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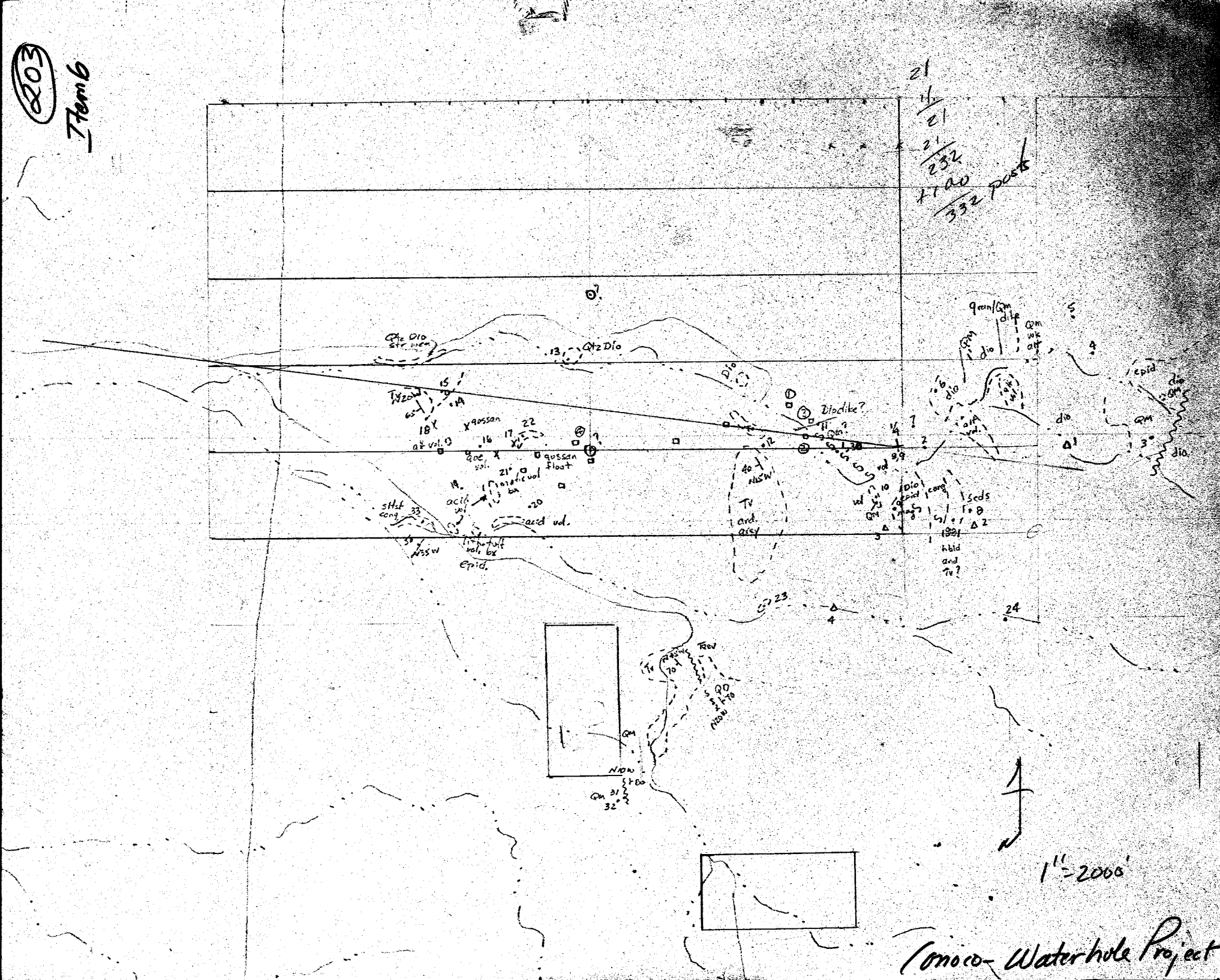

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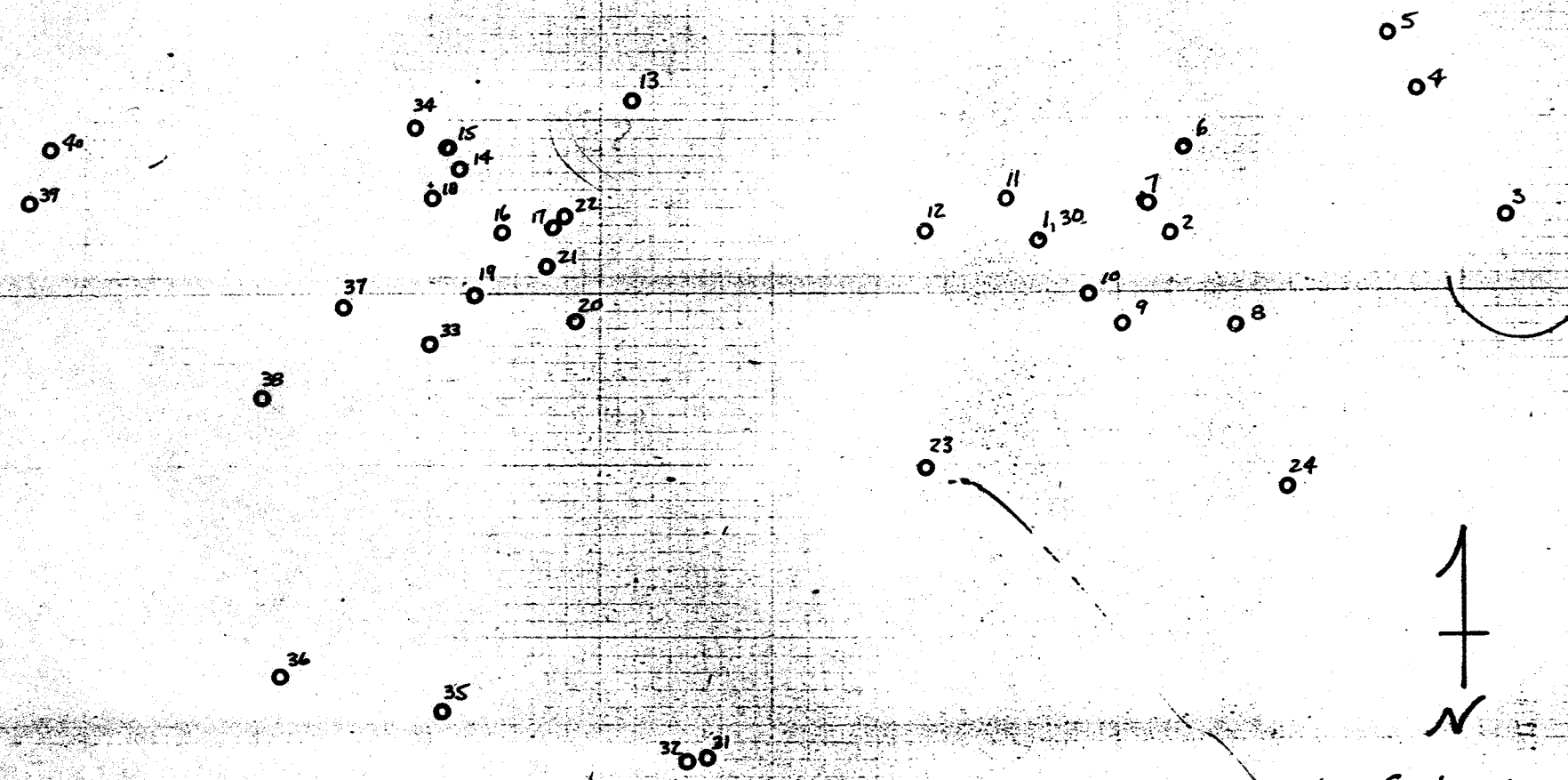

Rock Chip Geochemical Sampling

Conoco – Waterhole Prospect, Nevada

Sample Locations

1" = 2000'

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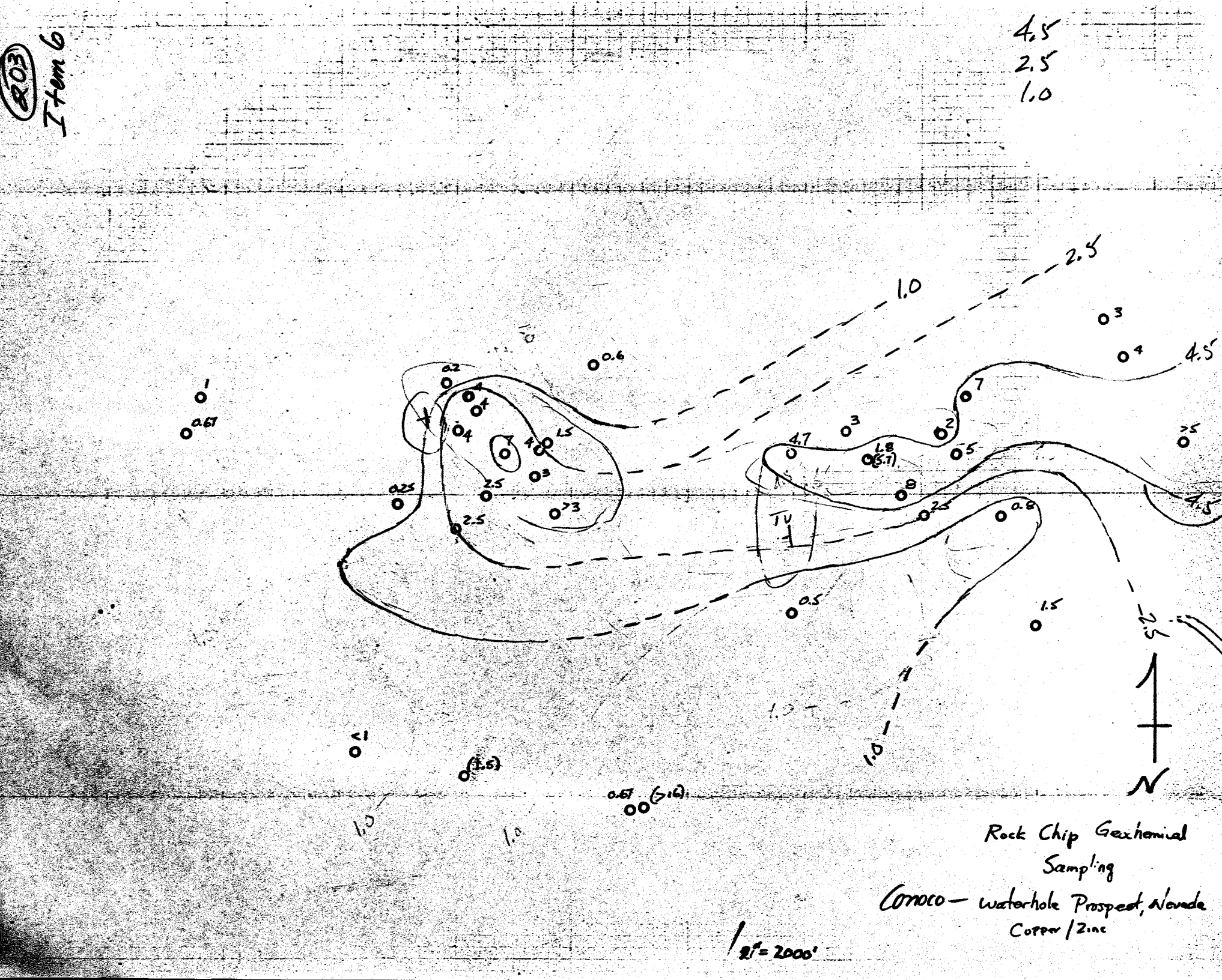

Rock Chip Geochemical Sampling

Conoco — Waterhole Prospect, Nevada

Copper / Zinc

1" = 2000'

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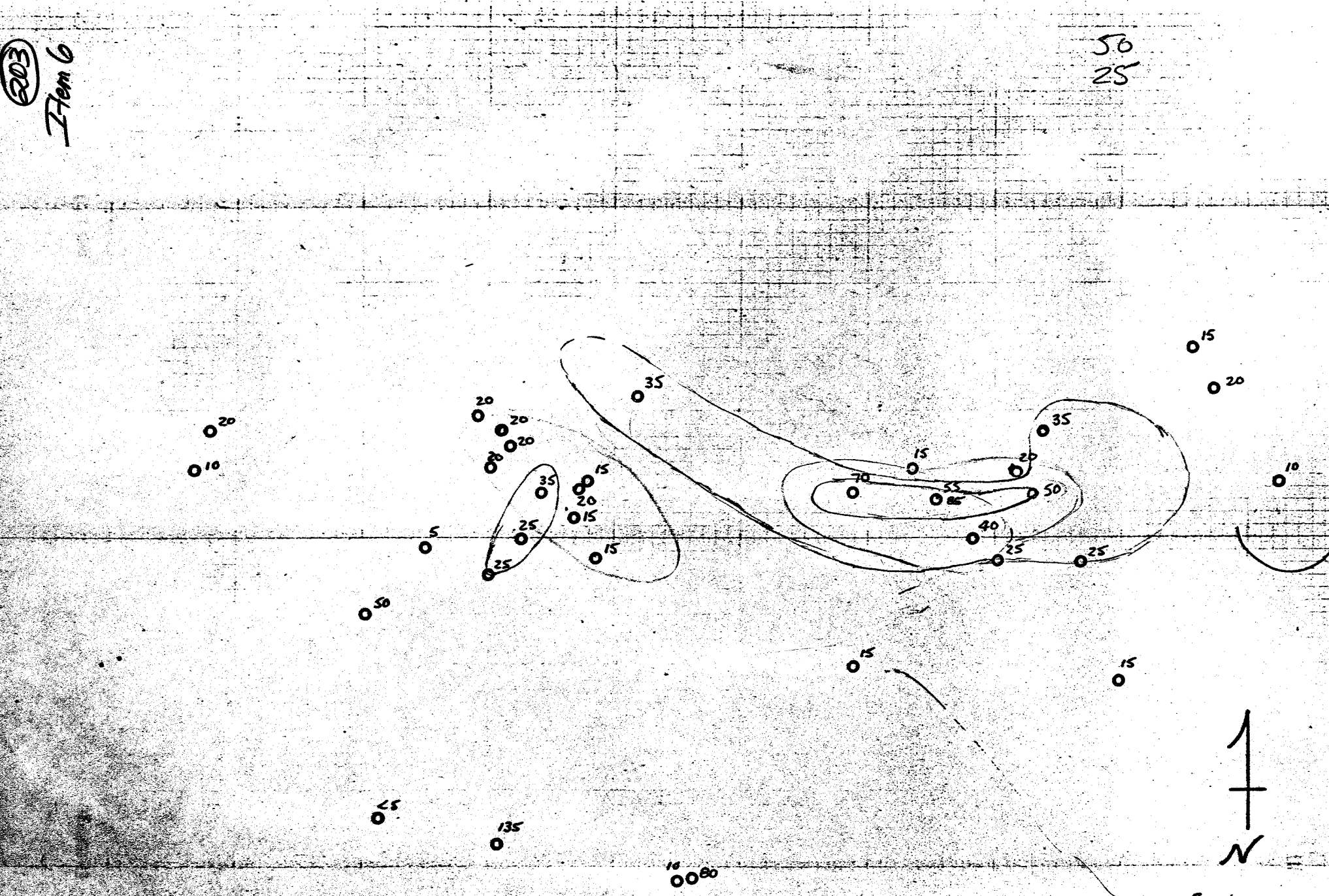

Rock Chip Geochemical Sampling
Conoco — Waterhole Prospect, Nevada
Copper, ppm

1" = 2000'

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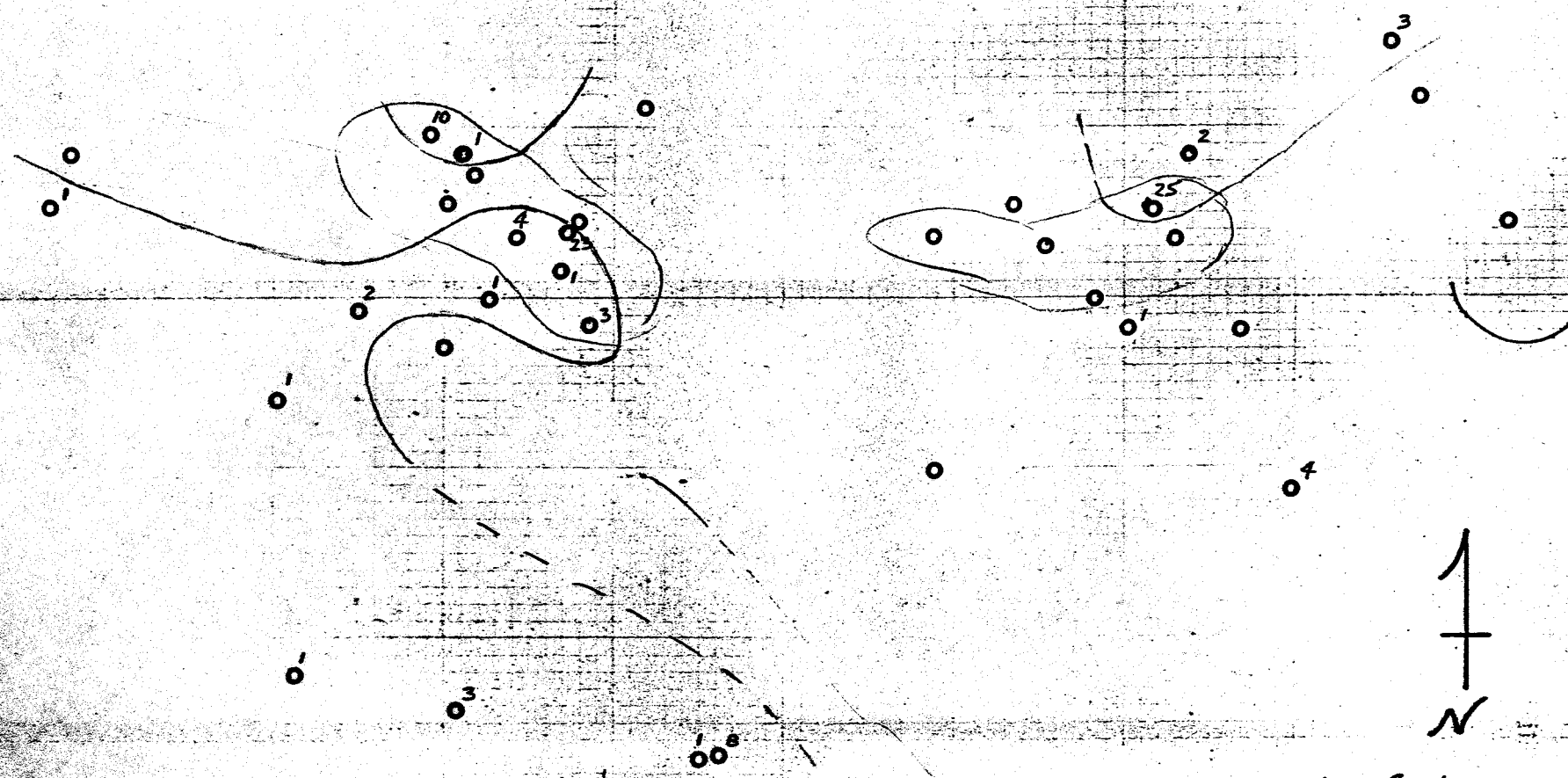

Rock Chip Geochemical Sampling

Conoco – Waterhole Prospect, Olanda

Mo, ppm

(All samples 1 ppm or greater)

1" = 2000'

