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For Clyde Osborn
to Review

IN THE SUPERIOR COURT OF THE STATE OF ARIZONA

IN AND FOR THE COUNTY OF GRAHAM

GUY ANDERSON and ELIZABETH ANDERSON, husband and wife; ANN ANDERSON JONES, a married woman, dealing with her sole and separate property and estate; JEANNE ANDERSON WILSON, a married woman, dealing with her sole and separate property and estate; SUE MARIE ANDERSON YOUNG, a widow; JOHN H. ANDERSON, a married man, dealing with his sole and separate property and estate; GEORGE G. ANDERSON, a married man, dealing with his sole and separate property and estate; GUY ANDERSON, as guardian for MARK L. ANDERSON, a minor; ALF B. CLARIDGE and LENORE CLARIDGE, husband and wife; L. L. MALOY and ORLENA MALOY (also known as Arlena Maloy), husband and wife; GLENN A. GHERKINS and TRILBA GHERKINS, husband and wife; and ESSEX INTERNATIONAL, INC., a Michigan corporation authorized to conduct business in the State of Arizona,

Plaintiffs,

-vs-

EDWIN T. SCRUGGS, also known as E. T. SCRUGGS, also known as EDWIN T. SCRUGGS, JR.; SCRUGGS MINING COMPANY, a Texas corporation; CHEMICAL PRODUCERS CORPORATION, a Texas corporation; and PRODUCERS MINERALS CORPORATION, a Texas corporation,

Defendants.

NO. 7 6 9 3

INTERROGATORIES

TO: Guy Anderson, plaintiff, et al, through their attorney, Dudley S. Welker; also to plaintiff Essex International, through its attorneys, RICHARDSON, MORTENSEN & GREENHALGH:

Under authority of Rule 33, Arizona Rules of Civil Procedure, you are hereby requested to answer in writing and under oath, within thirty (30) days from the receipt hereof, the following interrogatories:

INSTRUCTIONS FOR USE:

- A. All information is to be divulged which is in the possession of the individual or corporate party, his attorneys, investigators, agents, employees or other representatives of the named party and his attorney;
- B. Where an individual interrogatory calls for an answer which involves more than one part, each part of the answer should be clearly set out so that it is understandable.
- C. Where the terms "you," "plaintiff" or "defendant" are used, they are meant to include every individual party and separate answers should be given for each person named as a party, if requested.

- D. Where the terms "accident" or "the accident" are used, they are meant to mean the incident which is the basis of this lawsuit, unless otherwise specified.
- E. A space has been provided on the form of interrogatories for your answer. The original and one copy is served herewith. You shall, within the time permitted by law, serve upon this propounding party and all other parties one copy of the interrogatories and typewritten answers, and shall file the original set with the Clerk of the Court.
- F. In the event the space provided is not sufficient for your answer to any of the questions, please attach a separate sheet of paper with the additional information.
- G. These interrogatories are intended as continuing interrogatories, requiring you to answer by supplemental answer, setting forth any information within the scope of the interrogatories as may be acquired by you, your agents, attorneys or representatives following your original answers.

Interrogatories Nos. 1 through 17 are directed to all plaintiffs other than Essex International, Inc.

1. State your full name and all names by which you are or have been known.

2. State the date and place of your birth.

3. State the full name of your spouse, if you are now married, together with the date and place of such marriage.

4. State the full name and present or last known residence address of any previous spouse, together with the date and place of any such previous marriage and the date on and manner in which any such previous marriage was terminated.

5. If you have any children, state the full name, age and present or last known residence address of each child. If any such children are not living, give the date and place of death.

6. State the geographic address of your present place of residence. State also your present post office mailing address if different from your residence address.

7. List the full name and the relationship to you of each person who resides with you at said address.

8. List each of your residence addresses during the period of the past five years, together with the dates of residence at each such address and the full name and the relationship to you of each person who resided with you at each such address.

9. List the name and address of each public or private school, college, university, seminary or other institute of classroom or technical training or education which you have attended. State also the date of receipt and the nature of each degree, diploma or certificate of graduation or attendance received by you from such institutions.

10. Have you every been charged, indicted, convicted or imprisoned in connection with a felony? _____. If so, as to each such charge, indictment, conviction or imprisonment, give the following information:

(a) Date and place thereof.

