/cm @ 25°C)	11,800
Cl (mg/l)	548
SO ₄ (mg/l)	4390
NO ₃ (mg/l)	635
Ni (mg/l)	<0.04
Se (mg/l)	<0.01

(<) = Result less than detection limit

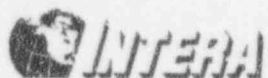


L-BAR MINE
Well MW-57

Ground-Water Sample
Date Sampled: 04/12/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6130.755
Elevation Top of Casing (TOC) (ft AMSL)	6131.705
Depth to Water from TOC (ft)	25.715
Water Level (ft AMSL)	6105.99
Temp (°C)	15
pH	7.58
Conductivity (µmhos/cm @ 25°C)	4,550
Cl (mg/l)	84.5
SO ₄ (mg/l)	2,080

(<) = Result less than detection limit

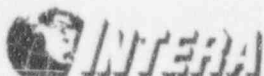


L-BAR MINE
Well MW-58

Ground-Water Sample
Date Sampled: 04/13/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6148.293
Elevation Top of Casing (TOC) (ft AMSL)	6149.753
Depth to Water from TOC (ft)	35.686
Water Level (ft AMSL)	6114.067
Temp (°C)	16
pH	8.05
Conductivity (µmhos/cm @ 25°C)	2,830
Cl (mg/l)	60.9
SO ₄ (mg/l)	862

(<) = Result less than detection limit

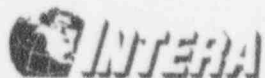


L-BAR MINE
Well MW-61

Ground-Water Sample
Date Sampled: 04/12/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6124.053
Elevation Top of Casing (TOC) (ft AMSL)	6124.873
Depth to Water from TOC (ft)	37.031
Water Level (ft AMSL)	6087.842
Temp (°C)	20
pH	7.36
Conductivity (µmhos/cm @ 25°C)	5,700
Cl (mg/l)	108
SO ₄ (mg/l)	3,090

(<) = Result less than detection limit



L-BAR MINE
Well MW-69

Ground-Water Sample
Date Sampled: 04/11/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6158.510
Elevation Top of Casing (TOC) (ft AMSL)	6159.690
Depth to Water from TOC (ft)	NA
Water Level (ft AMSL)	NA
Temp (°C)	15
pH	6.88
Conductivity (µmhos/cm @ 25°C)	11,000
Cl (mg/l)	579
SO ₄ (mg/l)	5,880
NO ₃ (mg/l)	7.2
Ni (mg/l)	<0.04
Sb (mg/l)	0.005
Se (mg/l)	< 0.01
U (mg/l)	0.526
Ra226 (pCi/l)	2.5
Ra228 (pCi/l)	6.3
Th230 (pCi/l)	0.5

NA = Not Applicable - pumpback well

(<) = Result less than detection limit

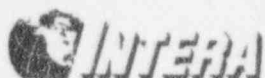


L-BAR MINE
Well MW-72

Ground-Water Sample
Date Sampled: 04/11/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6163.307
Elevation Top of Casing (TOC) (ft AMSL)	6164.517
Depth to Water from TOC (ft)	27.585
Water Level (ft AMSL)	6136.932
Temp (°C)	13
pH	7.41
Conductivity (µmhos/cm @ 25°C)	7,160
Cl (mg/l)	139
SO ₄ (mg/l)	3,940

(<) = Result less than detection limit

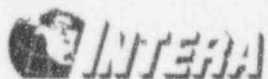


L-BAR MINE
Well MW-76

Ground-Water Sample
Date Sampled: 04/12/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6135.501
Elevation Top of Casing (TOC) (ft AMSL)	6136.221
Depth to Water from TOC (it)	20.828
Water Level (ft AMSL)	6115.393
Temp (°C)	16
pH	7.48
Conductivity (µmhos/cm @ 25°C)	6,030
Cl (mg/l)	107
SO ₄ (mg/l)	3,230

(<) = Result less than detection limit



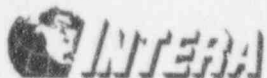
L-BAR MINE
Well MW-77

Ground-Water Sample
Date Sampled: 04/11/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6143.044
Elevation Top of Casing (TOC) (ft AMSL)	6143.664
Depth to Water from TOC (ft)	NA
Water Level (ft AMSL)	NA
Temp (°C)	15
pH	7.27
Conductivity (µmhos/cm @ 25°C)	7,560
Cl (mg/l)	252
SO ₄ (mg/l)	4,210

NA = Not Applicable - pumpback well

(<) = Result less than detection limit

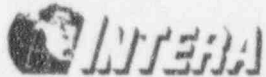


L-BAR MINE
Well MW-78

Ground-Water Sample
Date Sampled: 04/13/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6149.666
Elevation Top of Casing (TOC) (ft AMSL)	6150.726
Depth to Water from TOC (ft)	35.490
Water Level (ft AMSL)	6115.236
Temp (°C)	22
pH	7.14
Conductivity (µmhos/cm @ 25°C)	6,310
Cl (mg/l)	131
SO ₄ (mg/l)	3,550

(<) = Result less than detection limit

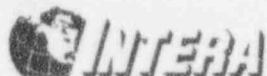


L-BAR MINE
Well MW-79

Ground-Water Sample
Date Sampled: 04/12/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6134.229
Elevation Top of Casing (TOC) (ft AMSL)	6135.369
Depth to Water from TOC (ft)	23.583
Water Level (ft AMSL)	6111.786
Temp (°C)	16
pH	7.82
Conductivity (μ mhos/cm @ 25°C)	7,220
Cl (mg/l)	119
SO ₄ (mg/l)	3,480

(<) = Result less than detection limit

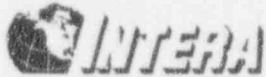


L-BAR MINE
Well MW-81

Ground-Water Sample
Date Sampled: 04/13/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6164.397
Elevation Top of Casing (TOC) (ft AMSL)	6165.257
Depth to Water from TOC (ft)	46.707
Water Level (ft AMSL)	6118.55
Temp (°C)	15
pH	7.25
Conductivity (µmhos/cm @ 25°C)	7,210
Cl (mg/l)	166
SO ₄ (mg/l)	4,520
NO ₃ (mg/l)	36
Ni (mg/l)	<0.04
Sb (mg/l)	<0.005
Se (mg/l)	<0.01
U (mg/l)	0.020
Ra226 (pCi/l)	1.5
Ra228 (pCi/l)	4.9
Th230 (pCi/l)	0.6

(<) = Result less than detection limit



L-BAR MINE
Well MW-91

Ground-Water Sample
Date Sampled: 04/12/94

CONSTITUENT	VALUE
Ground Surface Elevation (ft AMSL)	6188.36
Elevation Top of Casing (TOC) (ft AMSL)	6190.24
Depth to Water from TOC (ft)	52.546
Water Level (ft AMSL)	6137.694
Temp (°C)	16
pH	7.23
Conductivity (μmhos/cm @ 25°C)	5,890
Cl (mg/l)	38.2
SO ₄ (mg/l)	3,730
NO ₃ (mg/l)	< 0.1
Ni (mg/l)	<0.04
Sb (mg/l)	<0.005
Se (mg/l)	<0.01
U (mg/l)	0.003
Ra226 (pCi/l)	4.1
Ra228 (pCi/l)	8.0
Th230 (pCi/l)	0.8

< = Result less than detection limit