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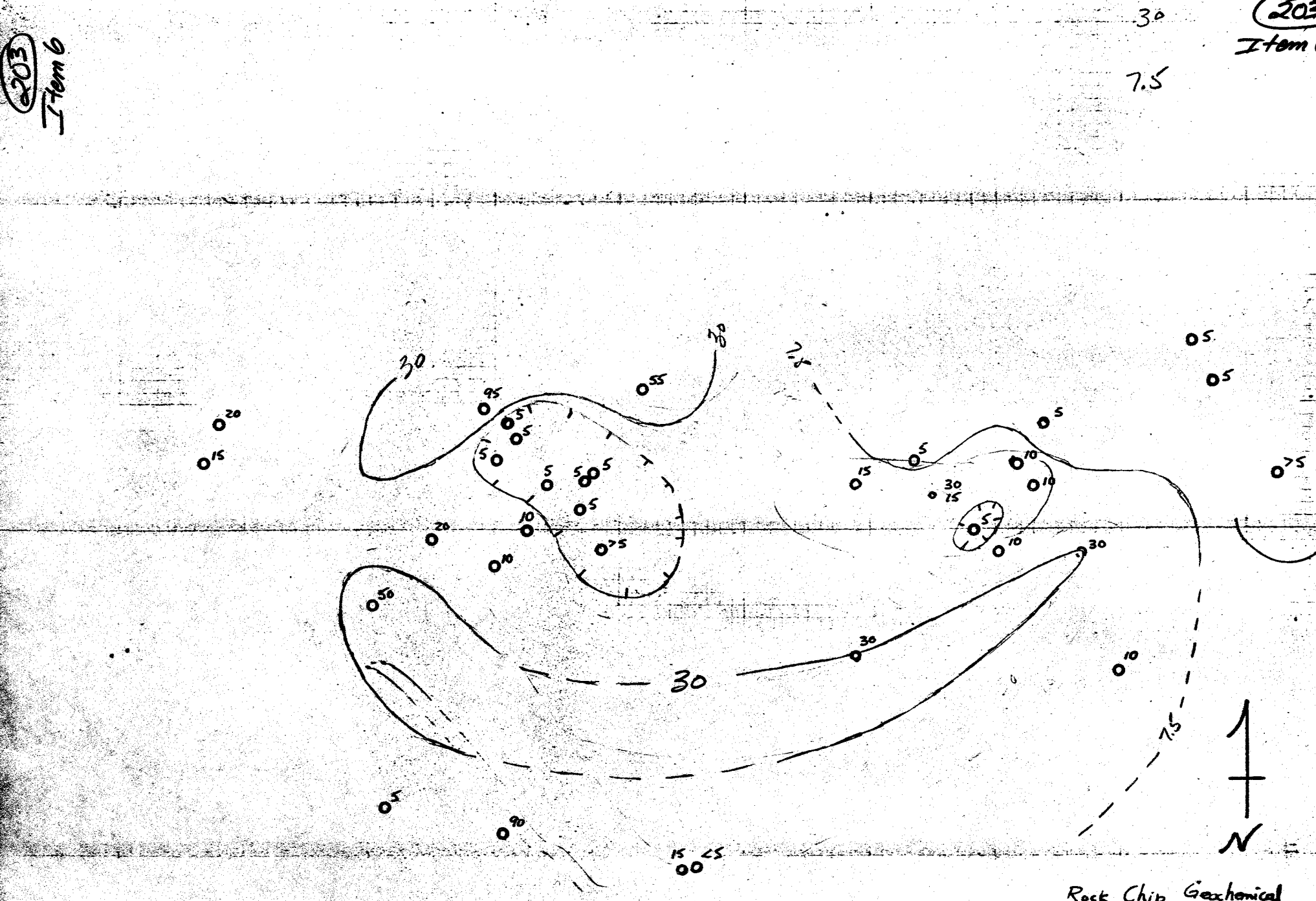

Rock Chip Geochemical Sampling

Conoco – Waterhole Prospect, Nevada

Zinc, ppm

1" = 2000'

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Item 6

Eklund Drilling Company

L. W. EKLUND, Owner

P.O. Box 666 Phone 702-754-6548 Carlin, Nevada 89822

April 3, 1975

DAVE DAVIS
Continental Oil Company
P. O. Box 7608
Reno, Nevada 89502

Invoice #36-3 75

INVOICE

For drilling services performed by Rig #36 in March 1975:

136 hrs. @ $45.00	$6,120.00
5 hrs. standby @ $35.00	175.00
22 days subsistance, 2 man crew @ $30.00	660.00
5 - sks. QuikGel @ $4.35	21.75
16 - sks. SuperBen @ $4.35	69.60
13 - sks. QuikTrol @ $6.75	87.75
2 - sks. MicaTex @ $9.95	19.90
12 - gals. diesel @ 38¢	4.56
2 - 4 3/4 Rock Bits @ $83.50	167.00
Demobilization to Carlin, 292 mi. @ $2.50	730.00
Invoice Total	$8,055.56

L. D. C. D.

Waterhole
8182-7070169

Thank you,

EKLUND DRILLING COMPANY

4-15 + RFS ✓

Conoco - Waterhole Project

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conoco

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Item 6

Interoffice Communication

To P. H. Kirwin, Reno

From Steve Kilbreath, Reno

Date August 5, 1974

Subject WATERHOLE PROJECT, GEOLOGIC MAPPING

INTRODUCTION

A detailed geologic mapping project was undertaken in the Waterhole copper prospect (Sections 7, 8, 17, 18; T9N, R28E) from June 13 through July 6, 1974. This area consists mainly of Triassic sediments and volcanics that are weakly metamorphosed. The Triassic rocks are capped by Tertiary volcanics which appear to be andesitic flows and pyroclastics. All the rocks were faulted during the Basin and Range episode.

The Triassic rocks occur in a rough east-west belt through Sections 7, 8, and 9. They are flanked by intrusives to the south and to the north in the NE 1/4 of Section 8. These range in composition from diorite to granite. The intrusives are all later than the Triassic rocks, but trying to date them relative to each other without more outcrops is difficult.

MAPPABLE ROCK UNITS

1. Triassic sediments. These rocks are mostly siltstone, conglomerate, quartose sandstone and chert. These have all been metamorphosed to hornfels which may be the product of both regional and contact metamorphism. Most of this unit is dense, fine grained, dark hornfels that is locally spotted. Dark colored, silicious conglomerate with some volcanic clasts up to 2" (average 1/8" - 3/8") was seen in the SE 1/4 of Section 9. A band of reddish brown, medium grained quartzite is present in the SW 1/4 of Section 7. It also protrudes northward from under the Tertiary volcanics in Section 7. The least abundant sedimentary rock is dark grey-black chert, seen only as intercalations within the conglomerate in Section 9, and a small amount in Section 12.

2. Triassic basic volcanics. This unit is a fine to medium grained, pyroxene and feldspar bearing basalt with veinlets and clots of epidote. The basalt appears to be part of the normal stratigraphic sequence in Section 12. Medium to course grained pyroxene gabbro is present in Sections 8 & 9 near the Waterhole. Outcrop is limited. The coarsness of the texture leads you to believe it is an intrusive and possibly younger than the Triassic.

3. Triassic volcanics. This unit is predominatly a white, quartz rich, locally altered pyroclastic with abundant iron staining on the fractures. This rock contains abundant sericite and no fresh feldspars. In a few places where unaltered, it contains up to 5% disseminated pyrite which is probably syngenetic. In most places you can find a few iron stained cubic casts or hematite pseudomorphs after pyrite. This unit includes a dark to light gray, quartz and feldspar rich lithic tuff, which makes up the entire hill in the SE 1/4 of Section 12. It also occurs as scattered patches near the Waterhole in Section 8. A fine grained, "salt and pepper" appearing

Conoco-Waterhole Project

volcanic that could be interlayered with the pyroclastics in the NE 1/4 of Section 17 and SE 1/4 of Section 8 was also mapped with the Triassic volcanics.

4. Diorite. Coarse grained, hornblende diorite crops out in the NE 1/4 of Section 8 and the NW 1/4 of Section 9. This rock consists entirely of plagioclase and green poikilitic hornblende in equal amounts. There is some granitic material which is present as dikes.

5. Quartz Diorite. Medium to coarse grained, grey quartz diorite is present in the NE 1/4 of Section 8. This rock consists of plagioclase, hornblende, biotite and quartz (10%). There are also outcrops of a highly weathered, quartz bearing intrusive near the fresher material which is presumed to be the same rock unit. A quartz diorite outcrop just north of the hill in the center of Section 7 appears to be very similar to that in Section 8. A northwest trending, fine to medium grained, quartz diorite dike is present on the section line between Sections 8 and 9. There was one small outcrop where I found some copper stain on the dike.

6. Granodiorite. A large area of light grey, medium to coarse grained granodiorite trends northwest through Section 17 and 18. This rock consists of plagioclase, hornblende, biotite, quartz and K-spar (5 - 10%). The mafics have all been altered to chlorite. There appears to be an increase in K-spar from southeast to northwest.

7. Quartz Monzonite. A medium to coarse grained, pinkish-grey quartz monzonite crops out in the center of Section 17. The rock consists of hornblende, biotite, quartz and equal amounts of K-spar and plagioclase. These mafics have also undergone chloritic alteration.

8. Granite. A very coarse grained granite is present in the SE 1/4 of Section 5. This rock consists of almost equal amounts of K-spar and quartz with minor biotite. There are phenocrysts of K-spar up to 2 cm and abundant aplitic veining.

9. Tertiary volcanics. These rocks are fine grained andesite with pilotaxitic hornblende needles scattered throughout. Overall color is dark grey and the rock weathers to a reddish brown. There is abundent flow banding and jointing. There are also a few small outcrops of a coarse grained andesitic agglomerate. These are scattered and surrounded by Quaternary alluvium so no real extent to them was seen.

STRUCTURE

The structures of the Waterhole area are predominately north-south or a little east or west of north-south. The north-south alignment is seen in faulting, folding and the veining.

FAULTING

There were four definite faults visible in the area; three are almost parallel and trend roughly N20°E and the fourth trends about N45°W. I could get some feeling for displacement on the two faults in Section 8. Both are normal faults with a right lateral component. The fault in Section 18

has a definite left lateral motion but on the fault in Section 17 I could get no motion except a dip of 60° northwest.

I feel that there could be several other faults present. There easily could be an east-west fault in the northern part of Section 17 to offset the two north-south faults. It seems likely that since the Tertiary volcanics in Sections 7 and 8 are lower than any other Tertiary rocks around, they are faulted down by another north-south fault. There could be two more north-south faults causing the minor offsets that were observed on the contact between Triassic sediments and granodiorite in Section 18.

VEINS

A large number of prospects pits and adits are scattered throughout the granodiorite and quartz monzonite. These were all on quartz veins, the majority of which trend roughly north-south, or within 25° east or west of north-south.

FOLDS

The hill in Section 7 displays an outcrop pattern typical of a plunging syncline trending north-south and plunging to the southwest. The Triassic volcanics are wrapped around the sediments to give this pattern. According to the dips the northwest flank of the syncline has to be overturned, giving the same relative dips on each flank. If the volcanics are continuous with the ones in Section 8 there may be an anticline that is trending to the north.

COPPER MINERALIZATION

The copper mineralization seen in the Waterhole area was predominatly in quartz veining in the quartz monzonite and granodiorite in Sections 17 and 18. It occurs mainly as oxide staining after calcopyrite. Very little fresh calcopyrite was seen, mainly hematite blobs with oxide stain nearby. There is about a two foot wide vein of copper oxide stain along a shear zone in the SE 1/4 of the NE 1/4 of Section 1. Again this is probably all after calcopyrite.

Steve Kilbreath pb.

Steve Kilbreath

pb

CONOCO

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Item 6

Interoffice Communication

To Peter H. Kirwin

From Byron R. Berger

Date August 1, 1975

Subject Waterhole Project Summary

Attached is a brief summary of the exploration program on the Waterhole prospect. The interpretations and recommendations are based on my association with the general Wassuk Range reconnaissance program and logging of the rotary drill cuttings. I was not involved in the geologic, geochemical, and geophysical exploration programs.

Byron R. Berger

Byron R. Berger
Geologist

pb
Att.

Conoco - Waterhole Project

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Item 6

SUMMARY AND EVALUATION OF THE WATERHOLE PROSPECT

Byron R. Berger
July 30, 1975

SUMMARY AND EVALUATION OF THE WATERHOLE PROSPECT

INTRODUCTION

The Waterhole prospect was originally investigated during the fall of 1973, as a color anomaly on aerial photographs of the Wassuk reconnaissance area.[1] The prospect is on the westerly extension of a large, positive magnetic anomaly. Property acquisition was effected in December, 1973, consisting of the staking of 100 lode mining claims. Geologic mapping, geochemical surveying, and an induced polarization survey during 1974 led to the selection of two drill sites. Rotary drilling was done in early 1975.

The purpose of this report is to briefly review the exploration program and results, and to make recommendations for further work.

GEOLOGICAL EXPLORATION

Exploration Program

Field examination of a color anomaly on aerial photographs led to the recognition of a large area of pyritic alteration in Mesozoic acidic volcanic rocks. Metatuffs contain quartz-sericite alteration, and the alteration appears to be related to altered-appearing granitic intrusions. Fracture systems with narrow selvages of quartz-sericite alteration contain vitreous limonite interpreted as an oxidation product after chalcocite. Martite and various limonites suggest that the system also contains magnetite and pyrite. Preliminary geologic

sampling indicated that a porphyry-type target may exist under Tertiary cover to the north and west of exposed pre-Tertiary rocks.[2]

An attempt to more thoroughly delineate the alteration and to determine the Mesozoic stratigraphic relationships was commenced in June, 1974. Geologic mapping at a scale of 1" = 1,000' was completed for the claim block. Several intrusive phases were identified, as well as different types of pre-plutonic volcanic rocks. Copper oxide-bearing fractures were found adjacent to the claim block in intrusive rocks, and were interpreted as trending toward the prospect area.[3] The pyritic alteration in the metatuffs was interpreted as being in part syngenetic.[4]

Two drill targets (Figure 1) were selected on the basis of the geologic mapping program. No corroborative data were acquired from geochemical and geophysical surveys to aid in the selection of drill sites.

Interpretation

Although the altered metavolcanic rocks do not extend south of the Waterhole prospect, the quartz-sericit-pyrite alteration does extend to the east onto the Naval reserve. Except for about a one mile band of intrusive rocks, the alteration is traceable northwest continuously to the Spanish Mines prospect. Similar alteration exists in the metavolcanics southeast of VABM Stud. Thus there does not appear to be any specific significance to the alteration around the Waterhole prospect.

The relationships of the intrusive rocks to the metavolcanics are relatively well exposed at several localities. No porphyritic textures and/or stockwork veining are evident. Some of the intrusions are only altered in a regional sense[5], displaying epidote-chlorite alteration. I suggest, however, that the bleached appearance of the metavolcanics and the high pyrite content are due to contact metamorphic processes and are not syngenetic as suggested in the property geologic report.[6]

The distribution of copper-bearing fracture systems in the area indicates that there is no definite relationship between those found south of the Waterhole claim block and the altered metavolcanics. North to northwest-trending fractures or faults control mineralization throughout the area as shown in Figure 2.

GEOPHYSICAL EXPLORATION

Exploration Program

Geophysical exploration consisted of a dipole-dipole polarization and resistivity survey[7] and a partially completed ground magnetics survey.

Five IP lines were completed, three at 1,000 foot spacing and two at 500 foot spacing. These lines represent approximately thirteen line miles of coverage. A weak, near-surface IP response was detected over altered metavolcanics in the eastern one-half of Section 7 (T9N, R28E). A moderate response was also detected in the area of the Waterhole (Section 8, T9N, R28E). However, all in all, a


Qal
Tv
Ŧev
grn
dio
qd
Ŧes
dio?
mt-qtz
magnetite and qtz.
RWH-4
tuff
Ŧbv
RWH-1 to RWH-3
8
6745
tuff & ext.
Ŧes
grd
possible fault
ext.
qm
Cu oxides in shear
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extrusives
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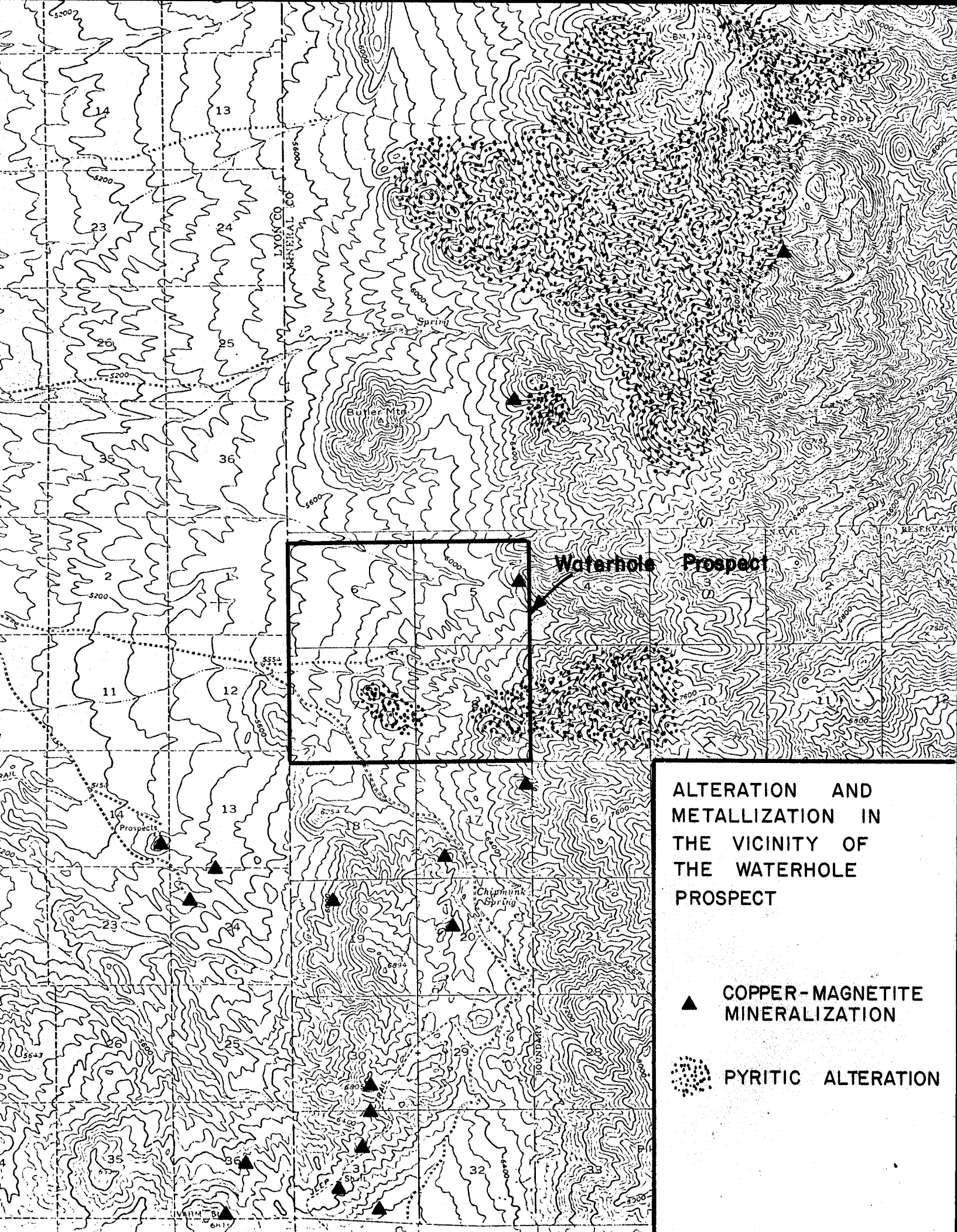
qtz. vein


Waterhole Prospect
Butler Mtn
Spring
Chipmunk Spring
Prospects
LYON CO
MINERAL CO
ALTERATION AND METALLIZATION IN THE VICINITY OF THE WATERHOLE PROSPECT
COPPER-MAGNETITE MINERALIZATION
PYRITIC ALTERATION

rather uniform horizontal layering is observed in the data. Part of this layering is due to a problem in the recording system between the fifth and sixth channels.

A ground magnetics survey was commenced during the drilling program to provide more data on the highly magnetic rocks being encountered in the drill cuttings. Due to poor weather, instrument problems, and a shortage of technical personnel, the survey was only one-half completed. Data are only available for the northern portion or the claim block.

Interpretation

Fresh sulfides in the metavolcanic rocks at a shallow depth should have been detected by the IP survey. Most of the poor response is probably due to electronic problems with the survey equipment. However, most of the area mapped as Quaternary alluvium in the claim block is actually covered by Tertiary volcanic rocks and volcaniclastic lake bed sediments. These volcanic and sedimentary rocks may have affected the penetrability of the survey equipment. The ground magnetic data available suggest that pre-Tertiary rocks continue under the covered area at a shallow depth without much change in magnetic character. Thus one may assume that there is little change in the type of alteration from the covered area to the outcrop.

GEOCHEMICAL EXPLORATION

Rock chip sampling for geochemical analysis was done during the

initial stages of claim staking and property evaluation. Copper values range from less than 5 ppm to 135 ppm, the average being 31 ppm. Zinc averages 17 ppm, and molybdenum 2 ppm. None of these values are significant, and no metallization patterns can be discerned from them.

DRILLING PROGRAM

As mentioned, two sites (Figure 1) were selected for testing by rotary drilling methods.[8] The sites were selected to test the pyritized rock near the Waterhole and the area of weak IP response in Section 7 (T9N, R28E). Drilling was commenced near the Waterhole. RWH-1 was lost at 75 feet in caving ground; RWH-2 was a redrill at the same locality and was lost at 125 feet for the same reasons. RWH-3 was a third attempt to get a deep test of the pyritized area using mud instead of air and was taken to a total depth of 440 feet. Triassic metavolcanics were encountered throughout the hole displaying quartz-epidote, pyrite, and magnetite alteration. RWH-4 was drilled to 410 feet total depth in Triassic metavolcanics with similar alteration as RWH-3, except that little magnetite was observed. A narrow dike-like body of hornblende diorite was cut in the hole and the intrusion contained pyrite. No other alteration of the dike was evident, and the assay data suggested no copper mineralization was present.