(b) Description of the felony involved.

(c) Ultimate disposition thereof.

11. Have you ever served in the Armed Forces of this or any other country? _____. If so, as to each such period of service, give the following information:

(a) The branch thereof.

(b) The date and place of commencement and termination thereof.

(c) The highest rank or rating attained.

discharge. (d) Type of discharge and rank or rating upon

(e) Reasons for discharge.

12. State your height in feet and inches.

13. State your weight in pounds.

14. State the color of your eyes.

15. State the color of your hair.

16. State your social security number.

17. Have you ever been a party to a civil lawsuit?
_____. If so, state:

(a) Were you plaintiff or defendant?

(b) What was the nature of the plaintiff's claim?

(c) When, where and in what court was the action
commenced?

(d) State the names of all parties other than
yourself.

Interrogatory No. 18 is directed only to Essex Interna-
tional, Inc.

18. With regard to Essex International Inc., provide
the following information:

(a) State the date upon which said corporation was
incorporated.

(b) State each and every state in which said corporation is licensed to do business.

(c) State the date upon which Essex International, Inc. qualified to do business in Arizona.

(d) State the date upon which Essex International, Inc. first began doing business in Arizona.

(e) Set forth a description of any and all property belonging to Essex International, Inc, presently located within the State of Arizona that would be available for payment of costs.

(f) State the general business of Essex International, Inc.

(g) State the nature of the business activities carried on by Essex International, Inc. within the State of Arizona.

(h) State the names of all members of the Board of Directors of Essex International, Inc.

(i) State the names and addresses of all officers of Essex International, Inc.

(j) State the names of any and all employees or officers of Essex International, Inc. within the State of Arizona that Essex International, Inc. considers to be managing officers or employees.

Paul Eimon

(k) State the name of the person or persons who are primarily responsible for the conduct of the business affairs of Essex International, Inc. that are carried on within the State of Arizona, and if there is more than one such individual, describe the responsibility of each individual named.

?

(l) Is Essex International, Inc. a subsidiary of any other corporation? no. If so, state the name and State of incorporation of the parent of Essex International, Inc.

(m) State the present net worth or capital worth of Essex International, Inc.

(n) State the gross income of Essex International, Inc. for the last full calendar or fiscal year.

(o) State the gross income of Exxes International, Inc. for the most recently completed fiscal or annual quarter.

(p) State the net profit (before income taxes) of Essex International, Inc. for the last completed fiscal or calendar year.

(q) State the net profit (before income taxes) of Essex International, Inc. for the most recently completed fiscal or calendar quarter.

(r) Does Essex International, Inc. have any wholly or partially owned subsidiaries? YES. If so, state whether any of such subsidiaries are directly or indirectly involved in the ownership or control of any of the mining claims with which this lawsuit is concerned. NO

(s) If your answer to the preceding subpart indicated that some subsidiary was so involved, provide the full name and state of incorporation of such subsidiary together with all of the information for such subsidiary that has previously been requested with regard to Essex International, Inc. in preceding subparts.

19. In Count One of plaintiffs' Complaint, it is alleged that all of the plaintiffs are owners of various patented and unpatented lode mining claims as more particularly described in Exhibit "A" attached to plaintiffs' Complaint. With regard to such alleged ownership, state fully and completely the interest owned by each and every plaintiff in any and all of said mining claims and provide the following information with respect thereto:

(a) State precisely and in detail the interest owned in said mining claims by each plaintiff.

(b) State the date upon which each plaintiff acquired any and all of said interest in said mining claims.

(c) State the persons or corporations from whom each plaintiff acquired said purported interest.

(d) If the plaintiffs, or any of them, own undivided interests in any or all of said mining claims, state precisely the percentage interest owned by each plaintiff in said mining claims.

Essex
20. In Paragraph III of plaintiffs' Complaint, it is alleged that Glenn A. Gherkins, Trilba Gherkins and Essex International, Inc. have acquired undivided interests in and to the aforesaid property subsequent to April 10, 1967. With respect to such allegations, provide the following information:

(a) State the date or dates upon which each interest by each of the aforementioned plaintiffs was acquired in said property.

(b) State the name of the person or persons from whom each of the aforesaid three plaintiffs obtained their interest.

(c) State precisely and in detail the total consideration that was paid by each of the aforesaid three plaintiffs in payment for the interest purportedly acquired by them.

(d) If the consideration given by any of the three plaintiffs was in the form of a promissory note or other deferred purchase plan, describe fully such deferred purchase plan including the date or dates upon which the purchase price is payable and describe any and all provision of said deferred purchase plan, including specifically any provisions that might or could or will effect the payment or amount of payment that is ultimately made by any of the aforesaid three plaintiffs.

(e) If the consideration given by any of the aforesaid three plaintiffs was something other than cash or an obligation to pay cash, describe fully what the consideration consisted of, including any contingencies existing in the agreement to pay.

(f) State precisely and in detail the extent of the "undivided interests" which were acquired by each of the aforesaid three plaintiffs, and state the extent of such interest that was purchased from each seller.

(g) Describe each and every written document sufficient for a Motion to Produce that was involved in the transaction or transactions whereby the aforesaid three plaintiffs acquired their alleged interest in the properties.

(h) Attach copies of all of the documents described in the aforesaid subpart to your answers to these interrogatories.

(i) Describe in sufficient detail to enable a Motion to Produce each and every document that was signed by any person or corporation in connection with the transaction or transactions whereby the aforesaid three plaintiffs acquired their alleged interests in the property.

(j) State the total consideration that has actually been paid by each of the above-named three plaintiffs from the date they acquired their purported interests until the present date in payment of the purchase agreement.

X 21. State whether the sellers of the interests that were sold to the above-named three plaintiffs have any type of option agreement or any other such agreement that enables the sellers of the interests purchased by the above-named three plaintiffs to repurchase said interests at any time or on any conditions.

X 22. State whether it is contended that plaintiffs Glenn A. Gherkins, Trilba Gherkins and/or Essex International, Inc. derived or obtained some interest, right to participate in, and/or right to share in the profits of the agreement of April 10, 1967 between plaintiff Guy Anderson, et al. and E. T. Scruggs or in the various agreements signed after that date relating to the property whereby the interests of Scruggs were transferred to Chemical Producers Corporation and Producers Minerals Corporation.

yes

23. State specifically whether there is any written document that gives Glenn A. Gherkins, Trilba Gherkins and/or Essex International, Inc. any interest in the aforesaid agreement of April 10, 1967, and the subsequent agreements relating thereto. _____. If your answer is in the affirmative, provide the following information:

(a) Describe the document in sufficient detail to allow a Motion to Produce.

(b) State the date of such document.

(c) Provide a summary of the contents of such document.

(d) State the names of the persons who transferred any of their interests in the agreement of April 10, 1967 and the subsequent agreements to the aforesaid three plaintiffs, or any of them.

24. Set forth a complete and specific description of any and all documents which Essex International, Inc. contends give it such an interest in the agreements with Producers Minerals and Chemical Producers that Essex International, Inc. is a proper party to this lawsuit withstanding to sue Chemical Producers Corporation and/or Producers Minerals Corporation.

25. State the names of any and all persons employed by or acting as agents for Essex International, Inc. that have discussed in any form or fashion the mining and leaching operations that have been or are being conducted by Producers Minerals Corporation on the mining claims in question with any of the other plaintiffs to this lawsuit.

Paul Eimon,

Ray Foote

Leo Smith

26. With respect to the names provided in the answer to the preceding interrogatory, provide the following information:

(a) State the complete address and telephone number of each such person.

(b) State the relationship of each such person to Essex International, Inc. at the present time and at the time such discussions took place.

(c) State each and every date upon which each such person discussed any aspect of Producers Minerals mining and leaching operations with any of the other plaintiffs to this lawsuit.

Exact dates

(d) State the substance of the discussion that occurred on each such date.

(e) State the names of all persons who were present during such discussions.

(f) State the location where such discussions were held.

27. Is Essex International, Inc. in possession or control of any memoranda, correspondence, rough notes, or any other documents that contain a description of or information regarding the discussions referred to in the answer to the preceding interrogatory? no. If your answer is in the affirmative, provide the following information:

(a) Describe sufficiently for a Motion to Produce the nature of any and all such documents.

(b) State the date of each such document.