All of the drill hole and rock geochemical assay data indicate that the pyrite-chlorite-epidote-quartz alteration is not related to

a porphyry copper-type system. Copper values in all of the drill holes range from 5 to 205 ppm with the average geochemical values being as follows:

RWH-1

	Range	Mean	Standard Deviation
Copper	10 to 120	63 ppm	29
Molybdenum	<1 to 4	1 ppm	1
Lead	10 to 60	20 ppm	15
Zinc	5 to 95	44 ppm	28

RWH-2

	Range	Mean	Standard Deviation
Copper	20 to 125	52 ppm	32
Molybdenum	<1 to 1	<1 ppm	<1
Lead	10 to 70	14 ppm	12
Zinc	15 to 75	42	15

RWH-3

	Range	Mean	Standard Deviation
Copper	15 to 205	56 ppm	34
Molybdenum	<1 to 5	1 ppm	1
Lead	<10 to 120	17 ppm	17
Zinc	5 to 190	48 ppm	41

RWH-4

	Range	Mean	Standard Deviation
Copper	5 to 420	17 ppm	47
Molybdenum	<1 to 10	2 ppm	2
Lead	<10 to 20	2 ppm	4
Zinc	<5 to 20	3 ppm	4
Silver	<1 to 1	<1 ppm	

There appears to be less base metal content in the metavolcanics away from the Waterhole *per se*, but the differences are not statistically significant.

CONCLUSIONS AND RECOMMENDATIONS

The Waterhole prospect does not appear to be a portion of a porphyry copper-type system. Similarly altered volcanics occur at many places in the range with no associated copper mineralization. Geochemical surveying indicates a uniformly low background for all of the base metals. Copper-bearing fractures in the region do not appear to have any relationship to the alteration at the Waterhole, though all of the metallization and alteration in the region may be related to multiple intrusive activity. The intrusions are relatively fresh at all localities except for a regional development of chlorite and epidote in some stocks regardless of age.

The drill results failed to upgrade the Waterhole prospect. As a result, I recommend that no further work be done on the Waterhole claim block at this time.

FOOTNOTES

[1]P. H. Kirwin - Monthly Report, November, 1973.

[2]P. H. Kirwin - Monthly Report, November, 1973.

[3]P. H. Kirwin - Monthly Report, July 1974.

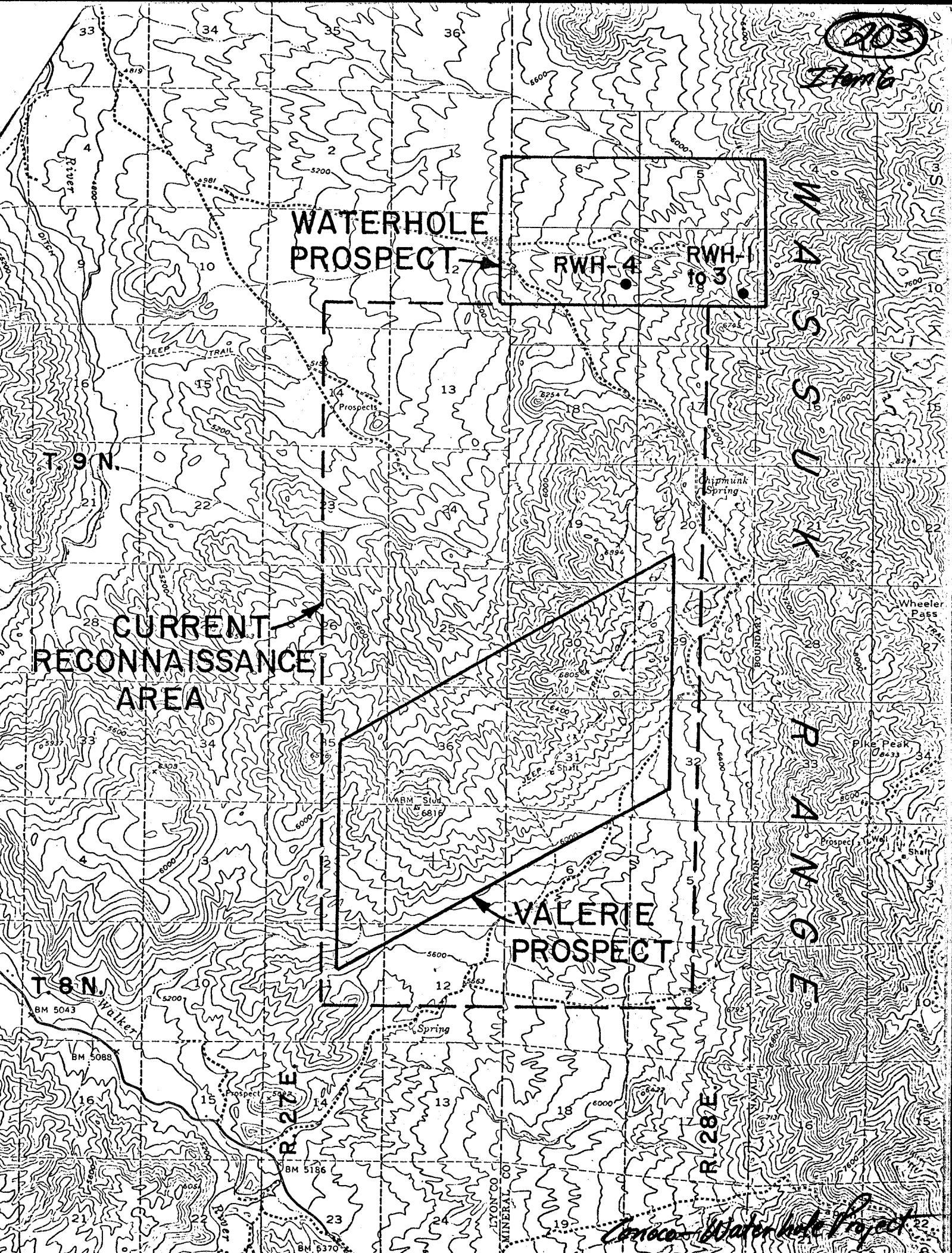
[4]S. P. Kilbreath - File Report, Waterhole Project, August, 1974.

[5]Refer to the file report on Wassuk Range reconnaissance project.

[6]S. P. Kilbreath - File Report, Waterhloe Project, August, 1974.

[7]Refer to Waterhole project, geophysics file.

[8]Refer to Waterhole project, drilling file.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WATERHOLE PROSPECT
RWH-4
RWH-1 to 3
CURRENT RECONNAISSANCE AREA
VALERIE PROSPECT
T. 9 N.
T. 8 N.
R. 27 E.
R. 28 E.
MISSOULA
PAVAGE
Chipmunk Spring
Wheeler Pass
Pike Peak
Prospects
Spring
Walker River
BM 5043
BM 5088
BM 5186
BM 5370
LYON CO.
MINERAL CO.
Conoco-Waterhole Project

3210 0006

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Interoffice Communication

File

To D. C. Davis

From B. R. Berger

Date July 11, 1975

Subject Waterhole Prospect - Impressions and Recommendations

A general reconnaissance of the central Wassuk Range has been completed, and several ideas about the regional geology and its bearing on the style of mineralization found are germane to a discussion of the Waterhole project results:

1) Consanguinous plutonic and volcanic activity took place in the Lower Jurassic along an island-arc system;

2) Plutonic activity continued intermittently into the Late Cretaceous, the stocks being emplaced within the older volcanic pile;

3) Limestone was deposited in <u>irregular</u> basins around the flanks of the volcanic islands;

4) Except for a brief period in the Late Jurassic hypabyssal porphyries were, ostensibly, not emplaced in the area now making up the central Wassuk Range;

5) Hydrothermal alteration is restricted to relatively high temperature and pressure types of "typical" porphyry copper systems; and,

6) Except for the Yerington trend of porphyritic dike-like intrusions, copper mineralization is restricted to fissure veins and replacement deposits.

At the Waterhole several coarse grained intrusive phases were emplaced in dacitic and quartz latitic metavolcanics. Although the absolute ages of the intrusions are unknown, the oldest stocks may be plutonic equivalents of the effusive rocks. The results of the intrusive activity were widespread pyritization, silicification, and recrystallization of the volcanic pile. Northwesterly trending fault zones appear to have affected the intensity and distribution of hydrothermal solutions to some extent.

It is common in modern island-arc porphyry systems to get alteration assemblages of chlorite-epidote-magnetite together with K-feldspar and biotite. At the Waterhole the highest grade alteration consists of chlorite, epidote, magnetite, and pyrite--a deep-seated, propylitic type. No potassic type of alteration was noted. Quartz-sericite is restricted to recrystallized tuffs and is not necessarily the result of widespread thermal water activity. It is generally the case that the porphyry copper ore is associated with potassic alteration. Furthermore, I suggest that

Conoco - Waterhole Project

any intrusion emplaced in an andesitic volcanic pile with particular reference to the Waterhole mineralization will display and create Fe-Mg alteration that may be unrelated to a discrete hydrothermal event.

The very large magnetic anomaly adjacent to the Waterhole prospect is caused by a diorite intrusion containing 1-4% magnetite and some epidote. This stock is not anomalous in trace copper content and displays little or no alteration. It is possibly the oldest intrusive phase in the range, possibly emplaced comagmatically with development of the island-arc system. Much younger intrusions (to 100 million years younger) also contain significant amounts of magnetite (1/2-1%), chlorite, and particularly epidote. All of these iron-rich phases are probably a result of contamination from the volcanic pile, as suggested for the mineralization we tested in our drilling program.

None of the exploration activity on the Waterhole claims found anomalous copper mineralization. Likewise, no limestone beds or porphyry dikes exist in this part of the metavolcanic sequence. Both of the U.S. Steel orebodies (iron-copper and copper) are limestone replacement deposits with porphyry dike-rocks cross-cutting the mineralized zones.

On the basis of the above observations, I recommend the following:

1) No further drilling on the Waterhole claim block;

2) No additional geophysical exploration on the claims; and,

3) No further geological mapping adjacent to the Waterhole claim block.

Byron R. Berger

Byron R. Berger

pb
CC:
Peter H. Kirwin

conoco

(203)
Item 6

Interoffice Communication

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Conoco - Waterhole Project

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Byron R. Berger

Byron R. Berger

pb
CC:
Peter H. Kirwin

WR-22

Handspecimen Description:

This rock is a light lavender grey, mineralized (magnetite), rhyolite-latite crystal tuff containing quartz, and altered plagioclase phenocrysts in an altered (slight sericitic) aphanitic groundmass. Minute cavities (leached grains?) occur scattered throughout rock.

Thin Section Description:

In this section this rock displays a pyroclastic-tuffaceous fabric consisting of embayed and corroded quartz-plagioclase phenocrysts and abundant crystal fragments set in predominantly devitirfied felsitic, microgranophyric, matrix of quartz intergrown with feldspar. Irregular, anhedral, interstitial clots of isotropic brown glass occur scattered throughout the groundmass. These clots commonly contain coarse intergrown muscovite needles. Fairly abundant "spongy" anhedral clots of magnetite (altered to hematite) occur disseminated through the rock. The groundmass is moderately to strongly sericitized. One hairline quartz veinlet cuts across this thin section.

Mineralogy:

Phenocrysts and crystal fragments - 10-15% of rock.

Quartz - 80% of phenocrysts and crystal fragments - as embayed/corroded phenocrysts (up to 4 mm) and as smaller angular crystal fragments.

Plagioclase - 20% of phenocrysts and crystal fragments - intermediate composition (based on index of refraction) - moderately-strongly sericitized and also partially replaced by magnetite.

Groundmass - 85-90% of rock

Quartz and feldspar - 80% of groundmass - micrographic-subgranophyric intergrowths of quartz and alkalic(?) feldspar - optically continuous patches of quartz enclose recognizable minute plagioclase laths also.

Glass - 8-10% of groundmass - anhedral-irregular disseminated clots with intergrown coarse sericite and quartz.

Magnetite - 10-15% of matrix - as dissiminated "spongy" clots and as minute granules scattered throughout matrix - magnetite is extensively altered to hematite.

Zircon - trace-minute grains in matrix.

Alteration:

This rock is moderately-strongly sericitized and appears to have had quartz (hairline veinlets) and magnetite introduced. The matrix has been nearly completely devitrified but remnant patches of glass still remain.

WR-22

Rock Name:

Sericitized-devitrified quartz latite crystal tuff.

The rock name is based on observed mineralogy and therefore is strongly influenced by phenocryst content. A whole rock chemical analysis may well shift this into a more acidic (i.e. rhyolite) category.

WR-21

Handspecimen Description:

In handspecimen this rock is a whitish grey, altered, porphyritic acidic volcanic rock containing small plagioclase (argillized) phenocrysts in an aphanitic matrix. The rock is cut by numerous "vuggy-like" limonite-goethite filled veinlets. Small "holes" (leached out phenocrysts or minute cavities?) occur throughout the rock.

Thin Section Description:

In thin section this rock displays a porphyritic texture consisting of scattered subhedral altered plagioclase grains and glameroporphyritic clots set in a felsitic matrix of submicrographic intergrown quartz and feldspar. The texture of this rock is more representative of a porphyritic, flow or shallow intrusive rock than of a pyroclastic tuffaceous rock. The entire rock has been argillized and moderately sericitized. The plagioclase phenocrysts are essentially completely altered. K-spar as phenocrysts may be present but is not positively identifiable. The section is cut by several limonite-minor quartz veinlets. The limonite (altered to goethite in part) is irregular in form and displays colloform textures along the vein margins; no definite psuedomorphs of a replaced mineral were observed although traces of altered magnetite were observed within (along margins primarily) these veinlets.

Mineralogy:

Phenocrysts - 25% of rock

Plagioclase - 100% of phenocrysts - (no K-spar positively identified) - up to 2 mm - completely altered to clays and moderate sericite. Occurs as individual subhedral-euhedral phenocrysts and as glameroporphyritic clots.

Matrix - 72% of rock (veins make up rest of rock).

Quartz-feldspars - intergrown in a submicrographic to very irregular allotriomorphic fabric. Minute plagioclase grains recognizable. Trace of very minute sericite veinlets in matrix.

Veinlets - 3% of rock - limonite-goethite - minor remnant magnetite filling veins. Limonite appears to be filling veins and displays colloform textures along margins of veinlets. No recognizable sulfide pseudomorphs associated with veinlets.

Alteration:

Alteration of this rock consists of strong argillic-moderate sericitic with crosscutting limonite veins.

Rock Name:

Altered latite-quartz latite.

By the mineralogy this rock would fit into this range of rock type but a whole rock chemical analysis would be more definitive for this type of rock.

WR-17

Handspecimen Description:

In handspecimen this rock appears very similar to specimen WR-21, being a limonite stained, whitish grey, slightly porphyritic-aphanitic rhyolitic volcanic rock containing small observable quartz phenocrysts (as seen on the cut surface). The specimen is cut by vuggy limonite veinlets/fracture fillings and by one dark grey mineralized? veinlet. Abundant holes (leached phenocrysts?) or minute cavities occur throughout the rock.

Thin Section Description:

In thin section this sample is unlike specimen WR-21 but appears to be the same unit as WR-22. The sample consists of embayed/corroded quartz and altered plagioclase phenocrysts and crystal fragments set in a felsitic, microgranophyric matrix of quartz and feldspar. The section is cut by two veinlets; the dark grey veinlet (as seen in handspecimen) is the older veinlet and is truncated by the limonite veinlet. The older, dark grey veinlet consists of mutual intergrowths of quartz and K-feldspar (microcline) and contains abundant subhedral tourmaline (schorl) crystals. Minor anhedral, sponge-like, hematite (after magnetite) occurs within this veinlet. The younger limonitic vein displays a microbreccia texture consisting of crystal and lithic fragments (apparently of enclosing rock) cemented in a matrix of limonite intergrown with minor jarosite. The jarosite is crystalline in part and does not appear to be pseudomorphous after an earlier sulfide mineral. Coarse sericite is associated with part of this veinlet.

Mineralogy:

Phenocrysts and crystal fragments - approximately 10% of rock.

Quartz - 75% of phenocrysts and crystal fragments - anhedral embayed and corroded phenocrysts, up to 2 mm.

Plagioclase - 25% of phenocrysts and crystal fragments - subhedral corroded grains - strongly sericitized.

Groundmass - 85-90% of rock

Quartz-feldspar - 90-95% of groundmass - submicrographic intergrowths of spongy, sieve-like quartz and alkali feldspar. Slight to moderate sericitic alteration exists throughout this groundmass.

Magnetite + zircon + other accessories? - less than 3% of matrix - minute disseminated granules. Magnetite oxidized to hematite.

Tourmaline - less than 1% of matrix - minute anhedral disseminated grains.

Small - minute irregularly shaped cavities occur scattered throughout the groundmass (less than 1-2% of matrix). These cavities due not have any mineral linings or fillings but do not appear to be after any phenocrysts or crystal fragment. They appear to be minute vesicle like cavities in the rock. Some may be due to "plucking" during thin section preparation.

WR-17

Alteration:

Alteration of this rock was probably multiphase, consisting of original devitrification of a glassy matrix followed by the quartz-feldspar-tourmaline alteration and the subsequent sericitization of the groundmass and plagioclase phenocrysts. Limonite-jarosite veining is the youngest alteration and displays no recognizable association with a sulfide mineral.

To what extent the felsitic groundmass texture presently observed is primary devitrification or the result of later hydrothermal alteration is speculative. This applies to similar groundmass textures observed in other specimens.

Rock Name:

Hydrothermally altered quartz latite crystal tuff.

WR-15

Handspecimen Description:

In handspecimen this rock is a light whitish grey, limonite stained, aphanitic, acidic volcanic which appears to have been silicified and/or recrystallized. Phenocrysts are not obvious in handspecimen. Muscovite? flakes occur scattered throughout the aphanitic silicified? rock. Minor hairline limonite? veinlets occur in the rock.

Thin Section Description:

In thin section this rock displays a pyroclastic texture which has been partially obscured by recrystallization of the rock. Partially recrystallized (to quartz and muscovite) argillized phenocrysts and crystal fragments of plagioclase and anorthoclase? and trace quartz occur scattered throughout a fine grained recrystallized matrix of quartz and slightly argillized feldspar (K-spar?). Anhedral, interstitial to subpoikioblastic plates of muscovite occur scattered throughout the groundmass of the rock. Also occurring in the rock are scattered coarse polygonal mosaic "clots" of quartz. These may be recrystallized quartz phenocrysts or possibly introduced, hydrothermal quartz which has been recrystallized.

Mineralogy:

Phenocrysts and crystal fragments - 5-8% of rock.

Plagioclase - 80% of phenocrysts - subhedral corroded grains - argillized and partially replaced by coarse muscovite and quartz.

K-spar - Anorthoclase? - 15-20%? of phenocrysts - difficult to distinguish from other feldspar phenocrysts - argillized and partially recrystallized to quartz and muscovite.

Quartz - up to 5% if recrystallized clots were originally phenocrysts - trace of remnant phenocrysts - partially recrystallized.

Groundmass : 92-95% of rock

Quartz -feldspar (K-spar?) - 90-95% of matrix - recrystallized to subpolygonal to polygonal mosaics of interlocking grains. Feldspars are slightly to moderately argillized.

Muscovite - 5% of matrix - anhedral interstitial plates and subpoikioblastic grains.

Biotite - trace - small anhedral plates to slightly interstitial grains. Also in minute hairline veinlets with limonite.

Topaz - trace - as minute anhedral sieve-like plates and slender prismatic grains in groundmass. Also in minute cavities. Typically associated with coarse muscovite and minor hematite-limonite.

WR-15

Opaques - magnetite - less than 1% - subhedral-anhedral disseminated grains - altered to hematite-limonite intergrowths.

Accessory - trace zircon and granular sphene (after biotite).

Alteration:

Alteration of this rock consists of argillization of the phenocryst and groundmass feldspars. The rock has been recrystallized with the production of muscovite.

Rock Name:

Recrystallized rhyolitic tuff.

WR-14

Handspecimen Description:

In handspecimen this rock appears to be a quartz-sericite altered, microporphyritic rhyolitic rock. The rock is whitish grey on fresh surfaces and contains trace quartz phenocrysts in a "speckled" quartz-feldspar groundmass. The rock contains abundant limonite stained minute cavities and is cut by several hairline veinlets.

Thin Section Description:

Petrographically this specimen is unusual. It consists of scattered recrystallized quartz "clots" (polygonal mosaic aggregates) and minute cavities (vesicles?) set in a very very fine grained, "blotchy", sericitized groundmass of quartz and feldspar. Small angular quartz crystal fragments occur within this matrix, also, suggesting an original pyroclastic rock type. The polygonal mosaic quartz "clots" are round to subrounded rectangular and appear to have faint sericite aureoles around them. The minute cavities appear in part to have coarse grained quartz lining them and commonly contain coarse muscovite, prismatic topaz, and a collaform textured opaque (now hematite-after magnetite?) with associated limonite/goethite. The section is crosscut by a couple of recrystallized quartz-muscovite veinlets. The quartz in these veinlets is almost as coarse as the aggregated quartz in the clots. The minute sericite flakes comprising the pervasive sericitic alteration display a subtle preferred orientation acorss the tin section; this together with the recrystallized texture of the quartz "clots" suggests a "metamorphic" overprint to the original rock. How this recrystallization relates to the hydrothermal event (or events?) is not clear. They may have been rock - essentially contemporaneous.

Mineralogy:

Quartz - approximately 80% of rock - in recrystallized "clots" (up to 1 1/2 mm) as aggregated polygonal mosaics and in polygonal intergrowths with feldspar in matrix. Also as scattered crystal fragments in matrix and recrystallized veinlets.

Muscovite - 15% of rock - as pervasive very fine grained sericite and as slightly coarser anhedral plates associated with "vesicles".

Feldspar - 5%? of rock - intergrown in groundmass.

Topaz - <2% of rock anhedral to prismatic intergrowths with muscovite and opaque in "vesicles". Trace grains in quartz "clots" with muscovite.

Opaque - Less than 1% - collaform textured altered magnetite (to hematite) in "vesicles" (minute cavities) scattered throughout rocks - includes limonite and in goethite granules and interstitial material scattered throughout groundmass.

Tourmaline - trace - associated with one minute cavity.

Alteration:

Alteration consists of recrystallization, quartz-sericite alteration and introduction of topaz magnetite (altered) and trace tourmaline.

WR-14

Rock Name:

Recrystallized quartz-sericite altered rhyolitic volcanic rock.

WR-13

Handspecimen Description:

In handspecimen this rock is a medium grained, medium grey, dioritic rock containing plagioclase, a trace of quartz, and a slightly altered mafic mineral (hornblende). A trace of disseminated opaque magnetite and pyrite grains occur in the rock.

Thin Section Description:

In thin section this specimen consists of subhedral, slightly oscillatory zoned, plagioclase laths, interstitial to slightly poikilitic hornblende, and trace amounts of interstitial quartz, biotite, and trace K-spar. The specimen displays a well developed hypidiomorphic granular texture. The plagioclase grains display patchy overgrowths (replacement) by a more sodic plagioclase (albite-oligoclase) which probably represents a magmatic replacement. The plagioclases also display a late deuteric or post magmatic hydrothermal alteration consisting of minor stringers of albite associated with minor muscovite and epidote. Trace biotite in this section occurs interstitially to plagioclase and is almost totally altered to chlorite, epidote, and granular sphene. Interstitial to sub-poikilitic hornblende is partially altered to chlorite and epidote.

Mineralogy:

Plagioclase - 70% of rock - An_{55-60} zoned to An_{50-55} approximately. Subhedral grains, averaging 3-4 mm, display slight oscillatory zoning. The plagioclase appears to have been magmatically partially replaced by a more sodic plagioclase phase and then, either druing a late deuteric stage or a post magmatic phase, been slightly altered to albite (in vein-like stringers), epidote and trace muscovite. This alteration is confined primarily to more calcic zones within the plagioclase grains but not restricted to them.

Amphibole - 14% of rock - anhedral interstitial to subpoikilitic green-brown hornblende - partially altered to chlorite, epidote and minor sphene.

Quartz - 4% of rock - anhedral interstitial patches .

Biotite - trace - interstitial - almost completely altered to chlorite-epidote-sphene.

Chlorite - < 3% of rock - alteration of biotite and amphibole.

Epidote - < 5% of rock - as alteration of mafics and calcic plagioclase.

Sphene - < 1% of rock - as trace subhedral primary grains and as secondary alteration product.

K-spar - orthoclase - trace - interstitial fillings associated with quartz commonly.

Apatite - trace - as large (almost 1 mm) primary grains.

Muscovite - trace - after plagioclase.

Opaques - 3% of section - magnetite - anhedral irregular and subhedral grains.

WR-13

Alteration:

No alteration in this section which could be considered hydrothermal (although it may have been deuteric) consists of slight alteration of plagioclase to albite, epidote, muscovite and alteration of biotite (nearly completely) and hornblende (slight to partial) to chlorite, epidote and secondary sphene.

Rock Name:

hornblende diorite

WR-10

Handspecimen Description:

In handspecimen this rock appears to be a slightly porphyritic-aphanitic, perhaps pyroclastic?, acidic volcanic rock consisting of quartz, altered plagioclase, and a fine grained mafic? in a dense, light grey, aphanitic matrix. The rock is limonitic stained on fracture surfaces.

Thin Section Description:

In thin section this rock appears to display a pyroclastic texture although this texture is poorly preserved. The section consists of crystal fragments? and embayed phenocrysts of quartz and partially recrystallized anorthoclase, set in a microcrystalline allotriomorphic granular felsic matrix. Scattered throughout the section are irregular blotches of very fine grained biotite (secondary biotite?) intergrown with sericite and some limonitic material. This very fine grained biotite also occurs in hairline veinlets. Hairline limonite veinlets also occur in this section. The entire section displays a slightly blotchy appearance due to the moderate-strong sericitic alteration.

Mineralogy:

Phenocrysts and crystal fragments - 15-20% of rock.

Quartz - 40% of phenocrysts and xl fragments - subhedral embayed embayed phenocrysts - up to 3 mm.

Anorthoclase - 60% of phenocrysts - up to 3 mm - sericitized embayed corroded phenocrysts - recrystallized to patchy aggregates of anorthoclase?

Pumice lapilli - ? - perhaps trace - devitrified and thermally recrystallized to felsic groundmass material (slightly coarser grained) and containing fine grained biotite (secondary?).

Groundmass: 75-80% of rock -

Quartz-alkali feldspar - 93% of groundmass - very, very fine grained. microcrystalline allotriomorphic granular intergrowth - moderately to strongly sericitized.

Biotite - less than 5% of groundmass - very fine grained "blotchy" aggregates and in minor hairline veinlets - intergrown with sericite and granular sphene.

Magnetite - less than 1% of groundmass. Small to minute disseminated grains - altered to hematite/limonite.

Limonite - up to 1% - associated with hematite and in hairline veinlets/fractures by itself.

Alteration:

The alteration of this rock consists of primary devitrification and hydrothermal sericitization with minor recrystallization (alteration) of anorthoclase. The biotite may represent remobilization of an original mafic constituent (producing granular sphene) but is "secondary" in appearance.

WR-10

Rock Name:

Sericitized rhyolitic crystal tuff.

Waterhole (203)
Item 6

WR-84A

Handspecimen Description:

This specimen is a medium to dark grey, greenish grey weathering, blocky fractured, dense, aphanitic volcanic? rock crosscut by several hairline veinlets in fracture fillings.

Thin Section Description:

In thin section this specimen displays a typical pyroclastic fabric consisting of glass shards, pumice lapilli (up to 3 mm), broken crystal fragments and a trace of minute (less than .5 mm) phenocrysts of sanidine, quartz and plagioclase. Minute platy aggregates of green biotite occur scattered throughout the rock and within the pumice lapilli. The specimen is completely devitrified but shard and pumice textures are still evident. Glass shards are devitrified to quartz (variety unknown?) and possibly feldspar and set in a felsitic, cryptocrystalline groundmass. Along with the disseminated minute platy biotite aggregates the groundmass of the rock is pervaded by a felted submicroscopic platy mineral (montmorillonite?).

The section is cut by several hairline quartz veinlets displaying incipient recrystallization textures. These quartz veinlets display recrystallization textures and are cut and displaced by a later generation veinlet/fracture filling. The later veinlet/fracture filling consists primarily of biotite with some quartz whereas the first generation veinlets consist almost entirely of quartz.

Mineralogy:

Phenocrysts - less than 1% of rock - less than 1/2 mm. Phenocrysts of quartz, sanidine and plagioclase are present in the rock. Some crystals display recrystallization textures.

Pumice - less than 1/2% of rock - up to 3 mm pumice are non collapsed-voids filled with quartz and pumice devitrified to submicroscopic quartz and feldspar.

Groundmass - composed of devitrified glass shards and broken crystal fragments set in a crystofelsitic altered (montmorillonite) groundmass. Minute biotite plates and aggregates are disseminated throughout the rock - occurring in occasional clots (biotite - perhaps 5% of total rock). Trace of euhedral zircon in groundmass.

Alteration:

This tuff is non welded but appears to have undergone at least two phases of alteration; the first being the devitrification and argillization (montmorillonite?) of the glass content of the rock. This alteration was followed by implacement of hairline quartz veinlets which were subsequently cut and offset by a later generation of veinlets/fracture fillings. This second generation of fracture filling/veinlet probably accompanied a slight metamorphism which generated the observed recrystallization features and produced the abundant disseminated biotite plates and aggregates.

Rock Name:

Devitrified, slightly recrystallized, nonwelded rhyolitic ashflow tuff.

Conoco-Waterhole Project

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Item 6

WR-23

Handspecimen Description:

This rock is a dark to medium grey crystal rich pyroclastic rock (tuff) containing abundant plagioclase phenocrysts and crystal fragments and fine grained disseminated to clotty biotite in a dense aphanitic matrix.

Thin Section Description:

In this section this rock displays a pyroclastic texture and consists of abundant subhedral, slightly embayed plagioclase phenocrysts and crystal fragments, devitrified pumice lapilli, and fairly abundant trachy andesite lithic fragments set in a very fine grained allotriomorphic granular groundmass of quartz, feldspar, and abundant biotite.

Mineralogy:

Phenocrysts and crystal fragments - 40% of rock.

Plagioclase - 98% of phenocrysts + xl - fragments - subhedral, slightly corroded, "dusty" grains and fragments - moderately argillized (no An content measurements available by flat stage methods). Grains up to 1 mm.

Quartz - < 2% of phenocrysts/ xl - fragments - up to 1/2 mm.

Pumice lapilli - 5% of rock

devitrified to fine grained allotriamorphic granular quartz-feldspar (plagioclase). Minor fine grained disseminated biotite occurs in these pumice lapilli. Up to 6 mm.

Lithic fragments - 3% of rock

Almost all lithic fragments are of a slightly porphyritic trachyandesite rock type consisting of minute plagioclase laths in a trachytic fabric. One, slightly more acidic, devitrified tuffaceous? fragment was observed. Minor disseminated biotite (as in groundmass) occurs within the lithic fragments also.

Groundmass - 52% of rock

Quartz-feldspar (plagioclase) - 60% of matrix - very vine grained allotriomorphic granular textured groundmass - both quartz and plagioclase in interlocking subpolygonal mosaics quartz is not sieve-like or spongy. Trace K-spar?

Biotite - 40% of matrix - as discrete anhedral minute flakes disseminated throughout groundmass. Also in a couple of coarser grained clots intergrown with coarse muscovite.

Muscovite - less than 1% - as small sieve textured grains and as replacement of biotite in coarse grained, recrystallized clots.

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Magnetite - less than 1/2% - minute disseminated granules - trace small euhedral grains (these partially altered to hematite).

Accessories - trace zircon

Alteration:

Alteration in this section consists of slight to moderate argillization of feldspar phenocrysts. The ab undant groundmass biotite and two recrystallized clots are the result of slight thermal metamorphism which also is responsible probably for the subpolygonal mosaic textured felsic groundmass.

Rock Name:

Slightly recrystallized dacitic crystal tuff.

RK-1

Handspecimen Description:

This rock is a medium grey, fine grained dense, porphyritic rock containing phenocrysts of feldspar and minor quartz in a dense siliceous matrix containing minute disseminated ferromag/magnetite grains.

Thin Section Description:

In thin section this rock is porphyritic, consisting of subhedral corroded phenocrysts of plagioclase, trace sanidine, and anhedral to broken and embayed quartz set in a microcrystalline felsic matrix. Scattered throughout the matrix are clots of fine grained aggregated biotite (secondary biotite). The microcrystalline matrix varies in texture from slightly trachytic to equigranular bordering on a polygonal fabric. These more equigranular polygonal areas may represent younger hydrothermal solution activity but this is not conclusive. The sample is cut by minor hairline fractures containing limonite and a ferromag(?).

Mineralogy:

Phenocrysts: approximately 8% of section.

Plagioclase - 85-90% of phenocrysts - subhedral corroded grains (up to 2 mm) and glomeroporphyritic clots. Plagioclase is moderately argillized and incipiently altered by micro-grained disseminated, randomly oriented sericite blades.

Sanidine - trace - moderately argillized and containing scattered microsericite blades.

Quartz - 10-15% of phenocrysts - anhedral embayed and corroded phenocrysts up to 3 mm but generally less than 1 mm.

Matrix - approximately 92% of section.

Quartz-feldspar - 72% of matrix - microcrystalline intergrowths ranging from an equidimensional subpolygonal fabric to a subtrachytic fabric containing recognizable plagioclase microlites.

Biotite - 25% of matrix - green brown - fine grained granular clots and irregular networks and stringers.

Sericite - perhaps 4% of matrix and of section - disseminated randomly oriented micro blades ubiquitous throughout matrix and in phenocrysts. Locally more concentrated in association with secondary biotite clots and along minute veinlike stringers.

Zircon - trace

Apatite - trace

Opaque - less than 1% - fine grained granular magnetite(?) and/or sulfide(?) associated with biotite clots, also as minute scattered subhedral grains and trace along fractures. In part altered to hematite - limonite.

Alteration:

Alteration of this rock consists of incipient sericitization and development of secondary biotite. The different matrix textures may represent hydrothermal solution activity but mineralogical differences (i.e., silica vs. feldspar) were not apparent between these textural different areas.

Rock Name:

Hydrothermal altered rhyolite - either a shallow intrusive or flow.

(203)
Item 6

WEEKLY DRILLING SUMMARY

WEEK ENDING March 14, 1975

PROSPECT Waterhole

DRILL HOLE No. RWH-3

LOCATION Section 8 T9N, R28E

COORDINATES

LOGGED BY B. R. Berger

CURRENT DEPTH 440'

INCLINATION vertical BEARING

TOTAL DEPTH 440'

STARTING DATE February 26, 1975

COMPLETION March 7, 1975

DEPTH TO BEDROCK 0

ROTARY FOOTAGE 440'

CORE FOOTAGE

ROCK TYPES: Triassic metavolcanics

ALTERATION: Quartz, epidote, pyrite, magnetite

MINERALIZATION:

METALLURGICAL TYPE (S): Sulfide
ASSAY DATA: none available to date

COMMENTS: Hole abandoned in broken, caving, ground

MAP REFERENCES

Conoco Waterhole Project

WEEKLY DRILLING SUMMARY

WEEK ENDING March 7, 1975

PROSPECT Waterhole

DRILL HOLE No. RWH - 3

LOCATION Section 8, T9N, R28E

COORDINATES

LOGGED BY B. R. Berger

CURRENT DEPTH 380'

INCLINATION vertical BEARING

TOTAL DEPTH

STARTING DATE February 26, 1975

COMPLETION

DEPTH TO BEDROCK 0

ROTARY FOOTAGE 380'

CORE FOOTAGE 0

ROCK TYPES: Triassic metavolcanics

ALTERATION: Quartz, epidote, pyrite, magnetite

MINERALIZATION:

METALLURGICAL TYPE (S): Sulfide
ASSAY DATA: none available

COMMENTS:

MAP REFERENCES

WEEKLY DRILLING SUMMARY

WEEK ENDING February 28, 1975

PROSPECT Waterhole

DRILL HOLE No. RWH - 3

LOCATION Section 8, T9N, R28E

COORDINATES

LOGGED BY B. R. Berger

CURRENT DEPTH 80'

INCLINATION vertical BEARING

TOTAL DEPTH

STARTING DATE 2-26-75

COMPLETION

DEPTH TO BEDROCK 5'

ROTARY FOOTAGE 80'

CORE FOOTAGE

ROCK TYPES: Metavolcanics

ALTERATION: Quartz, pyrite, magnetite, epidote

MINERALIZATION:

METALLURGICAL TYPE (S): Sulfide

ASSAY DATA: No assays to date

COMMENTS: Offset to hole RWH - 2
Drilling with rotary and mud

MAP REFERENCES

WEEKLY DRILLING SUMMARY

WEEK ENDING: February 28, 1975

PROSPECT: Waterhole

DRILL HOLE No.: RWH - 3

LOCATION: Section 8, T9N, R28E

COORDINATES:

LOGGED BY: B. R. Berger

CURRENT DEPTH: 80'

INCLINATION: vertical BEARING:

TOTAL DEPTH:

STARTING DATE: 2-26-75

COMPLETION:

DEPTH TO BEDROCK: 5'

ROTARY FOOTAGE: 80'

CORE FOOTAGE:

ROCK TYPES: Metavolcanics

ALTERATION: Quartz, pyrite, magnetite, epidote

MINERALIZATION:

METALLURGICAL TYPE (S): Sulfide

ASSAY DATA: No assays to date

COMMENTS: Offset to hole RWH - 2
Drilling with rotary and mud

MAP REFERENCES:

CONOCO-DRILL LOG
MINERALS EXPLORATION

PROJECT: Waterhole
HOLE NO.: RWH-3

ELEV.: ~6400'
COORDINATES:
TYPE DRILL: Mayhew 1000 BIT: 5 1/8", 4 3/4" Tricone
INCLINATION: Vertical BEARING:
FOOTAGE: CORE: ROTARY:
CONTRACTOR: Eklund-Gene Martin
OBJECTIVE: Test high sulfide area near Waterhole
STOPPED BECAUSE:

SECTION: 8 TWP: 9N RANGE: 28E
TOTAL FOOTAGE:
START: 2/26/75 COMPLETION:
LOGGED BY: BRB
SCALE:

FOOTAGE: DEPTH RUN BOTTOM	ROCK TYPE: AGE	ROCK TYPE: LITH	ROCK TYPE: COLOR	FRAC: INT.	FRAC: DIP	FAULT: DIP	TEXTURE	ALTERATION SKARN: QTZ	DIOP	GAR	EPI	AMP	ø1	ø2	ø3	ø4	ø5	MINERALS INTRUSIVES: OR	BIO	QTZ	SER	CLY	CHL	EPI	CAR	GYP	ANH	MAG	ø1	ø2	ø3	ø4	OXIDE ZONE: LIM	HEM	Cu-1	Cu-2	ø1	ø2	SULFIDE ZONE: PY	CPY	BOR	CC	Mo	ø1	ø2	ø3	ø4	ZONE: MET.
5	TK	VOL	BK								1																						3											1					
10																																																	
15																																																	
20								3																																									
25																																																	
30																																																	
35																																																	
40																																							1										
45			GR																														2						2									S C	
50																																	1																
55																																							3				2						
60			BK								2																												1										
65																																							2										
70			GR					3																															3										
75								1																															2										
80								3																															3										
85																																																	
90																																																	
95																																																	

ASSAY DATA: Cu, Mo, Ag, Au, Pb, Zn

CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT Waterhole
HOLE NO. RW4-3
TOTAL FOOTAGE

DEPTH RUN BOTTOM	GRAPHIC LOG	GEOLOGY — DESCRIPTION AND REMARKS
5		MIXED OXIDIZED SULFIDE BEARING TRIASSIC VOLCANICS. SOME CRYSTAL TUFF BUT ALSO FLOW RKS QI= MAGNETITE (MOSTLY OXIDIZED ABOVE ~40-45 FEET
10		DO SOME MANGANESE STAIN
15		DO
20		DO PRIMARILY TUFFACEOUS RK
25		DO
30		DO
35		DO
40		SOME FRESH PYRITE 2-5% IN A FEW CLASTS, BUT MINOR OVERALL
45		DO SOME BROWN MICA? FLECKS LESS OXIDATION
50		PORPHYRITIC RK (MAFIC) MED GRAINED IN PLACES + MINOR TUFF (TO 5% PYRITE)
55		DO WITH 2-3% MAGNETITE; PYRITE SILVERY AND IN CLUSTERS
60		DO MUCH LESS PYRITE 1/2% OR SO BUT LOTS OF MAGNETITE
65		DO WITH INCREASED PYRITE TO 2-3% OR SO
70		DO WITH 50% A MIXTURE OF QTZ-RICH GREENISH VOLC ABOUT 5% PYRITE
75		MOSTLY POR VOLC W/LESS PYRITE
80		GRAY SIL VOLC W/ABOUT 5% PYRITE
85		GRAY + GREEN PYRITIZED VOLC
90		DO
95		DO

CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT Waterhole
HOLE NO. RWH-3
TOTAL FOOTAGE

DEPTH RUN BOTTOM	GRAPHIC LOG	GEOLOGY — DESCRIPTION AND REMARKS
		QTZ=1 PY=2
100		MOSTLY DARK GREEN AND BLK VOLC W/INCREASING EPIDOTE
105		BLK VOLC W/15% EPI QTZ=1 PYRITE 4-5% MT=1
110		DO
115		DO
120		MUCH LESS EPI (5%) WITH QTZ=2 AND PYRITE AS ABOVE
125		MIXED GRAY AND BLK Q=3 PY=3 EPI=2 PYRITE 5-8%
130		GRAY AND GREEN SILICA FLOODED VOLC Q=3 PY=3 EPI=3
135		MOSTLY GRAY W/GRN VOLC Q=3 PY=3 EPI=2
140		DO
145		DO
150		DO
155		DO
160		LIGHTER COLOR DUE TO INTENSIFYING QTZ FLOODING MINOR LT GRN EPI
165		DO SOME CLEAR QTZ FRAGMENTS Q=3 PY=3 (5%) EPI=1 MT=1 STILL, BUT MUCH LESS
170		DO MUCH MORE QTZ FRAG (8-10% PY IN PLACES)
175		DO W/LESS QTZ ← SOME QTZ W/PINKISH CAST
180		ALL GRAY + GREEN VOLC Q=3 PY=3 (5%) EPI=1 MT=1
185		VERY SILICEOUS VOLC W/PYRITE, SOME PINK QTZ PY=2 Q=3 EPI=1 MT=0
190		DO

CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT Waterhole
HOLE NO. RWH-3
TOTAL FOOTAGE

DEPTH RUN BOTTOM	GRAPHIC LOG	GEOLOGY DESCRIPTION AND REMARKS
195		GREENISH CAST SIL VOLC Q=3 PY=2 EPI=1
200		DO
205		CONTAMINATED W/OXIDIZED MATERIAL
210		DO
215		DO
220		GRAY-GRN VOLC + BLK VOLC PY=3 Q=3 EPI=1
225		DO
230		INCREASED SILICA FLOODING Q=3 PY=2 EPI=1
235		DO SOME PINK QTZ
240		DO
245		DO
250		DO W/ INCREASING PYRITE TO 5% Q=3 PY=3
255		MIXED BLK VOLC W/ ABOVE 5-8% PY (IN PLACES 10%)
260		DO
265		DO
270		DO
275		DO
300		DO
305		DO

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Item 6

WEEKLY DRILLING SUMMARY

WEEK ENDING February 28, 1975

PROSPECT Waterhole

DRILL HOLE No. RWH - 2

LOCATION Section 8, T9N, R28E

COORDINATES

LOGGED BY B. R. Berger

CURRENT DEPTH

INCLINATION Vertical BEARING

TOTAL DEPTH 125'

STARTING DATE 2-22-75

COMPLETION

DEPTH TO BEDROCK 5'

ROTARY FOOTAGE 125'

CORE FOOTAGE

ROCK TYPES: Metavolcanics

ALTERATION: Quartz, pyrite, magnetite, epidote

MINERALIZATION:

METALLURGICAL TYPE (S): Sulfide

ASSAY DATA: No assays to date

COMMENTS: Lost to caving ground
Hole drilled with air and down hole hammer
Offset to RWH-1

MAP REFERENCES

Conoco - Waterhole Project

WEEKLY DRILLING SUMMARY

WEEK ENDING February 28, 1975

PROSPECT Waterhole

DRILL HOLE No. RWH - 2

LOCATION Section 8, T9N, R28E

COORDINATES

LOGGED BY B. R. Berger

CURRENT DEPTH

INCLINATION Vertical BEARING

TOTAL DEPTH 125'

STARTING DATE 2-22-75

COMPLETION

DEPTH TO BEDROCK 5'

ROTARY FOOTAGE 125'

CORE FOOTAGE

ROCK TYPES: Metavolcanics

ALTERATION: Quartz, pyrite, magnetite, epidote

MINERALIZATION:

METALLURGICAL TYPE (S): Sulfide

ASSAY DATA: No assays to date

COMMENTS: Lost to caving ground
Hole drilled with air and down hole hammer
Offset to RWH-1

MAP REFERENCES

WEEKLY DRILLING SUMMARY

WEEK ENDING February 24, 1975

PROSPECT Waterhole

DRILL HOLE No. RWH -1

LOCATION Section 8, T9N, R28E

COORDINATES

LOGGED BY B. R. Berger

CURRENT DEPTH

INCLINATION vertical BEARING

TOTAL DEPTH 75'

STARTING DATE 2-20-75

COMPLETION 2-20-75

DEPTH TO BEDROCK -

ROTARY FOOTAGE 75'

CORE FOOTAGE

ROCK TYPES: 0 - 75 Triassic tuff and tuff breccia

ALTERATION: 0 - 75 Silicification
45 - 75 Epidote

MINERALIZATION: 0 - 75 Pyrite and magnetite (oxidized above 40 feet)

METALLURGICAL TYPE (S): 0 - 40 Oxide
40 - 75 Sulfide

ASSAY DATA:
None available.

COMMENTS: Water at 50'; lost due to caving around collar. Will be redrilled with 20 ft. of casing at top of hole.

MAP REFERENCES

CONOCO-DRILL LOG
MINERALS EXPLORATION

PROJECT: WATERHOLE
HOLE NO.: RWH-2

ELEV.: ~6400
COORDINATES:
TYPE DRILL: Mayhew 1000 BIT: 5" Hammer
INCLINATION: vertical BEARING:
FOOTAGE: CORE: ROTARY: 125'
CONTRACTOR: Eklund-Gene Martin
OBJECTIVE: Test high sulfide zone to 600-700'
STOPPED BECAUSE: Lost to caving in heavy water flow @ 125'

SECTION: 8 TWP: 9N RANGE: 28E
TOTAL FOOTAGE: 125'
START: 2-22-75 COMPLETION: 2-25-75
LOGGED BY: BRB
SCALE:

FOOTAGE: RUN	% REC.	DEPTH RUN BOTTOM	ROCK TYPE: AGE	LITH	COLOR	FRAC: INT.	DIP	FAULT	TEXTURE	ALTERATION MINERALS: SKARN: QTZ	DIOP	GAR	EPI	AMP	ø1	ø2	ø3	ø4	ø5	INTRUSIVES: OR	BIO	QTZ	SER	CLY	CHL	EPI	CAR	GYP	ANH	MAG	ø1	ø2	ø3	ø4	OXIDE ZONE: LIM	HEM	Cu-1	Cu-2	ø1	ø2	SULFIDE ZONE: PY	CPY	BOR	CC	Mo	ø1	ø2	ø3	ø4	ZONE: MET.	ASSAY DATA: Cu	Mo	Ag	Au	Pb	Zn
		5	TR	VOL	BR					3																									2						1					1										
		10																																																								
		15																																																								
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		40																																		1						2																
		45			GR								1																																												
		50																																								3																
		55											2																																												
		60											3																																												
		65																																																								
		70																																																								
		75			GW																																											2									
		80																																																								
		85																																																								
		90																																																								
		95																																																								

CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT WATERHOLE
HOLE NO. RWH-2
TOTAL FOOTAGE 125'

DEPTH RUN BOTTOM	GRAPHIC LOG	GEOLOGY DESCRIPTION AND REMARKS
		VOLC BRECCIA AND WELDED TUFF UNIT WITH INTENSE SILICIFICATION OR
5		RECRYSTALLIZATION. FE-X REPLACED DISSEMINATED PYRITE CUBES ØI=MAGNETITE
10		DO REDDISH BROWN LIMONITE ALSO MANGANESE STAIN ALL FRACTURE CONTROLLED
15		DO
20		DO
25		DO
30		DO
35		DO
40		DO
45		MIXED GRAY METAVOLC + OXIDIZED VOLCS
50		ALL GRAY VOLC WITH 5-10% PYRITE + MT DISSEMINATED EPIDOTE XTLS
55		DO ABOUT 3-5% PYRITE
60		DO VARIABLE PYRITE IN CLASTS, PROBABLY AVG 1-5% DARK GREEN-BRN MICA
65		DO MT MAY BE GREATER THAN 1%
70		DO
75		DO
80		DO
85		DO LARGE BOOKS OF DARK GREEN MICACEOUS MINERAL
90		DO COARSE GRAINED GRANITIC RK FRAGMENTS PRESENT ?? (MINOR AMT)
95		DO

CONOCO-DRILL LOG
MINERALS EXPLORATION

PROJECT: WATERHOLE
HOLE NO.: RWH-2

ELEV.
COORDINATES
TYPE DRILL ____ BIT
INCLINATION ____ BEARING
FOOTAGE: CORE ____ ROTARY
CONTRACTOR
OBJECTIVE
STOPPED BECAUSE

SECTION ____ TWP ____ RANGE
TOTAL FOOTAGE: 125
START ____ COMPLETION
LOGGED BY
SCALE

Page 2 of 2

FOOTAGE: RUN	% REC.	DEPTH RUN BOTTOM	ROCK TYPE: AGE	LITH	COLOR	FRAC: INT.	DIP	FAULT: DIP	TEXTURE	ALTERATION: SKARN: QTZ	DIOP	GAR	EPI	AMP	ø1	ø2	ø3	ø4	ø5	MINERALS: INTRUSIVES: OR	BIO	QTZ	SER	CLY	CHL	EPI	CAR	GYP	ANH	MAG	ø1	ø2	ø3	ø4	OXIDE ZONE: LIM	HEM	Cu-1	Cu-2	ø1	ø2	SULFIDE ZONE: PY	CPY	BOR	CC	Mo	ø1	ø2	ø3	ø4	MET. ZONE	ASSAY DATA: Cu	Mo	Ag	Au	Pb	Zn
		100	TR	VOLCN						3			3																												3					2											
		105																																																								
		110																																																								
		115																																																								
		120																																																								
		125																																																								
									1																																																

CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT Waterhole
HOLE NO. RWH-2
TOTAL FOOTAGE 125

DEPTH RUN BOTTOM	GRAPHIC LOG	GEOLOGY DESCRIPTION AND REMARKS
100		CONTINUED ALTERED METAVOLC WITH 5-10% DISSEMINATED PYRITE + MAGNETITE
105		DO
110		DO
115		DO
120		DO
125		DO BOTTOM OF HOLE

203
Item 6

WEEKLY DRILLING SUMMARY

WEEK ENDING March 14, 1975

PROSPECT Waterhole

DRILL HOLE No. RWH-4

LOCATION Section 7, T0N, R28E

COORDINATES

LOGGED BY B. R. Berger

CURRENT DEPTH 85'

INCLINATION vertical BEARING

TOTAL DEPTH

STARTING DATE 3-13-75

COMPLETION

DEPTH TO BEDROCK 5'

ROTARY FOOTAGE 85'

CORE FOOTAGE

ROCK TYPES: Triassic metavolcanics

ALTERATION: Silicification, pyrite

MINERALIZATION:

METALLURGICAL TYPE (S): Oxide
ASSAY DATA: none available

COMMENTS: Hammer drilling to current depth; hole is dry in unbroken ground

MAP REFERENCES

Conoco - Waterhole Project

WEEKLY DRILLING SUMMARY

WEEK ENDING March 21, 1975

PROSPECT Waterhole

DRILL HOLE No. RWH-4

LOCATION Section 7, T9N, R28E

COORDINATES

LOGGED BY B. R. Berger & P. H. Kirwin

CURRENT DEPTH 410'

INCLINATION vertical BEARING

TOTAL DEPTH 410'

STARTING DATE 3-13-75

COMPLETION 3-21-75

DEPTH TO BEDROCK 5'

Current Week's ROTARY FOOTAGE 325'

CORE FOOTAGE

ROCK TYPES: Triassic metavolcanics

ALTERATION: Silicification, pyrite

MINERALIZATION:

METALLURGICAL TYPE (S): Oxide, sulfide

ASSAY DATA: None to date

COMMENTS: Lost 1 day with snow, unscrewed rods 2 joints below Kelly on Tuesday, went fishing and recovered rods on Wednesday, arrived at rig at 11:30 AM Thursday after buying mud. Hit heavy water at 345' and changed over from hammer to rotary drilling with mud. Hole stopped because of low penetration (1 ft/hour) and high drilling costs. Three feet of surface casing left in hole.

MAP REFERENCES

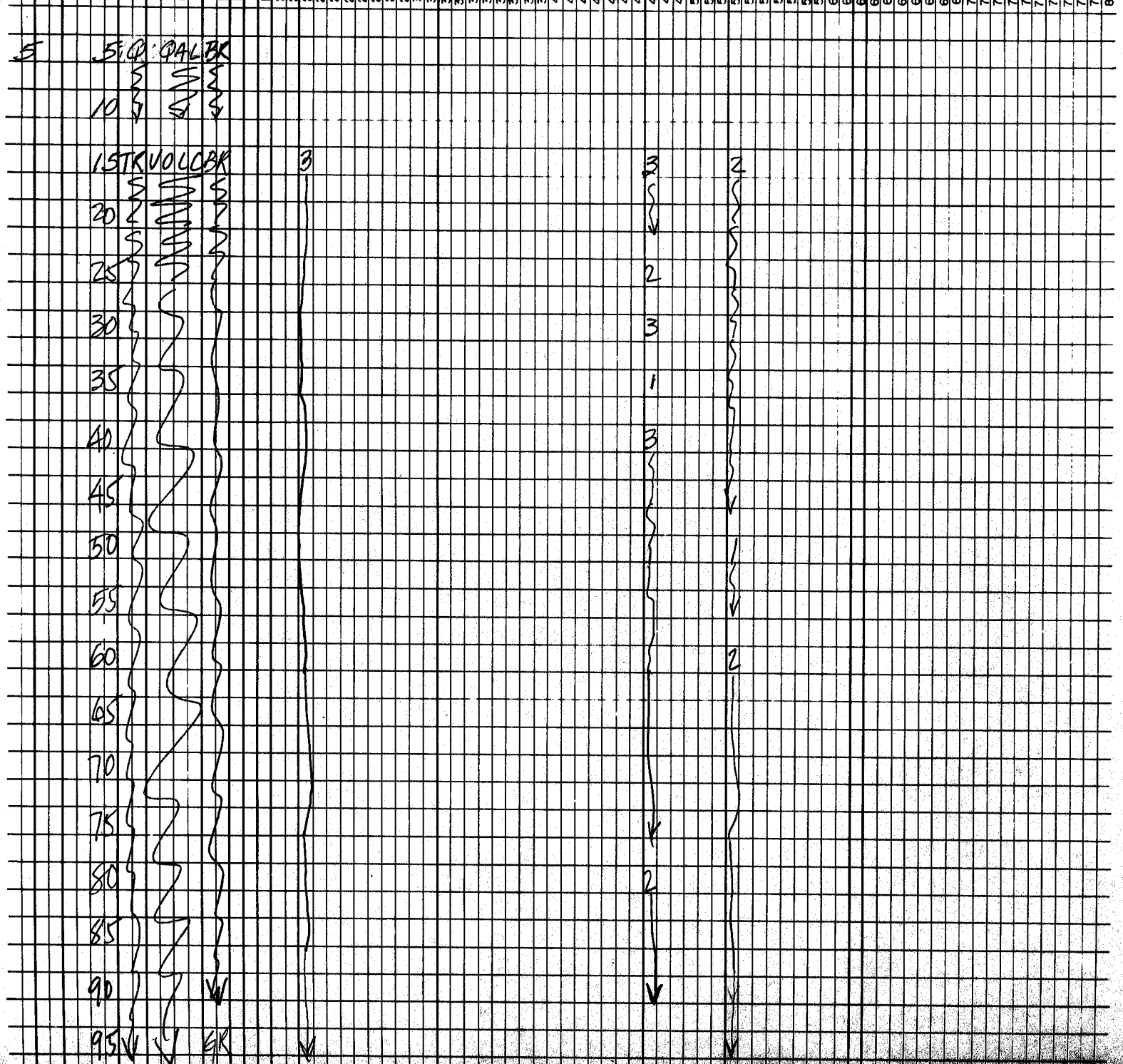
CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT: Waterhole
HOLE NO.: RWH-4

ELEV.:
COORDINATES:
TYPE DRILL: Mayhew 1000 BIT: 5" Hammer 4¾" tricone
INCLINATION: vertical BEARING:
FOOTAGE: CORE: ROTARY: 410'
CONTRACTOR: Gene Martin - Eklund
OBJECTIVE: Test small IP anomaly assoc. w/ sulfide casts objective @ 700'
STOPPED BECAUSE: Caving and poor drilling performance

SECTION: TWP: 9N RANGE: 28E
TOTAL FOOTAGE: 410'
START: 3/13/75 COMPLETION: 3/21/75
LOGGED BY: BRB
SCALE:

FOOTAGE				ROCK TYPE				FRAC	DIP			ALTERATION												MINERALS												OXIDE ZONE								SULFIDE ZONE									ZONE	ASSAY DATA					
												SKARN												INTRUSIVES																																					
RUN	% REC.	DEPTH RUN BOTTOM		AGE		LITH		COLOR	INT. DIP	FAULT	TEXTURE	QTZ	DIOP	GAR	EPI	AMP	ø1	ø2	ø3	ø4	ø5	OR	BIO	QTZ	SER	CLY	CHL	EPI	CAR	GYP	ANH	MAG	ø1	ø2	ø3	ø4	LIM	HEM	Cu-1	Cu-2	ø1	ø2	PY	CPY	BOR	CC	Mo	ø1	ø2	ø3	ø4	MET.	Cu	Mo	Ag	Au	Pb	Zn
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80



CONOCO.- DRILL LOG
MINERALS EXPLORATION

PROJECT: Waterhole
HOLE NO.: RWH-4

ELEV.
COORDINATES
TYPE DRILL _____ BIT
INCLINATION _____ BEARING
FOOTAGE: CORE _____ ROTARY
CONTRACTOR
OBJECTIVE
STOPPED BECAUSE

SECTION _____ TWP _____ RANGE
TOTAL FOOTAGE
START _____ COMPLETION
LOGGED BY
SCALE

Page 2 of 5

FOOTAGE: DEPTH RUN BOTTOM	ROCK TYPE: AGE	ROCK TYPE: LITH	ROCK TYPE: COLOR	FRAC: INT. DIP	FRAC: FAULT DIP	TEXTURE	ALTERATION: SKARN: QTZ	DIOP	GAR	EPI	AMP	ø1	ø2	ø3	ø4	ø5	MINERALS: INTRUSIVES: OR	BIO	QTZ	SER	CLY	CHL	EPI	CAR	GYP	ANH	MAG	ø1	ø2	ø3	ø4	OXIDE ZONE: LIM	HEM	Cu-1	Cu-2	ø1	ø2	SULFIDE ZONE: PY	CPY	BOR	CC	Mo	ø1	ø2	ø3	ø4	ZONE: MET.	ASSAY DATA: Cu	Mo	Ag	Au	Pb	Zn
100	TR	VOL	GR				3																									2						2																
105																																3																						
110																																																							
115			GR																													1																							
120			BR																													2																							
125																																																							
130																																																							
135			GR																																																					
140																																						3																		
145																																																							
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155																																																							
160																																																							
165																																																							
170																																																							
175																																																							
180																																																							
185			BR																													2																							
190																																																							

CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT Waterhole
HOLE NO. RWH-4
TOTAL FOOTAGE 410'

DEPTH RUN BOTTOM	GRAPHIC LOG	GEOLOGY — DESCRIPTION AND REMARKS
100		MIXED FRESH AND OX SIL VOLC
105		PRIMRLY OX 2-3% PY
110		DO SOME LARGE FRESH CLOTS OF PY; SOME HEMATITE STAINED QTZ PORPHYRY
115		MOSTLY FRESH GRAY-WHITE SIL VOLC W/2-3% PY
120		50% OX WITH PORPHYRY APPEARING LESS ALTERED
125		DO
130		DO
135		MIXED MILKY QTZ AND DARK PORPHYRITIC ANDESITE LITTLE OR NO OX 3% PY
140		GRAY-WHITE AND GREENISH VOLC W/3-5% SILVERY PYRITE
145		NOT GRN, BUT MIXED ANDESITE? AND QTZ VOLC W/COARSE PY CUBES
150		DO W/SOME GREENISH FRAGMENTS
155		INTENSELY SILCIFIED QTZ (NOT MILKY) WITH MINOR GREEN; LOTS OF PY 3-5%
160		DO
165		DO
170		DO
175		DO
180		DO
185		DO EXCEPT SOME OXIDIZED FRAG CONTAMINATION?
190		DO WITH OX

CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT Waterhole

HOLE NO. RWH-4

ELEV.