(c) State the name and address of the person who prepared such document.

(d) State the present location of a copy of such document.

(e) Set forth the substance contained within said document or, in the alternative, attach a copy of such document to your answer to these interrogatories.

28. Has any officer, employee, agent, or representative of Essex International, Inc. ever discussed the condition, potential, future development or description of the mining claims that are at issue in this lawsuit with any of the other plaintiffs to this lawsuit, or their representatives? yes. If your answer is in the affirmative, provide the following information:

(a) State the date upon which each such discussion took place.

(b) State the names of all persons who were present during such discussion.

(c) State the purpose of such discussion.

(d) State the location of such discussion.

(e) State the substance of such discussion.

29. With regard to the matters concerned in the preceding interrogatory, is Essex International, Inc. in possession of any memoranda, letters, reports, rough notes or any other documents concerning or describing such discussions? No. If your answer is in the affirmative, provide the following information:

(a) Describe the nature of each such document.

(b) State the date of each such document.

(c) State the name or names of persons who prepared such document.

(d) State the present location of such document.

(e) Provide a summary of the substance of the content of such document or in lieu thereof, attach a copy of such documents to your answers to these interrogatories.

30. State the names and addresses of all persons who were involved in the negotiations, discussions and dealings on behalf of Essex International, Inc. that led up to the purported purchase by Essex International, Inc. of some interest in the aforesaid mining claims.

Howard Lanier
Paul Eimon

31. Do you have an opinion as to what the mineralization is of the ore body on the property and mining claims?

Yes.

32. If your answer to the preceding interrogatory was in the affirmative, set forth specifically and in detail the mineralization of the ore body.

P.E.

33. Paragraph V of Count Two of your Complaint alleges that the copper ores being mined on the property are composed of chrysocolla with some cuprite and minor amounts of copper carbonate, native copper and various copper sulfide minerals including chalcocite. With regard to such allegations, provide the following information:

(a) Specifically, which copper sulfide minerals do you contend are contained within the ore?

chalcocite

(b) What is the weight percent of each such mineral contained within the ore?

not known

(c) Do you contend that the weight percent of each mineral is consistent throughout the entire ore body and, if not, what do you contend the variances to be of the minerals within the ore body?

no
don't know

34. To your knowledge, have any samples been taken from any location on the property at any time up until the present date? yes.

35. If your answer to the preceding interrogatory is in the affirmative, provide the following information:

(a) State the date or dates upon which each such sample was taken.

do not know

(b) State the exact location within the ore body and by mining claim description as to where the sample was taken.

don't know
Samples were taken in August 1972

(c) State the name, address and employer of each and every person who assisted or was involved in anyway in the taking of the sample.

Bob Helming
Paul E. Eason
Ken Jones

(d) State the date upon which Essex International, Inc. first became aware of the sample.

(e) State the way in which Essex International, Inc. came to be informed of the existence of the sample.

M.A. thesis
~~U of A~~ Ariz Bureau of Mines study
Pay Dirt
Tittley volume
Wisser files

(f) State specifically whether any agent, employee, officer or other representative of Essex International, Inc. was involved in the taking of any of the samples that have previously been described in your answer to this interrogatory, and state specifically which samples such agents, employees, officers or representatives were involved in.

(g) State specifically the location to which the sample was taken when it was removed from the property.

(h) State the names and addresses of all persons who were in control, custody or had care of any kind of the sample from the time it was removed until the time it was chemically or otherwise tested.

(i) What were the qualifications of the person or persons who were involved in each sample taken as set forth above.

(j) Who made the determination as to the place on the mining claims where the samples should be taken?

(k) State the criteria that were employed by the person who determined where the samples would be taken from.

(l) Was an independent observer present when each of the above samples were taken? _____. If so, state the name and address of such independent observer.

(m) What do you contend to be the qualifications of each and every independent observer who was mentioned in your answer to the preceding subpart?

(n) At whose request was the independent observer present during the taking of the sample?

33. If your answer to the preceding interrogatory indicates that any samples were taken by or for you or that you were aware of any samples having been taken at any time by anyone, state whether such samples were later analyzed by any means.

34. If your answer to the preceding interrogatory is in the affirmative, provide the following information:

(a) State the specific address at which the analysis took place.