COORDINATES

TYPE DRILL BIT

INCLINATION BEARING

FOOTAGE: CORE ROTARY

CONTRACTOR

OBJECTIVE

STOPPED BECAUSE

SECTION TWP RANGE

TOTAL FOOTAGE

START COMPLETION

LOGGED BY

SCALE

Page 3 of 5

FOOTAGE			ROCK TYPE			FRAC		DIP	TEXTURE	ALTERATION MINERALS SKARN										INTRUSIVES															OXIDE ZONE						SULFIDE ZONE										ASSAY DATA					
RUN	% REC.	DEPTH RUN BOTTOM	AGE	LITH	COLOR	INT.	DIP	FAULT		QTZ	DIOP	GAR	EPI	AMP	ø1	ø2	ø3	ø4	ø5	OR	BIO	QTZ	SER	CLY	CHL	EPI	CAR	GYP	ANH	MAG	ø1	ø2	ø3	ø4	LIM	HEM	Cu-1	Cu-2	ø1	ø2	PY	CPY	BOR	CC	Mo	ø1	ø2	ø3	ø4	MET. ZONE	Cu	Mo	Ag	Au	Pb	Zn
		195	TR	VOL	GR					3																									1						2															
		200											1																																											
		205			BK																																				3															
		210								1			2																												2															
		215																																																						
		220																																																						
		225																																																						
		230																																																						
		235																																																						
		240								2																																														
		245			GR																																																			
		250																																																						
		255								3																																														
		260			GR								1																												3															
		265																																																						
		270																																																						
		275																																																						
		280																																																						
		285																																																						

CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT Waterhole
HOLE NO. RWH-4
TOTAL FOOTAGE 410'

DEPTH RUN BOTTOM	GRAPHIC LOG	GEOLOGY DESCRIPTION AND REMARKS
195		GRAY SILICIFIED R VOLC W/3-5% SILVERY PY; SOME CLOTS SUBHEDRAL XTLS
200		GRAY MIXED W/ANDESITE MINOR EPIDOTE
205		MOSTLY DARK, ANDESITIC VOLC W/SOME GREENISH ZONES; 1-3% PYRITE
210		DO INCREASING EPIDOTE (MOSTLY BLK VOLC)
215		DO
220		DO
225		DO
230		DO
235		DO
240		GETTING SOME MILKY QTZ AGAIN
245		DO INCREASING SILICA W/GREENISH PATCHES (MOTTLED)
250		DO
255		DO W/3-5% PY
260		DEFINITELY SIL VOLC AS BEFORE 205 FEET DEPTH
265		DO
270		DO
275		DO
280		DO
285		DO

CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT: Waterhole
HOLE NO.: RWH-4

ELEV.
COORDINATES
TYPE DRILL _____ BIT
INCLINATION _____ BEARING
FOOTAGE: CORE _____ ROTARY
CONTRACTOR
OBJECTIVE
STOPPED BECAUSE

SECTION _____ TWP _____ RANGE
TOTAL FOOTAGE
START _____ COMPLETION
LOGGED BY
SCALE

Page 4 of 5

FOOTAGE: DEPTH RUN BOTTOM	ROCK TYPE: AGE	ROCK TYPE: LITH	ROCK TYPE: COLOR	FRAC: INT.	FRAC: DIP	FAULT: DIP	TEXTURE	ALTERATION MINERALS: SKARN: QTZ	DIOP	GAR	EPI	AMP	ø1	ø2	ø3	ø4	ø5	INTRUSIVES: OR	BIO	QTZ	SER	CLY	CHL	EPI	CAR	GYP	ANH	MAG	ø1	ø2	ø3	ø4	OXIDE ZONE: LIM	HEM	Cu-1	Cu-2	ø1	ø2	SULFIDE ZONE: PY	CPY	BOR	CC	Mo	ø1	ø2	ø3	ø4	ZONE: MET.	ASSAY DATA: Cu	Mo	Ag	Au	Pb	Zn
290	TR	VOL	GR					3																															2																
295																																							3																
300																																							2																
305																																							3																
310																																																							
	TR	VOL																																																					
315	CR	INT																																					2																
	TR	VOL																																																					
320	CR	INT																																																					
325	CR	INT																																					1																
	TR	VOL																																																					
330	CR	INT																																																					
335	TR	VOL																																					2																
340																																																							
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360																																																							
365																																																							
370																																																							
375																																																							
380																																																							

CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT Waterhole
HOLE NO. RW4-4
TOTAL FOOTAGE 410'

DEPTH RUN BOTTOM	GRAPHIC LOG	GEOLOGY — DESCRIPTION AND REMARKS
290		DO W/1-3% PY SCATTERED
295		DO 3-5% PY
300		DO SOMEWHAT DARKER
305		DO
310		DO W/SOME FN GRAINED INTRUSIVE FRAGMENTS??
315		MIXED PYRITIC PORPHYRY VOL AND FN EQUIGRANULAR TO HORNBLENDE PORPHYRY INTRUSIVE W/FN DISSEMINATED PY
320		CONTINUED MIXED HB DIORITE AND SIL VOLC
325		VIRTUALLY INTRUSIVE MINOR EPIDOTE
330		MIXED W/ INTRUSIVE PREDOMINANT
335		BACK TO FR VOLC AS BEFORE INT
340		DO (FELSITE FRAGMENT?)
345		DO
350		DO
355		DO
360		DO WITH MINOR HB INTRUSIVE FRAGMENTS
365		DO NO INTRUSIVE
370		DO
375		
380		

CONOCO.- DRILL LOG
MINERALS EXPLORATION

PROJECT Waterhole

HOLE NO. RWH-4

ELEV.
COORDINATES
TYPE DRILL BIT
INCLINATION BEARING
FOOTAGE: CORE ROTARY
CONTRACTOR
OBJECTIVE
STOPPED BECAUSE

SECTION TWP RANGE
TOTAL FOOTAGE
START COMPLETION
LOGGED BY
SCALE

Page 5 of 5

FOOTAGE			ROCK TYPE			FRAC		DIP	TEXTURE	ALTERATION MINERALS SKARN										INTRUSIVES															OXIDE ZONE						SULFIDE ZONE									ZONE	ASSAY DATA					
RUN	% REC.	DEPTH RUN BOTTOM	AGE	LITH	COLOR	INT.	DIP	FAULT		QTZ	DIOP	GAR	EPI	AMP	Ø1	Ø2	Ø3	Ø4	Ø5	OR	BIO	QTZ	SER	CLY	CHL	EPI	CAR	GYP	ANH	MAG	Ø1	Ø2	Ø3	Ø4	LIM	HEM	Cu-1	Cu-2	Ø1	Ø2	PY	CPY	BOR	CC	Mo	Ø1	Ø2	Ø3	Ø4	MET.	Cu	Mo	Ag	Au	Pb	Zn
		385	TR	VOL	GR				3																																2															
		390	↓	↓	↓				↓																																↓															
		395	↓	↓	↓				↓																																↓															
		400	↓	↓	↓				↓																																↓															
		405	↓	↓	↓				↓																																↓															
		410	↓	↓	↓				↓																																↓															

CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT Waterhole
HOLE NO. RWH-4
TOTAL FOOTAGE 410'

DEPTH RUN BOTTOM	GRAPHIC LOG	GEOLOGY DESCRIPTION AND REMARKS
385		SILICIFIED VOLC, MOTTLED DARK AND LT W/1-5% PY
390		DO
395		DO
400		DO
405		DO
410		DO

DRILLING SUMMARY

203
Item 6

DRILL HOLE No. RWH-1

PROSPECT Waterhole

LOCATION Sec 8 T9N R26E

COORDINATES

LOGGED BY BRB

TOTAL DEPTH 75'

STARTING DATE 2-20-75

COMPLETION 2-20-75

DEPTH TO BEDROCK —

ROTARY FOOTAGE 75'

CORE FOOTAGE

ROCK TYPES: 0-75 R tuff + tuff breccia

ALTERATION: 0-75 qtz + epidote

MINERALIZATION: 0-75 pyrite + mt (oxidized above 50')

METALLURGICAL TYPE (S): oxide 0-50
ASSAY DATA: sulfide 50-75

COMMENTS: Water @ 50'

MAP REFERENCES

Conoco - Waterhole Project

CONOCO-DRILL LOG
MINERALS EXPLORATION

PROJECT Waterhole
HOLE NO. RWH-1

ELEV.
COORDINATES
TYPE DRILL Mayhew 1000 BIT 5" Hammer
INCLINATION vertical BEARING
FOOTAGE: CORE ROTARY 75'
CONTRACTOR Eklund- Gene Martin
OBJECTIVE Test high sulfide area near Waterhole 600-700'
STOPPED BECAUSE lost to caving -objective not achieved

SECTION 8 TWP 9N RANGE 28E
TOTAL FOOTAGE 75
START 2-20-75 COMPLETION 2-20-75
LOGGED BY BRB
SCALE

FOOTAGE	ROCK TYPE			ALTERATION MINERALS: SKARN		OXIDE ZONE	SULFIDE ZONE		MET. ZONE
DEPTH RUN BOTTOM	AGE	LITH	COLOR	QTZ	GAR	LIM	PY	Mo	MET. ZONE
									ØX
5	TR	VOL	TN	3		2	1		
10						1			
15									
20									
25						2			
30						1			
35						2	1		
40									
45			GR					1	
50					1				SUL
55									
60					2				
65							2		
70									
75									

ASSAY DATA: Cu Mo Ag Au Pb Zn

CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT Waterhole
HOLE NO. RWH - 1
TOTAL FOOTAGE 75'

DEPTH RUN BOTTOM	GRAPHIC LOG	GEOLOGY — DESCRIPTION AND REMARKS
		PARTIALLY OXIDIZED TUFF AND TUFF BRECCIA W/DISSEMINATED PYRITE- FINE
5		CUBES <1/2 % YELLOWISH BROWN LIMONITE MUSTLY ON FRACTURES
10		AS ABOVE SMALL BRECCIA FRAGMENTS IN SILICEOUS; GRAY CLAY GOUGE
15		DO
20		DO WITH VERY EVIDENT HEMATITE STAIN (PERVASIVE) AS WELL AS ABOVE LIMONITE
25		DO INCREASED LIMONITE AND MANGANESE PRESENT
30		VIRTUALLY ALL VOLC BRECCIA MUCH LESS LIMONITE
35		BACK TO TUFF AND BRECCIA WITH INCREASED LIMONITE
40		DO-END OF OXIDATION
45		GRAY SILICIFIED VOLC WITH 1/2-1% DISSEMINATED PYRITE CUBES AND DULL GRAY MAGNETITE(?) CRYSTALS BRECCIA HAS MICROCRYSTS OF QTZ AND KSPAR
50		DO WITH EPIDOTE AS CLOTS, ALONG FRACTURES, AND AS DISCRETE GRAINS (WATER)
55		DO MINOR PYRITE-EPIDOTE VEINLETS
60		DO INCREASED EPIDOTE 1-2% INCLOTS WITH OXIDIZED MAGNETITE? BLEBS
65		DO PERVASIVE GREEN COLOR TO ROCK PYRITE ABOUT 1%
70		DO
75		DO BOTTOM OF HOLE

CONOCO - DRILL LOG
MINERALS EXPLORATION

PROJECT

HOLE NO.

TOTAL FOOTAGE

DEPTH RUN BOTTOM	GRAPHIC LOG	GEOLOGY — DESCRIPTION AND REMARKS
5		ALLUVIAL FILL FOR DRILL SITE
10		DO
15		MIXED BAG OF SILICEOUS VOLC RX W/BRWNISH LIMONITE ON FRACTURES. SOME HEMATITE AFTER OPAQUES; SOME PY REMAINS ORIG 3-4%; NO MT
20		DO
25		SOME ANDESITE (FRESH) MIXED W/OX SIL VOLC
30		DO W/INCREASED OXIDATION
35		LESS FEOX; FRESH PY IN WHITE QTZ ALTERED SIL, SOMEWHAT PORPHYRITIC VOLCS
40		DO EXCEPT SOME SPOTTED QTZ-BIO FRAG FINE GRAIND, MIXED W/RHY VOLC
45		DO
50		DO MOST OF QTZ IS MILKY PY<1% MOSTLY OX
55		DO
60		DO W/2-3% OX PYRITE
65		MIXED OX AND FRESH SILCIFIED VOLCS TO 5% FRESH EUHEDRAL, SILVERY PY
70		DO
75		DO
80		DO W/2-3% OX PY
85		DO
90		DO
95		FRESH, MILKY QTZ W/SUBHEDRAL SILVERY PYRITE 4-5%

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:

Local Job No.: 75-6-39R

Foreign Job No.:

Invoice No.:

Date: March 14, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 46 rock samples

Submitted by: Barney Berger

Date Received: March 1, 1975

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Conoco - Waterhole Project

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client CONOCO Date March 14, 1975 RMGC Job No. 75-6-39R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH1	75-80	30	-1	10	20	-0.003	-0.03
RWH2	0-5	45	-1	20	15	-0.003	-0.03
	5-10	95	1	10	35	-0.003	-0.03
	10-15	95	-1	20	25	-0.003	-0.03
	15-20	80	1	10	25	-0.003	-0.03
	20-25	100	1	10	30	-0.003	-0.03
	25-30	75	-1	10	30	-0.003	-0.03
	30-35	35	1	10	35	-0.003	-0.03
	35-40	35	-1	70	60	-0.003	-0.03
	40-45	25	-1	20	50	-0.003	-0.03
	45-50	20	-1	10	60	-0.003	-0.03
	50-55	50	-1	10	40	-0.003	-0.03
	55-60	115	1	10	55	-0.003	-0.03
	60-65	125	-1	10	55	-0.003	-0.03
	65-70	25	1	10	55	-0.003	-0.03
	70-75	60	1	10	45	-0.003	-0.03
	75-80	40	1	10	50	-0.003	-0.03
	80-85	35	1	10	60	-0.003	-0.03
	85-90	30	-1	10	75	-0.003	-0.03
	90-95	35	-1	10	55	-0.003	-0.03
	95-100	30	-1	10	45	-0.003	-0.03
	100-105	25	-1	20	35	-0.003	-0.03
	105-110	25	1	10	25	-0.003	-0.03
	110-115	35	1	10	35	-0.003	-0.03
RWH2	115-120	35	-1	10	45	-0.003	-0.03

Client CONOCO Date March 14, 1975 RMGC Job No. 75-6-39R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH2	120-125	30	-1	10	35	-0.003	-0.03
RWH3	5-10	70	1	10	85	-0.003	-0.03
	10-15	65	-1	10	65	-0.003	-0.03
	15-20	75	-1	10	55	-0.003	-0.03
	20-25	80	-1	20	40	-0.003	-0.03
	25-30	80	-1	10	35	-0.003	-0.03
	30-35	80	-1	20	30	-0.003	-0.03
	35-40	70	-1	10	30	-0.003	-0.03
	40-45	45	-1	10	45	-0.003	-0.03
	45-50	60	-1	10	50	-0.003	-0.03
	50-55	85	-1	10	40	-0.003	-0.03
	55-60	65	-1	30	65	-0.003	-0.03
	60-65	145	1	20	50	-0.003	-0.03
RWH3	65-70	80	1	10	45	-0.003	-0.03
WRB	2404	5	-1	10	25	-0.003	-0.03
	2405	5	1	10	15	-0.003	-0.03
	2406	5	-1	-10	10	-0.003	-0.03
WRB	2408	10	-1	90	20	-0.003	-0.03
	CU-1	5	11	20	10	-0.003	-0.03
	CU-2	175	17	10	40	-0.003	-0.03
714	2407	70	-1	10	45	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada
March 14, 1975

ROCKY MOUNTAIN GEOCHEMICAL CORP.
SALT LAKE CITY, UTAH • RENO, NEVADA • SPOKANE, WASHINGTON • TUCSON, ARIZONA

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 75-9-11R
Foreign Job No.:
Invoice No.: 10288

Date: April 5, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 80 cutting samples

Submitted by: B. Berger

Date Received:

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analysis is determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Conoco - Waterhole Project

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client CONOCO Date April 5, 1975 RMGC Job No. 75-9-11R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH4	0-5	15	-1	10	10	-0.003	-0.03
	5-10	20	1	10	10	-0.003	-0.03
	10-15	25	1	-10	5	-0.003	-0.03
	15-20	15	-1	-10	5	-0.003	-0.03
	20-25	30	-1	-10	5	-0.003	-0.03
	25-30	25	1	-10	-5	-0.003	-0.03
	30-35	10	-1	-10	-5	-0.003	-0.03
	35-40	10	1	10	-5	-0.003	-0.03
	40-45	5	1	-10	-5	-0.003	-0.03
	45-50	5	1	-10	-5	-0.003	-0.03
	50-55	5	-1	-10	-5	-0.003	-0.03
	55-60	85	3	10	-5	-0.003	-0.03
	60-65	40	10	-10	-5	-0.003	-0.03
	65-70	10	2	-10	-5	-0.003	-0.03
	70-75	20	-1	-10	-5	-0.003	-0.03
	75-80	25	3	-10	-5	-0.003	-0.03
	80-85	10	2	-10	-5	-0.003	-0.03
	85-90	10	3	-10	-5	-0.003	-0.03
	90-95	15	2	-10	-5	-0.003	-0.03
	95-100	5	2	-10	5	-0.003	-0.03
	100-105	15	8	-10	-5	-0.003	-0.03
	105-110	10	6	10	-5	-0.003	-0.03
	110-115	10	1	-10	-5	-0.003	-0.03
	115-120	15	4	10	-5	-0.003	-0.03
RWH4	120-125	10	4	-10	-5	-0.003	-0.03

Client CONOCO Date April 5, 1975 RMGC Job No. 75-9-11R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH4	125-130	5	4	-10	-5	-0.003	-0.03
	130-135	10	3	-10	5	-0.003	-0.03
	135-140	5	2	-10	-5	-0.003	-0.03
	140-145	5	2	-10	-5	-0.003	-0.03
	145-150	15	2	-10	-5	-0.003	0.03
	150-155	5	-1	-10	-5	-0.003	-0.03
	155-160	5	1	-10	-5	-0.003	-0.03
	160-165	5	2	-10	-5	-0.003	-0.03
	165-170	5	3	-10	5	-0.003	-0.03
	170-175	5	2	-10	-5	-0.003	-0.03
	175-180	5	4	-10	5	-0.003	-0.03
	180-185	10	4	-10	15	-0.003	-0.03
	185-190	5	2	-10	5	-0.003	-0.03
	190-195	5	2	-10	5	-0.003	-0.03
	195-200	10	1	-10	5	-0.003	-0.03
	200-205	50	2	-10	10	-0.003	-0.03
	205-210	420	1	-10	10	-0.003	0.03
	210-215	15	2	-10	5	-0.003	-0.03
	215-220	10	1	-10	5	-0.003	-0.03
	220-225	10	1	-10	5	-0.003	-0.03
	225-230	5	2	-10	5	-0.003	-0.03
	230-235	5	2	-10	-5	-0.003	-0.03
	235-240	5	-1	-10	-5	-0.003	-0.03
	240-245	5	1	-10	-5	-0.003	-0.03
RWH4	245-250	5	3	-10	5	-0.003	-0.03

Client CONOCO Date April 5, 1975 RMGC Job No. 75-9-11R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH4	250-255	10	3	-10	5	-0.003	-0.03
	255-260	5	2	-10	-5	-0.003	-0.03
	260-265	5	1	-10	-5	-0.003	-0.03
	265-270	5	1	-10	-5	-0.003	-0.03
	270-275	5	2	-10	5	-0.003	0.03
	275-280	5	4	-10	5	-0.003	0.03
	280-285	5	4	-10	-5	-0.003	0.03
	285-290	5	3	-10	-5	-0.003	-0.03
	290-295	5	2	-10	-5	-0.003	-0.03
	295-300	10	3	10	10	-0.003	-0.03
	300-305	10	3	10	10	-0.003	-0.03
	305-310	5	2	-10	5	-0.003	-0.03
	310-315	5	2	-10	5	-0.003	-0.03
	315-320	5	2	-10	5	-0.003	-0.03
	320-325	5	1	-10	5	-0.003	-0.03
	325-330	5	2	10	5	-0.003	-0.03
	330-335	5	2	-10	5	-0.003	-0.03
	335-340	5	2	10	-5	-0.003	-0.03
	340-345	10	2	-10	5	-0.003	-0.03
	345-350	15	2	-10	5	-0.003	-0.03
	350-355	15	2	-10	5	-0.003	-0.03
	355-360	10	3	-10	-5	-0.003	-0.03
	360-365	15	2	-10	5	-0.003	-0.03
	365-370	10	2	-10	-5	-0.003	-0.03
RWH4	370-375	25	2	20	20	-0.003	-0.03