(b) State the names and addresses of each and every person who was involved in any way in the analysis of the sample or samples.

(c) State precisely and in detail the qualifications of every person who you have listed in your answer to the preceding subpart.

(d) State specifically and in detail the type of analytical method that was used.

(e) State each and every item of equipment that was used in running the analysis.

(f) State the model number, manufacturer and distributor of each item of equipment that you have listed in your answer to the preceding subpart.

(g) State specifically and in detail each chemical reagent that was utilized in the tests.

(h) State the chemical composition to the best of your knowledge to each chemical reagent.

(i) State the manufacturer, distributor and date of purchase of each chemical reagent that was used.

(j) State the date upon which the person or persons who performed the tests acquired the chemical reagent.

(k) Were the chemical reagents standardized prior to beginning the tests? _____.

(l) If the chemical reagents were standardized, state specifically and in detail the method used and the name of the person who performed the standardization.

(m) What do you contend to be the relative accuracy of the analysis that was performed, and what degree of variance do you acknowledge might exist within the test results?

35. Were any written descriptions, reports, memoranda or any other documents of any kind prepared concerning the testing procedure or testing results? _____.

36. If your answer to the preceding interrogatory is in the affirmative, provide the following information:

(a) State the date upon which each such report was prepared.

(b) State the name of the person who prepared it.

(c) State the name of all persons who were given copies of the report.

(d) State the present location of each and every copy of the report known to be in existence.

(e) Describe each such document sufficiently to enable a Motion to Produce.

(f) Provide a summary of the contents of each such document or in lieu thereof, attach a copy of such document to your answers to these interrogatories.

37. Specifically, have any tests, analyses or geological maps been prepared or carried out by any University or College at the request or pursuant to the direction of any plaintiff in this lawsuit or his officers, agents or employees? _____.

38. If your answer to the preceding interrogatory is in the affirmative, provide the following information:

(a) State the date upon which each such test, analysis or geological survey was carried out.

(b) State the names of all persons who participated in such tests.

(c) State the name of the institution where such tests, analyses or geological surveys were carried out.

39. With respect to any tests, analyses or geological surveys that have ever been run as described in the preceding answers to interrogatories, provide the following information:

(a) State the date upon which results became known from such tests, analyses or geological surveys.

(b) State whether such results were ever put into writing. _____.

(c) If they were put into writing, state the nature of the writing and provide a listing of each and every person or organization or corporation to whom such results were sent.

(d) State precisely and in detail the results, conclusions and/or recommendations that were reported. If a written report was prepared, please provide a summary of the substance of such report or, in lieu thereof, attach a copy to your answers to these interrogatories.

40. Do you contend that the samples taken from the property and subsequently analyzed were representative of the mineralized material in the ore body? _____.

41. If your answer to the preceding interrogatory is in the affirmative, provide the following information:

(a) State each and every fact upon which you base your conclusion that the analysis was representative.

(b) State the name and address of each and every person who will so testify.

(c) State precisely and in detail the steps that were undertaken to insure that the analysis was representative.

42. Do you contend that the samples analyzed as set forth above were representative of the ore that has actually been leached to date by Producers Minerals? _____.

43. If your answer to the preceding interrogatory is in the affirmative, provide the following information:

(a) State each and every procedure that was undertaken to be sure that the sample was representative of the ore being leached as opposed to simply being representative of the ore body in its entirety.

(b) State the name and address of every person who will testify that the sample analyzed was representative of the ore being leached.

44. Do you have any knowledge of the acid that is presently being used by Producers Minerals, or that has ever been used in the past in leaching the ore body? yes.

45. If your answer to the preceding interrogatory is in the affirmative, provide the following information:

(a) State specifically and in detail the description of the acid that is presently being used, providing, among all other things, the complete and detailed chemical composition of the acid.

~~description as used in complaint~~

CEO Write this

The acid being used is known as spent refinery acid, or alkylation acid. Its exact composition is not known but generally it is 85-90% H_2SO_4 , 3-5% Carbon and Hydrocarbon, .3% to .7% ash, balance ^{is} water.

(b) State the same information requested in subpart (a) with regard to any other acids that you believe have been used by Producers Minerals at any time in the past that are not now being used.