Client CONOCO Date April 5, 1975 RMGC Job No. 75-9-11R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH4	375-380	15	2	-10	5	-0.003	-0.03
	380-385	15	1	-10	5	-0.003	-0.03
	385-390	15	1	10	5	-0.003	-0.03
	390-395	15	1	-10	5	-0.003	-0.03
RWH4	395-400	15	2	-10	5	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada April 5, 1975

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 75-9-11R
Foreign Job No.:
Invoice No.: 10288

Date: April 5, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 80 cutting samples

Submitted by: B. Berger

Date Received:

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analysis is determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Conoco-Waterhole Project

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client CONOCO Date April 5, 1975 RMGC Job No. 75-9-11R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH4	0-5	15	-1	10	10	-0.003	-0.03
	5-10	20	1	10	10	-0.003	-0.03
	10-15	25	1	-10	5	-0.003	-0.03
	15-20	15	-1	-10	5	-0.003	-0.03
	20-25	30	-1	-10	5	-0.003	-0.03
	25-30	25	1	-10	-5	-0.003	-0.03
	30-35	10	-1	-10	-5	-0.003	-0.03
	35-40	10	1	10	-5	-0.003	-0.03
	40-45	5	1	-10	-5	-0.003	-0.03
	45-50	5	1	-10	-5	-0.003	-0.03
	50-55	5	-1	-10	-5	-0.003	-0.03
	55-60	85	3	10	-5	-0.003	-0.03
	60-65	40	10	-10	-5	-0.003	-0.03
	65-70	10	2	-10	-5	-0.003	-0.03
	70-75	20	-1	-10	-5	-0.003	-0.03
	75-80	25	3	-10	-5	-0.003	-0.03
	80-85	10	2	-10	-5	-0.003	-0.03
	85-90	10	3	-10	-5	-0.003	-0.03
	90-95	15	2	-10	-5	-0.003	-0.03
	95-100	5	2	-10	5	-0.003	-0.03
	100-105	15	8	-10	-5	-0.003	-0.03
	105-110	10	6	10	-5	-0.003	-0.03
	110-115	10	1	-10	-5	-0.003	-0.03
	115-120	15	4	10	-5	-0.003	-0.03
RWH4	120-125	10	4	-10	-5	-0.003	-0.03

Client CONOCO Date April 5, 1975 RMGC Job No. 75-9-11R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH4	125-130	5	4	-10	-5	-0.003	-0.03
	130-135	10	3	-10	5	-0.003	-0.03
	135-140	5	2	-10	-5	-0.003	-0.03
	140-145	5	2	-10	-5	-0.003	-0.03
	145-150	15	2	-10	-5	-0.003	0.03
	150-155	5	-1	-10	-5	-0.003	-0.03
	155-160	5	1	-10	-5	-0.003	-0.03
	160-165	5	2	-10	-5	-0.003	-0.03
	165-170	5	3	-10	5	-0.003	-0.03
	170-175	5	2	-10	-5	-0.003	-0.03
	175-180	5	4	-10	5	-0.003	-0.03
	180-185	10	4	-10	15	-0.003	-0.03
	185-190	5	2	-10	5	-0.003	-0.03
	190-195	5	2	-10	5	-0.003	-0.03
	195-200	10	1	-10	5	-0.003	-0.03
	200-205	50	2	-10	10	-0.003	-0.03
	205-210	420	1	-10	10	-0.003	0.03
	210-215	15	2	-10	5	-0.003	-0.03
	215-220	10	1	-10	5	-0.003	-0.03
	220-225	10	1	-10	5	-0.003	-0.03
	225-230	5	2	-10	5	-0.003	-0.03
	230-235	5	2	-10	-5	-0.003	-0.03
	235-240	5	-1	-10	-5	-0.003	-0.03
	240-245	5	1	-10	-5	-0.003	-0.03
RWH4	245-250	5	3	-10	5	-0.003	-0.03

Client CONOCO Date April 5, 1975 RMGC Job No. 75-9-11R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH4	250-255	10	3	-10	5	-0.003	-0.03
	255-260	5	2	-10	-5	-0.003	-0.03
	260-265	5	1	-10	-5	-0.003	-0.03
	265-270	5	1	-10	-5	-0.003	-0.03
	270-275	5	2	-10	5	-0.003	0.03
	275-280	5	4	-10	5	-0.003	0.03
	280-285	5	4	-10	-5	-0.003	0.03
	285-290	5	3	-10	-5	-0.003	-0.03
	290-295	5	2	-10	-5	-0.003	-0.03
	295-300	10	3	10	10	-0.003	-0.03
	300-305	10	3	10	10	-0.003	-0.03
	305-310	5	2	-10	5	-0.003	-0.03
	310-315	5	2	-10	5	-0.003	-0.03
	315-320	5	2	-10	5	-0.003	-0.03
	320-325	5	1	-10	5	-0.003	-0.03
	325-330	5	2	10	5	-0.003	-0.03
	330-335	5	2	-10	5	-0.003	-0.03
	335-340	5	2	10	-5	-0.003	-0.03
	340-345	10	2	-10	5	-0.003	-0.03
	345-350	15	2	-10	5	-0.003	-0.03
	350-355	15	2	-10	5	-0.003	-0.03
	355-360	10	3	-10	-5	-0.003	-0.03
	360-365	15	2	-10	5	-0.003	-0.03
	365-370	10	2	-10	-5	-0.003	-0.03
RWH4	370-375	25	2	20	20	-0.003	-0.03

Client CONOCO Date April 5, 1975 RMGC Job No. 75-9-11R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH4	375-380	15	2	-10	5	-0.003	-0.03
	380-385	15	1	-10	5	-0.003	-0.03
	385-390	15	1	10	5	-0.003	-0.03
	390-395	15	1	-10	5	-0.003	-0.03
RWH4	395-400	15	2	-10	5	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada April 5, 1975

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 75-7-36R
Foreign Job No.:
Invoice No.: 10192

Date: March 18, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 29 rock samples

Submitted by: B. Berger

Date Received: March 7, 1975

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Conoco - Waterhole Project

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client CONOCO Date March 18, 1975 RMGC Job No. 75-7-36R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH3	270-275	75	5	10	20	-0.003	-0.03
	275-280	40	4	10	10	-0.003	-0.03
	280-285	45	-1	40	35	-0.003	-0.03
	285-290	55	2	20	30	-0.003	-0.03
	290-295	25	2	10	15	-0.003	-0.03
	295-300	20	1	20	30	-0.003	-0.03
	300-305	30	1	20	25	-0.003	-0.03
	305-310	20	3	10	5	-0.003	-0.03
	310-315	20	2	20	15	-0.003	-0.03
	315-320	35	4	10	10	-0.003	-0.03
	320-325	30	3	70	120	-0.003	-0.03
	325-330	70	2	120	115	-0.003	-0.03
	330-335	205	1	20	125	-0.003	-0.03
	335-340	110	2	20	145	-0.003	-0.03
	340-345	170	2	20	145	-0.003	-0.03
	345-350	105	2	20	150	-0.003	-0.03
	350-355	55	-1	20	190	-0.003	-0.03
	355-360	50	1	30	165	-0.003	-0.03
	360-365	65	1	30	145	-0.003	-0.03
	365-370	40	2	20	30	-0.003	-0.03
	370-375	25	3	20	15	-0.003	-0.03
	375-380	35	3	20	15	-0.003	-0.03
	380-385	30	3	20	50	-0.003	-0.03
	385-390	50	3	10	50	-0.003	-0.03
RWH3	390-395	55	2	10	85	-0.003	-0.03

Client CONOCO Date March 18, 1975 RMGC Job No. 75-7-36R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH3	395-400	60	-1	20	80	-0.003	-0.03
	400-405	35	2	20	35	-0.003	-0.03
	405-410	60	-1	20	35	-0.003	-0.03
RWH3	410-415	115	3	10	80	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada March 18, 1975

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 75-7-13R
Foreign Job No.:
Invoice No.: 10202

Date: March 19, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 40 cutting samples

Submitted by: B. Berger

Date Received: March 3, 1975

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Conoco - Waterhole Project

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client CONOCO Date March 19, 1975 RMGC Job No. 75-7-13R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH3	70-75	60	-1	10	75	-0.003	-0.03
	75-80	55	-1	10	75	-0.003	-0.03
	80-85	55	-1	20	65	-0.003	-0.03
	85-90	50	1	20	60	-0.003	-0.03
	Unmarked	55	-1	10	55	-0.003	-0.03
	95-100	65	-1	20	55	-0.003	-0.03
	100-105	70	-1	10	50	-0.003	-0.03
	105-110	70	-1	20	60	-0.003	-0.03
	110-115	75	1	10	45	-0.003	-0.03
	115-120	85	-1	10	50	-0.003	-0.03
	120-125	70	-1	10	55	-0.003	-0.03
	125-130	55	-1	10	55	-0.003	-0.03
	130-135	70	-1	10	55	-0.003	-0.03
	135-140	60	-1	10	55	-0.003	-0.03
	140-145	60	-1	20	70	-0.003	-0.03
	145-150	50	-1	10	60	-0.003	-0.03
	150-155	30	-1	10	45	-0.003	-0.03
	155-160	60	-1	10	35	-0.003	-0.03
	160-165	20	-1	10	20	-0.003	-0.03
	165-170	15	-1	10	10	-0.003	-0.03
	170-175	15	-1	10	20	-0.003	-0.03
	180-185	15	-1	10	10	-0.003	-0.03
	185-190	15	-1	20	5	-0.003	-0.03
	190-195	15	1	10	5	-0.003	-0.03
RWH3	195-200	20	-1	-10	15	-0.003	-0.03

Client CONOCO Date March 19, 1975 RMGC Job No. 75-7-13R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH3	200-205	30	-1	20	30	-0.003	-0.03
	205-210A	15	-1	10	15	-0.003	-0.03
	205-210B	15	-1	10	10	-0.003	-0.03
	210-215	45	-1	-10	5	-0.003	-0.03
	215-220	115	5	10	15	-0.003	-0.03
	220-225	65	-1	80	20	-0.003	-0.03
	225-230	20	-1	10	5	-0.003	-0.03
	230-235	20	3	10	10	-0.003	-0.03
	235-240	15	1	10	5	-0.003	-0.03
	240-245	85	-1	10	15	-0.003	-0.03
	245-250	60	-1	10	10	-0.003	-0.03
	250-255	25	-1	-10	15	-0.003	-0.03
	255-260	40	-1	10	20	-0.003	-0.03
	260-265	65	-1	60	50	-0.003	-0.03
RWH3	265-270	70	-1	10	25	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada March 19, 1975

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 75-7-36R
Foreign Job No.:
Invoice No.: 10192

Date: March 18, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 29 rock samples

Submitted by: B. Berger

Date Received: March 7, 1975

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Conoco - Waterhole Project

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client CONOCO Date March 18, 1975 RMGC Job No. 75-7-36R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH3	270-275	75	5	10	20	-0.003	-0.03
	275-280	40	4	10	10	-0.003	-0.03
	280-285	45	-1	40	35	-0.003	-0.03
	285-290	55	2	20	30	-0.003	-0.03
	290-295	25	2	10	15	-0.003	-0.03
	295-300	20	1	20	30	-0.003	-0.03
	300-305	30	1	20	25	-0.003	-0.03
	305-310	20	3	10	5	-0.003	-0.03
	310-315	20	2	20	15	-0.003	-0.03
	315-320	35	4	10	10	-0.003	-0.03
	320-325	30	3	70	120	-0.003	-0.03
	325-330	70	2	120	115	-0.003	-0.03
	330-335	205	1	20	125	-0.003	-0.03
	335-340	110	2	20	145	-0.003	-0.03
	340-345	170	2	20	145	-0.003	-0.03
	345-350	105	2	20	150	-0.003	-0.03
	350-355	55	-1	20	190	-0.003	-0.03
	355-360	50	1	30	165	-0.003	-0.03
	360-365	65	1	30	145	-0.003	-0.03
	365-370	40	2	20	30	-0.003	-0.03
	370-375	25	3	20	15	-0.003	-0.03
	375-380	35	3	20	15	-0.003	-0.03
	380-385	30	3	20	50	-0.003	-0.03
	385-390	50	3	10	50	-0.003	-0.03
RWH3	390-395	55	2	10	85	-0.003	-0.03

Client CONOCO Date March 18, 1975 RMGC Job No. 75-7-36R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH3	395-400	60	-1	20	80	-0.003	-0.03
	400-405	35	2	20	35	-0.003	-0.03
	405-410	60	-1	20	35	-0.003	-0.03
RWH3	410-415	115	3	10	80	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada March 18, 1975

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 75-7-13R
Foreign Job No.:
Invoice No.: 10202

Date: March 19, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 40 cutting samples

Submitted by: B. Berger

Date Received: March 3, 1975

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Conoco - Waterhole Project

All values are reported in parts per million unless specified otherwise. A minus sign (—) is to be read "less than" and a plus sign (+) "greater than." Values in parenthesis are estimates. This analytical report is the confidential property of the above mentioned client and for the protection of this client and ourselves we reserve the right to forbid publication or reproduction of this report or any part thereof without written permission.

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client CONOCO Date March 19, 1975 RMGC Job No. 75-7-13R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH3	70-75	60	-1	10	75	-0.003	-0.03
	75-80	55	-1	10	75	-0.003	-0.03
	80-85	55	-1	20	65	-0.003	-0.03
	85-90	50	1	20	60	-0.003	-0.03
	Unmarked	55	-1	10	55	-0.003	-0.03
	95-100	65	-1	20	55	-0.003	-0.03
	100-105	70	-1	10	50	-0.003	-0.03
	105-110	70	-1	20	60	-0.003	-0.03
	110-115	75	1	10	45	-0.003	-0.03
	115-120	85	-1	10	50	-0.003	-0.03
	120-125	70	-1	10	55	-0.003	-0.03
	125-130	55	-1	10	55	-0.003	-0.03
	130-135	70	-1	10	55	-0.003	-0.03
	135-140	60	-1	10	55	-0.003	-0.03
	140-145	60	-1	20	70	-0.003	-0.03
	145-150	50	-1	10	60	-0.003	-0.03
	150-155	30	-1	10	45	-0.003	-0.03
	155-160	60	-1	10	35	-0.003	-0.03
	160-165	20	-1	10	20	-0.003	-0.03
	165-170	15	-1	10	10	-0.003	-0.03
	170-175	15	-1	10	20	-0.003	-0.03
	180-185	15	-1	10	10	-0.003	-0.03
	185-190	15	-1	20	5	-0.003	-0.03
	190-195	15	1	10	5	-0.003	-0.03
RWH3	195-200	20	-1	-10	15	-0.003	-0.03

Client CONOCO Date March 19, 1975 RMGC Job No. 75-7-13R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH3	200-205	30	-1	20	30	-0.003	-0.03
	205-210A	15	-1	10	15	-0.003	-0.03
	205-210B	15	-1	10	10	-0.003	-0.03
	210-215	45	-1	-10	5	-0.003	-0.03
	215-220	115	5	10	15	-0.003	-0.03
	220-225	65	-1	80	20	-0.003	-0.03
	225-230	20	-1	10	5	-0.003	-0.03
	230-235	20	3	10	10	-0.003	-0.03
	235-240	15	1	10	5	-0.003	-0.03
	240-245	85	-1	10	15	-0.003	-0.03
	245-250	60	-1	10	10	-0.003	-0.03
	250-255	25	-1	-10	15	-0.003	-0.03
	255-260	40	-1	10	20	-0.003	-0.03
	260-265	65	-1	60	50	-0.003	-0.03
RWH3	265-270	70	-1	10	25	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada March 19, 1975

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:

Local Job No.: 75-6-39R

Foreign Job No.:

Invoice No.:

Date: March 14, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 46 rock samples

Submitted by: Barney Berger

Date Received: March 1, 1975

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Conoco-Waterhole Project

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client CONOCO Date March 14, 1975 RMGC Job No. 75-6-39R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH1	75-80	30	-1	10	20	-0.003	-0.03
RWH2	0-5	45	-1	20	15	-0.003	-0.03
	5-10	95	1	10	35	-0.003	-0.03
	10-15	95	-1	20	25	-0.003	-0.03
	15-20	80	1	10	25	-0.003	-0.03
	20-25	100	1	10	30	-0.003	-0.03
	25-30	75	-1	10	30	-0.003	-0.03
	30-35	35	1	10	35	-0.003	-0.03
	35-40	35	-1	70	60	-0.003	-0.03
	40-45	25	-1	20	50	-0.003	-0.03
	45-50	20	-1	10	60	-0.003	-0.03
	50-55	50	-1	10	40	-0.003	-0.03
	55-60	115	1	10	55	-0.003	-0.03
	60-65	125	-1	10	55	-0.003	-0.03
	65-70	25	1	10	55	-0.003	-0.03
	70-75	60	1	10	45	-0.003	-0.03
	75-80	40	1	10	50	-0.003	-0.03
	80-85	35	1	10	60	-0.003	-0.03
	85-90	30	-1	10	75	-0.003	-0.03
	90-95	35	-1	10	55	-0.003	-0.03
	95-100	30	-1	10	45	-0.003	-0.03
	100-105	25	-1	20	35	-0.003	-0.03
	105-110	25	1	10	25	-0.003	-0.03
	110-115	35	1	10	35	-0.003	-0.03
RWH2	115-120	35	-1	10	45	-0.003	-0.03

Client CONOCO Date March 14, 1975 RMGC Job No. 75-6-39R

	Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH2	120-125	30	-1	10	35	-0.003	-0.03
RWH3	5-10	70	1	10	85	-0.003	-0.03
	10-15	65	-1	10	65	-0.003	-0.03
	15-20	75	-1	10	55	-0.003	-0.03
	20-25	80	-1	20	40	-0.003	-0.03
	25-30	80	-1	10	35	-0.003	-0.03
	30-35	80	-1	20	30	-0.003	-0.03
	35-40	70	-1	10	30	-0.003	-0.03
	40-45	45	-1	10	45	-0.003	-0.03
	45-50	60	-1	10	50	-0.003	-0.03
	50-55	85	-1	10	40	-0.003	-0.03
	55-60	65	-1	30	65	-0.003	-0.03
	60-65	145	1	20	50	-0.003	-0.03
RWH3	65-70	80	1	10	45	-0.003	-0.03
WRB	2404	5	-1	10	25	-0.003	-0.03
	2405	5	1	10	15	-0.003	-0.03
	2406	5	-1	-10	10	-0.003	-0.03
WRB	2408	10	-1	90	20	-0.003	-0.03
	CU-1	5	11	20	10	-0.003	-0.03
	CU-2	175	17	10	40	-0.003	-0.03
714	2407	70	-1	10	45	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada
March 14, 1975

ROCKY MOUNTAIN GEOCHEMICAL CORP.
SALT LAKE CITY, UTAH • RENO, NEVADA • SPOKANE, WASHINGTON • TUCSON, ARIZONA

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 75-5-41R
Foreign Job No.:
Invoice No.: 10089

Date: February 27, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 15 rock samples

Submitted by: Barney Berger

Date Received: February 20, 1975

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Conoco - Waterhole Project

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client CONOCO Date Feb. 27, 1975 RMGC Job No. 75-5-41R

Sample No.		ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH-1	0-5	50	2	20	20	-0.003	-0.03
	5-10	45	2	50	55	-0.003	-0.03
	10-15	45	1	10	20	-0.003	-0.03
	15-20	30	4	10	5	-0.003	-0.03
	20-25	85	2	20	25	-0.003	-0.03
	25-30	120	1	60	95	-0.003	-0.03
	30-35	100	3	20	20	-0.003	-0.03
	35-40	85	-1	10	15	-0.003	-0.03
	40-45	40	-1	20	50	-0.003	-0.03
	45-50	10	1	20	55	-0.003	-0.03
	50-55	45	-1	10	55	-0.003	-0.03
	55-60	80	-1	20	90	-0.003	-0.03
	60-65	75	-1	10	70	-0.003	-0.03
	65-70	80	-1	10	60	-0.003	-0.03
RWH-1	70-75	50	2	10	30	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada February 27, 1975

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 75-5-41R
Foreign Job No.:
Invoice No.: 10089

Date: February 27, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 15 rock samples

Submitted by: Barney Berger

Date Received: February 20, 1975

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Conoco - Waterhole Project

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client CONOCO Date Feb. 27, 1975 RMGC Job No. 75-5-41R