Essex ~~doesn't~~ ^{doesn't} know what other acids have been used.

(c) State the name and address of every person who will testify regarding the answers to subpart (a) and (b) hereof.

Paul Emmer

Clyde Osborn

Bob Helms

Emmer

(d) State the source of any knowledge you have with regard to the matters asserted in your answer to subpart (a) and (b) hereof.

Observation + literature
Esmon

46. Have you ever run or had run any analyses or tests of acid which you believe were or are being used by Producers Minerals? no.

47. If your answer to the preceding interrogatory is in the affirmative, provide the following information:

(a) State the date upon which each such test or analysis was run.

(b) State the name and address of the person or persons who participated in the analysis.

(c) State precisely and in detail the qualifications of such person or persons to run the kind of tests and analyses that were run.

(d) State the source from which you obtained the acid which was tested or analyzed.

(e) State the age of the acid at the time you tested it.

(f) State the manner in which the acid was stored and cared for at all times between the time you obtained the acid and the time that it was ultimately sampled.

(g) State the name and address of every person who was involved in the care and custody of the acid sample during the aforesaid period of time.

(h) State precisely and in detail the name of all equipment that was used in carrying out the tests or analyses.

(i) State the manufacturer and model number of each piece of equipment that was used in carrying out the tests and analyses.

(j) State precisely and in detail the method of testing that was used, including each step that was taken, and each recording that was made of the results after each step.

(k) What do you contend to be the degree of accuracy that could reasonably be expected from the tests and analyses that were run in this particular instance?

(1) What degree of variance do you admit could exist within the tolerances of the testing equipment and procedures that were utilized?

48. Was a report ever rendered, either oral or in writing, concerning the results of the tests and analyses described in the preceding interrogatory? No tests were made

49. If your answer to the preceding interrogatory is in the affirmative, provide the following information:

(a) State the date upon which each such oral or written report was rendered.

(b) State the name and address of each person who prepared the report.

(c) State the names and addresses of all persons, organizations or corporations to whom the report was sent.

(d) State the substance of such report or, in lieu thereof, attach a copy of such report, if it was written, to your answers to these interrogatories.

(e) Specifically, what were the constituents that were determined to be present in the acid by percentage and by chemical description.

50. In Paragraph VI of your Complaint, it is alleged that the sulfuric acid being used contains impurities which have a deleterious effect on the leaching process. With regard to such allegation, provide the following:

(a) Describe specifically by percentage and chemical content the impurities that you are referring to in Paragraph VI which you contend inhibit recovery, and provide the following information with regard to such constituents:

(1) State the source of your knowledge in this regard.

*SPENT ALKYLATION ACID - 85-90% H_2SO_4
- 3-5% C / HYDRO CARBONS.
- .3%-.7% Ash*

From published data - BALANCE H_2O

Common knowledge of the industry

*no problem
Published literature*

(2) State the name and address of each and every person who will testify regarding the existence of such impurities and the fact that such impurities can inhibit recovery.

(a)

*(b) Howard Lanier
Paul E. Simon*

51. With regard to the impurities alleged in Paragraph VI of Count Two of your Complaint which you state are present in the acid, do you contend that the same impurities are present in the leaching solution? Yes. *IN THE DUMP. OR IN THE SOLUTION. TREATING ALL THE TIME?*

52. If your answer to the preceding interrogatory was in the affirmative, provide the following information:

(a) State precisely and in detail the impurity or impurities that you contend to exist within the leaching solution.

acid has not analyzed by assay

Refer to published data -

Typical of spent acid

Have not quantitated

(b) State which of these impurities you contend are carried into the leaching solution as part of the acid.

don't know

(c) State precisely and in detail the percentage of the total composition of the leaching solution which you contend is made up to each of the alleged impurities.

don't know

*Bagdad could not use P.M.C. cement Cu -
H.A.L. will try to get this for the record -*

(d) State precisely and in detail and quantitatively the effect on the efficiency of the leaching operation that you contend each of the alleged impurities has on each of the minerals contained in the ore.

~~not known?~~

~~not known~~

Refer to published literature
Common knowledge - typical results
in significant reduction

53. Do you acknowledge that certain of the impurities contained within the acid has certain beneficial effects on the leaching process? No. If so, state precisely and in detail the beneficial effects which you acknowledge that the impurities have on the leaching process.

Ferric iron - ? Chappu

firm

qualified -

54. Do you contend that the recovery would be higher for the ores actually being mined and leached on the mining claims if some acid other than the type of acid that is presently being, and has been, used by Producers Minerals was used instead? yes.

55. If your answer to the preceding interrogatory is in the affirmative, provide the following information:

(a) State precisely the kind or kinds of acid which you contend would result in a higher recovery.

NEW CLEAN ACID = COMMERCIAL 66° Be'

DEFINITION

(b) State the names and addresses of every witness who will testify that the use of such acids would result in a higher recovery.

Clyde Osborn ✓

~~Robert B. Bappu~~ ✓

David Rabb - ?

~~Elmer~~ Roseville - ? ✓

(c) State precisely and in detail what the difference in the recovery would be if the acids named above were used rather than the acids that are being and have been used by Producers Minerals.

No specific tests by Essent

Refer to literature

Infrared
X-Ray

5X-capability

Have someone to sample

GENE EALEY

(d) State the date upon which the acids that you have named above first became available for use in the Safford area in quantities sufficient to allow the leaching process to be run at full production.

*Generally. . . check Tony Kroha
Commercial acid has been available*

(e) State the price that you contend would have been paid for the acids you have named above delivered to the mine at Safford on a 100 percent H₂SO₄ basis.

Douglas - ?

(f) What method of transportation do you contend would have been able to be used from each supplier in order to transport the acid to the mine in Safford?

Truck or rail

(g) What would have been the necessary freight rate in order to transport the acid from the point of origin to the mine in Safford? *Same as above*

(h) Have you run any tests or analyses which would support your conclusion that the recovery would be higher with the use of the acid or acids suggested by you above? no. If such tests or analyses have been run, provide the following information:

(1) State the date upon which the tests were run.

NA

(2) State the names of all persons who were involved in the tests.

NA

(3) State the location where such tests were run.

(4) State the equipment that was used in such tests.

(5) State the manufacturer and model number of all such equipment.

(6) State the exact procedure that was used in running the comparative analyses or tests.

(7) State whether any kind of a written or oral report was made concerning the results or conclusions of such tests.

(8) Provide a summary of the report or conclusions or, in lieu thereof, attach a copy to your answers to these interrogatories.

(9) What do you contend the degree of accuracy was for such comparative tests or analyses?

56. What do you contend the effect would be on recovery time if the acid suggested by you were used rather than the acids that have been and are presently being used by Producers Minerals?

Heap leaching - osborn

effect not known

57. Would the use of the acid or acids suggested by you above result in an increase or a decrease in the amount of make-up water necessary to utilize the leaching process? *No essential effect, except nominal decrease*

58. For any tests or analyses which you have previously stated have been conducted on any portion of the ore body, please give the screen analysis of the ore used in the test or analysis and the assay of copper values as a function of particle size and mineralization.

*No tests by Essex
Refer to literature*

59. Have you made a determination, by way of test or analysis, of the extent to which the acid leachability of the ore is effected in each screen size fraction by any impurities in the leaching solution resulting from impurities in the acid used? *No tests made*

60. If your answer to the preceding interrogatory is in the affirmative, provide the following information:

(a) State the extent to which the leachability is effected by size fraction.

No tests made

(b) State the date upon which the tests or analyses providing this information were run.

(c) State the names and addresses of the persons who were involved in the tests.

(d) State whether any reports were made of the results of such tests either orally or in writing.

(e) State the substance of such reports and all opinions contained therein or, in lieu thereof, attach a copy of such reports to your answers to these interrogatories.

61. Do you contend that there are certain specific minerals which are rendered unrecoverable by impurities in the leaching solution from the acid?

If this question refers to recovery of copper the question is yes

62. If so, provide the following information:

(a) State by name and chemical description the mineral which you contend is rendered unrecoverable.

The recovery of all of the minerals are adversely affected

(b) State the percentage to which such mineral is rendered unrecoverable.

no tests have been made to quantify the effect - refer to literature

(c) State the name and address of every person who will testify regarding the allegations contained in subparts (a) and (b) hereof.