Sample No.		ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH-1	0-5	50	2	20	20	-0.003	-0.03
	5-10	45	2	50	55	-0.003	-0.03
	10-15	45	1	10	20	-0.003	-0.03
	15-20	30	4	10	5	-0.003	-0.03
	20-25	85	2	20	25	-0.003	-0.03
	25-30	120	1	60	95	-0.003	-0.03
	30-35	100	3	20	20	-0.003	-0.03
	35-40	85	-1	10	15	-0.003	-0.03
	40-45	40	-1	20	50	-0.003	-0.03
	45-50	10	1	20	55	-0.003	-0.03
	50-55	45	-1	10	55	-0.003	-0.03
	55-60	80	-1	20	90	-0.003	-0.03
	60-65	75	-1	10	70	-0.003	-0.03
	65-70	80	-1	10	60	-0.003	-0.03
RWH-1	70-75	50	2	10	30	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada February 27, 1975

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET • SPARKS-RENO, NEVADA 89431 • PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 73-33-24R
Foreign Job No.:
Invoice No.: 7757

Date: November 21, 1973

Client: Conoco
P. O. Box 7608
Reno, Nevada

Client Order No.: None

Report On: 28 rock samples

Submitted by: P. H. Kirwin

Date Received: November 10, 1973

Analysis: Copper, Molybdenum, Lead, Zinc, Gold, and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically. All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:cj----------

WR Series Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
R - 1	55	-1	10	30	-0.003	-0.03
2	50	-1	10	10	-0.003	-0.03
3	10	-1	-10	-5	-0.003	-0.03
4	20	-1	-10	5	-0.003	-0.03
5	15	3	10	5	-0.003	-0.03
R - 6	35	2	10	5	-0.003	-0.03

Conoco - Waterhole Project

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client Conoco Date November 21, 1973 RMGC Job No. 73-33-24R

WR Series Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
R - 7	20	25	10	10	-0.003	-0.03
8	25	-1	10	30	-0.003	-0.03
9	25	1	10	10	-0.003	-0.03
10	40	-1	-10	5	-0.003	-0.03
11	15	-1	10	5	-0.003	-0.03
12	70	-1	10	15	-0.003	-0.03
13	35	-1	10	55	-0.003	-0.03
14	20	-1	10	5	-0.003	-0.03
15	20	1	-10	5	-0.003	-0.03
16	35	4	10	5	-0.003	-0.03
17	20	23	10	5	-0.003	-0.03
18	20	-1	10	5	-0.003	-0.03
19	25	1	10	10	-0.003	-0.03
20	15	3	-10	-5	-0.003	-0.03
21	15	1	10	5	-0.003	-0.03
22	15	-1	10	5	-0.003	-0.03
23	15	-1	10	30	-0.003	-0.03
R -24	15	4	10	10	-0.003	-0.03
SS- 1	25	-1	10	25		
2	35	-1	10	25		
3	60	-1	10	30		
SS- 4	30	-1	10	35		

By Gary M. Fechko

Gary M. Fechko

Rocky Mountain Geochemical Corporation
Sparks, Nevada November 21, 1973

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET • SPARKS-RENO, NEVADA 89431 • PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:

Local Job No.: 73-34-5R

Foreign Job No.:

Invoice No.: 7810

Date: December 5, 1973

Client: Conoco
P. O. Box 7608
Reno, Nevada

Client Order No.: None

Report On: 9 rock samples

Submitted by: P. H. Kirwin

Date Received:

Analysis: Copper, Molybdenum, Lead, Zinc, Gold, and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically. All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:cj

Conoco - Waterhole Project

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client Conoco Date December 5, 1973 RMGC Job No. 73-34-5R

WR Series Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Gold	ppm Silver
25	5	-1	10	25	-0.1	-1
26	10	-1	10	-5	-0.1	-1
27	10	-1	10	15	-0.1	-1
28	10	-1	10	15	-0.1	-1
29	85	-1	10	30	-0.1	-1
30	85	-1	10	15	-0.1	-1
31	80	8	-10	-5	1.0	1
32	10	1	-10	15	-0.1	-1
33	25	-1	10	10	-0.1	-1

Bald Mtn.

By Gary M. Fechko

Gary M. Fechko

Rocky Mountain Geochemical Corporation
Sparks, Nevada December 5, 1973

203
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET • SPARKS-RENO, NEVADA 89431 • PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:

Local Job No.: 73-34-27R

Foreign Job No.:

Invoice No.: 7818

Date: December 4, 1973

Client: Conoco

P. O. Box 7608

Reno, Nevada

Client Order No.: None

Report On: 7 rocks

Submitted by: P. H. Kirwin

Date Received: November 20, 1973

Analysis: Copper, Molybdenum, Lead, Zinc, Gold, and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically. All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:cj

Conoco-Waterhole Project

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

Client Conoco Date December 4, 1973 RMGC Job No. 73-34-27R

WR Series Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	ppm Gold	ppm Silver
34R	20	10	20	95	-0.1	-1
35R	135	3	200	90	-0.1	-1
36R	-5	1	-10	5	-0.1	-1
37R	5	2	10	20	-0.1	-1
38R	50	1	10	50	-0.1	-1
39R	10	1	10	15	-0.1	-1
40R	20	-1	-10	20	-0.1	-1

By Gary M. Fechko

Gary M. Fechko

Rocky Mountain Geochemical Corporation
Sparks, Nevada December 4, 1973

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 75-10-24R
Foreign Job No.:
Invoice No.: 10341

Date: April 11, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 2 rock samples

Submitted by: B. Berger

Date Received: April 1, 1975

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH-4 400-405	15	1	20	15	-0.003	-0.03
RWH-4 405-410	15	1	10	10	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada April 11, 1975

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

0203
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 75-10-24R
Foreign Job No.:
Invoice No.: 10341

Date: April 11, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 2 rock samples

Submitted by: B. Berger

Date Received: April 1, 1975

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH-4 400-405	15	1	20	15	-0.003	-0.03
RWH-4 405-410	15	1	10	10	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada April 11, 1975

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 75-10-30R
Foreign Job No.:
Invoice No.: 10340

Date: April 11, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 5 rock samples

Submitted by: B. Berger

Date Received: April 2, 1975

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH-3 415-420	150	1	10	60	-0.003	-0.03
RWH-3 420-425	35	1	10	40	-0.003	-0.03
RWH-3 425-430	20	-1	10	15	-0.003	-0.03
RWH-3 430-435	25	1	10	30	-0.003	-0.03
RWH-3 435-440	25	1	10	20	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada April 11, 1975

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

(203)
Item 6

ROCKY MOUNTAIN GEOCHEMICAL CORP.

840 GREG STREET · SPARKS, NEVADA 89431 · PHONE: (702) 359-6311

RENO OFFICE

Certificate of Analysis

RMGC Numbers:
Local Job No.: 75-10-30R
Foreign Job No.:
Invoice No.: 10340

Date: April 11, 1975

Client: Continental Oil Company
P. O. Box 7608
Reno, NV

Client Order No.: None

Report On: 5 rock samples

Submitted by: B. Berger

Date Received: April 2, 1975

Analysis: Copper, Molybdenum, Lead, Zinc, Gold and Silver

Analytical Methods: Molybdenum analysis is determined colorimetrically, All other analyses are determined by atomic absorption.

Remarks: None

cc: Enclosed (2)
RMGC
File

GMF:er

Sample No.	ppm Copper	ppm Molybdenum	ppm Lead	ppm Zinc	Oz/T Gold	Oz/T Silver
RWH-3 415-420	150	1	10	60	-0.003	-0.03
RWH-3 420-425	35	1	10	40	-0.003	-0.03
RWH-3 425-430	20	-1	10	15	-0.003	-0.03
RWH-3 430-435	25	1	10	30	-0.003	-0.03
RWH-3 435-440	25	1	10	20	-0.003	-0.03

By Gary M. Fechko

Gary M. Fechko
Rocky Mountain Geochemical Corporation
Sparks, Nevada April 11, 1975

ND = None Detected 1 ppm = 0.0001% 1 Troy oz./ton = 34.286 ppm 1 ppm = 0.0292 Troy oz./ton

203
Item 6

Eklund Drilling Co.

Box 666
Carlin, Nevada 89822

Date Mar 1-75
Drill No. #36
Hole No. RWH-#3
Water Used 1000 Gallons
Water Truck No. 34

Shift Day
Location Yerington
Footage End Shift 200
Footage Start Shift 140
Footage Drilled 60
Hours Drilled 10
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 2 1/2
Hours Other
Total Hours 12 1/2

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	1-50# Sack - Super Ben		

REMARKS

Conoco - Waterhole Project

Helper Cayl Mass
Driller [illegible]

Helper
Approved

Eklund Drilling Co.

Box 666
Carlin, Nevada 89822

Date Mar 2-75
Drill No. #36
Hole No. RWH-#3
Water Used 1000 Gallons
Water Truck No. 34

Shift Day
Location Yerington
Footage End Shift 240
Footage Start Shift 200
Footage Drilled 40
Hours Drilled 7
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 2 1/2
Hours Other
Total Hours 9 1/2

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS	4 3/4	V3	120'	75753	Varel
	1-50# Sack Super Gel				
	1-Sack-Quick-Trol				

CASING	Size	Type	Footage

LOST MTL	Description	No. Sacks	Size Sacks

REMARKS Went to Carson after Bits

Helper Carl Mayr

Helper

Eklund Drilling Co.

Box 666
Carlin, Nevada 89822

Date Mar 3-75
Drill No. #36
Hole No. RWH-#3
Water Used 500 Gallons
Water Truck No. 34

Shift Day
Location Yerington
Footage End Shift 310
Footage Start Shift 240
Footage Drilled 70
Hours Drilled 9 1/2
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 2 1/2
Hours Other
Total Hours 12

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	1-50# Sack Super Bor		
	1-Sack Quick Trol		

REMARKS

Helper Carl Marr
Helper

Eklund Drilling Co.

Box 666
Carlin, Nevada 89822

Date May 4-75
Drill No. #36
Hole No. RWH-#3
Water Used 500 Gallons
Water Truck No. 34

Shift Day
Location Yerington
Footage End Shift 350
Footage Start Shift 310
Footage Drilled 40
Hours Drilled 10
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 2 1/2
Hours Other
Total Hours 12 1/2

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS	4 3/4	V2	130	75752	Varel

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	1-2# Sack	Quik	Trol

REMARKS

Helper Earl Marr

Helper

Eklund Drilling Co.

Box 666
Carlin, Nevada 89822

Date Mar-5-75
Drill No. #36
Hole No. RWH - #3
Water Used 600 Gallons
Water Truck No. 34

Shift Day
Location Gerrington
Footage End Shift 380
Footage Start Shift 350
Footage Drilled 7
Hours Drilled 1
Hours Equip. Rep. 0
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 2 1/2
Hours Other
Total Hours 9 1/2

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	1-50# Sack	Super Bop	
	1-2# Sack	Quick Trol	

REMARKS Losing Circulation bad - Rough and broken - not too hard not Washing hole too Clean

Helper Carl Mass Helper

Eklund Drilling Co.

Box 666
Carlin, Nevada 89822

Date Mar 6-75
Drill No. #36
Hole No. RWH-#3
Water Used 1000 Gallons
Water Truck No. 34

Shift Day
Location Jerrington
Footage End Shift 400
Footage Start Shift 380
Footage Drilled 20
Hours Drilled 8 1/2
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 2 1/2
Hours Other
Total Hours 11

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	1-Sack Mica Tex		
	2-2# Sacks Quik Trol		
	4-50# Sacks Super Ben		
	6 gal Diesel		

REMARKS Diesel for Mixing Quik Trol

Helper Carl Mars

Helper

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar 7-75
Drill No. #36
Hole No. PW#-#3
Water Used 1000 Gallons
Water Truck No. 34

Shift Day
Location Gerring Ton
Footage End Shift 440
Footage Start Shift 400
Footage Drilled 40
Hours Drilled 9½
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 2½
Hours Other
Total Hours 12

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	2-2# Sacks Quick Trol		
	3-50# Sacks Super Gen		
	6 Gal Diesel		

REMARKS Diesel for mixing Quick Trol

Helper Carl Mass
Driller Gene Martin

Helper
Approved

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar 10-75
Drill No. #36
Hole No. RWH-#3
Water Used 0
Water Truck No. 30 Gallons

Shift Day
Location Jerrington
Footage-End Shift 440
Footage Start Shift 440
Footage Drilled 0
Hours Drilled 3
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel
Hours Other
Total Hours 3

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

CASING	Size	Type	Footage

LOST MTL	Description	No. Sacks	Size Sacks

REMARKS Couldn't get to rig with Water Truck Then how drill for 3 hrs.? 3 hrs. travel, not drilling

Helper Carl Mann
Helper
Driller Gary Martin
Approved RB

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar 11-75
Drill No. #36
Hole No. RWH-#3
Water Used 0
Water Truck No. 34 Gallons

Shift Day
Location Jessington
Footage End Shift 440
Footage Start Shift 440
Footage Drilled 0
Hours Drilled 3
Hours Equip. Rep. 1
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 2
Hours Other
Total Hours 3

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL			

REMARKS Couldn't get to rig with water Truck - Couldn't get to Rig without Chains on 4 wheel Drive 3 hrs. Travel, not drilling

Helper Carl Marr
Helper
Driller Gene Martin
Approved BRB

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar 12-75
Drill No. #36
Hole No. RWH - #3
Water Used
Water Truck No. 34 Gallons

Shift Day
Location Gemstone
Footage End Shift
Footage Start Shift 440
Footage Drilled
Hours Drilled
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel
Hours Other
Total Hours

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL			

REMARKS Condition of pipe is very bad under truck - Quit Hole - Breakdown and moved down on second location. Couldn't get on Drill Site because of mud

Helper Carl Mann
Helper
Driller Leo Martin
Approved

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date: MAY 13-75
Shift: Day
Drill No.: #36
Location: Elkington
Hole No.: RUH-#4
Footage End Shift: 85
Water Used: _____ Gallons
Footage Start Shift: 0
Water Truck No.: _____
Footage Drilled: 85
Hours Drilled: 8
Hours Equip. Rep.: _____
Hours Casing: _____
Hours Cementing: _____
Hours Standby: _____
Hours Travel: 2 1/2
Hours Other: _____
Total Hours: 10 1/2

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

CASING	Size	Type	Footage

LOST MTL	Description	No. Sacks	Size Sacks

REMARKS

Helper: Carl Man
Helper: _____
Driller: Gene Martin
Approved: _____

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar 14-75
Drill No. #36
Hole No. RWH-#4
Water Used _____ Gallons
Water Truck No. _____

Shift Day
Location Yerington
Footage End Shift 85
Footage Start Shift 85
Footage Drilled 0
Hours Drilled _____
Hours Equip. Rep. _____
Hours Casing _____
Hours Cementing _____
Hours Standby _____
Hours Travel 3
Hours Other _____
Total Hours 3

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL			

REMARKS Snowed 18 inches - Couldn't get to rig

Helper Carl Man
Helper _____
Driller [illegible]
Approved _____

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar 15-75
Drill No. #36
Hole No. RWH-#4
Water Used _____ Gallons
Water Truck No. _____

Shift Day
Location Pennington
Footage End Shift 145
Footage Start Shift 85
Footage Drilled 60
Hours Drilled 6
Hours Equip. Rep. _____
Hours Casing _____
Hours Cementing _____
Hours Standby _____
Hours Travel 2 1/2
Hours Other _____
Total Hours 8 1/2

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL			

REMARKS Starter went out on Rig

Helper Carl Man
Driller Jerry Mar
Helper _____
Approved _____

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar 16-75
Drill No. #36
Hole No. RWH-#4
Water Used 200 gal. Gallons
Water Truck No.

Shift Day
Location Jerrington
Footage End Shift 325
Footage Start Shift 145
Footage Drilled 180
Hours Drilled 9
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 2 1/2
Hours Other
Total Hours 11 1/2

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	1-50# Sack Super Gel		

REMARKS Rough - Ragged hole - had to mud the walls - still on air

Helper Carl Mars
Helper
Driller
Approved

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar 17-75
Drill No. #36
Hole No. RUH - #4
Water Used 1000 Gallons
Water Truck No. 34

Shift Day
Location Yerington
Footage End Shift 370
Footage Start Shift 325
Footage Drilled 50
Hours Drilled 10
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 2 1/2
Hours Other
Total Hours 12 1/2

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS	4-7/8	Rock	Bit	75 R3	Hinel

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	2-50# Sacks Fine Sawdust		
	1-2# Sack Check Nut		

REMARKS Lost Hole at 370 ft - Changed over to Rotary - mud + water

Helper Al Marr
Driller Gene Martin

Helper
Approved

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar 18-75
Drill No. #36
Hole No. RWH-#4
Water Used 1000 gal Gallons
Water Truck No. 34

Shift Day
Location Jerrington
Footage End Shift 400
Footage Start Shift 375
Footage Drilled 25
Hours Drilled 7
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 2 1/2
Hours Other Fishing - 2 1/2
Total Hours 12

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	3 - 50# Sacks Jerome Bar		
	2 - 2# Sacks Calcium Chl		
	1 - 50# Sack Mining Gel		

REMARKS Lost 380 ft pipe down hole fished for 2 1/2 hrs - didn't get it

Helper Carl Mass
Helper
Driller Gene Martin
Approved

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar 19-75
Drill No. #36
Hole No. RWH-#4
Water Used 0
Water Truck No. 34 Gallons

Shift Day
Location Fleming Ton
Footage End Shift 4100
Footage Start Shift 4100
Footage Drilled 0
Hours Drilled
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 2½
Hours Other Fishing - 6 hrs
Total Hours 8½

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL			

REMARKS

Went to Carson for fishing tools - fished pipe out of hole

Helper Carl Mass
Helper
Driller Gene Martin
Approved

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar. 20-75
Drill No. #36
Hole No. RWH #4
Water Used _____ Gallons
Water Truck No. _____

Shift Day
Location Jerrington
Footage End Shift 405
Footage Start Shift 400
Footage Drilled 5
Hours Drilled 6
Hours Equip. Rep. _____
Hours Casing _____
Hours Cementing _____
Hours Standby _____
Hours Travel 2 1/2
Hours Other 1 - getting mud
Total Hours 9 1/2

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	3 - 50 # Sacks Clay Gel		
	2 - 2# Sacks Celluloid Tool		

REMARKS Trouble getting back on bottom Couldn't get hole clean

Helper Carl Mass
Driller Gene Martin

Helper _____
Approved _____

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar 21-75
Drill No. #36
Hole No. RWH-#4
Water Used 1000 Gallons
Water Truck No. 3

Shift Day
Location Genny Lou
Footage End Shift 415
Footage Start Shift 405
Footage Drilled 10
Hours Drilled 8 2 for getting out
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 2 1/2
Hours Other
Total Hours 10 1/2

FORMATION LOG

From	To	Formation

Does not take 2 hrs to pull rods BB

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL	2-50 oz Sack Quick Gel		
	1-7 # Sack Quick Gel		

REMARKS 6 hrs drilling 10 ft - Came out of hole - Bit was wore out - Called Reno - TD hole - 415

Helper Carl Mass
Driller Guy Martin

Helper
Approved

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar 22 - 75
Drill No. #36
Hole No. RWH - #4
Water Used _____ Gallons
Water Truck No. _____

Shift Day
Location Yerington
Footage End Shift 415
Footage Start Shift 415
Footage Drilled #0
Hours Drilled 0
Hours Equip. Rep. _____
Hours Casing _____
Hours Cementing _____
Hours Standby _____
Hours Travel 2 1/2
Hours Other 2 hrs breakdown
Total Hours 6 1/2

FORMATION LOG

From	To	Formation

Was chgd

No drilling done

BCP

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

CASING	Size	Type	Footage

LOST MTL	Description	No. Sacks	Size Sacks

REMARKS 4 hrs breaking down and moving to Yerington. Chargeable

Helper Carl Mars
Driller Steve Martin
Helper _____
Approved _____

Eklund Drilling Co.

P. O. Box 666
Carlin, Nevada 89822

Date Mar 24-75
Drill No. #36
Hole No.
Water Used Gallons
Water Truck No.

Shift Day
Location Jerington to Carlin
Footage End Shift
Footage Start Shift
Footage Drilled
Hours Drilled
Hours Equip. Rep.
Hours Casing
Hours Cementing
Hours Standby
Hours Travel 8 Chargeable
Hours Other 3 — no chg.
Total Hours 11

FORMATION LOG

From	To	Formation

MATERIALS USED

	Size	Type	Footage	Serial No.	Name
BITS					

	Size	Type	Footage
CASING			

	Description	No. Sacks	Size Sacks
LOST MTL			

REMARKS Moved from Jerington back to Carlin 293 miles
demobilization to Cazhales 29 to Carlin

Helper Carl Mann Helper

Driller Lee Martin Approved