Clyde Osborn ✓

F. B. Heppner ✓

D. Rabb

Roseville

Bill Osborn

William

and Agro Chemical Business

Phoenix

(d) State whether your conclusions in this regard are based on any tests or analyses that have been run.

No tests made or analyses have been made.

(e) If your conclusions are based on tests or analyses, provide the following information:

(1) The date upon which the test was run.

No date made.

(2) The names of all persons who were involved in the testing procedure.

(3) The equipment which was used in the testing procedure.

Not relevant

(4) The manufacturer and model number of all equipment used.

Not relevant

(5) The accuracy that you contend is present in the test that was actually run (what would you consider to be the variance range of accuracy).

Not relevant

(6) State the conclusions and opinions that were arrived at as a result of such tests.

The quantity of copper recovered by spent acid is not as great as could be recovered by using clean commercial acid at

63. Have any tests or analyses which have been run by you or for you utilized an acid other than the precise acids that are being or have been used by Producers Minerals? YES.

64. If your answer to the preceding interrogatory is in the affirmative, provide the following information:

(a) State the date of all such tests that utilized other acids.

*Object on grounds
that question is too broad -*

(b) State the source from which said acids were obtained and describe in detail and by chemical composition and chemical percentage the exact make-up of each such acid that was utilized in the tests.

Typical

(c) State the ore description on which such acids were utilized for purposes of testing and state specifically whether such ores were ores that were taken from any of the mining claims involved in this case or whether they were taken from some unrelated mine.

Essential has run

*Sample A
" B
" C*

see attached list

65. Do you contend that you have run sufficient tests both with respect to the ore analysis and with respect to the effect of the acid being used by Producers Minerals on the ore to arrive at statistically valid conclusions as to the ore content of the claims or the effect of the acid on the recovery of the ore? no. If you do contend that sufficient tests have been run to establish a valid statistically analysis, state how many tests have been run and what the variances have been between the tests that were run.

66. What is your definition of a "reducing acid" as that term is used within Paragraph VI of Count Two of your Complaint?

*may contain ~~25%~~ or 50% specific
in oxidants effectively - reducing -*

QEO -

67. Do you contend that the acids that have been and are presently being used by Producers Minerals are a reducing acid? Yes.

68. In Paragraph VI of your Complaint, you allege that the acid being used contained impurities which have the chemical effect of rendering the sulfuric acid a reducing acid. With respect to such allegations, provide the following information:

(a) State the chemical composition, by description and quantity of the acid without the impurities or with the impurities removed.

no analysis have been made
Typical analysis
some of which -
100% H₂SO₄

(b) State the chemical composition by description and by quantity of the acid with the impurities present.

(c) List the chemical reactions that occur during the leaching of the ore from the mine that are caused by the presence of the reducing acid.

(d) Do you contend that the variations are significant in terms of their effect on the final recovery rate?

Yes. We contend that significantly less.

(e) What do you contend that the difference in the recovery rate is as a result of the effect of the reducing acid?

69. What percentage of the total copper contained in the ore on the property do you contend can't be recovered by leaching if the impurities which you contend be present in the sulfuric acid were not present in the leaching solution?

Check with Ken Peters -
Zonia -
Cobre - New Mexico
Nacimientos

70. What is the chemical composition of any reducing acid which you contend to be present in the leaching solution presently being utilized or that has ever been utilized by Producers Minerals?

CEO

see answer to

71. Do you contend that it is possible to segregate those or certain elements within the leaching solution that are, by their make-up, a reducing acid? . If so, state the percentage of the leaching solution, by weight, that you contend is composed of a reducing acid.

*check this with
Bhappu*

72. Do you acknowledge that aeration has an effect on the leaching solution? yes. If so, what is the effect in terms of the reaction that it causes in the leaching solution?

73. Is there any reaction between the gangue in the ore and the reducing acid? yes.

74. Do you have any information regarding the ore body, the operations, the make-up of the acid, the recovery results, or any other aspects of the mining and leaching operation that was supplied to you by Clement K. Chase? yes. If so, set forth in detail the extent of the information that has been provided to you by Mr. Chase.

Ore Body - no

Operations - yes

Make-up of acid -

*~~No proprietary information has been~~
~~supplied by CKE.~~*

Ermon

H.L.

75. Do you have any of the information requested in the preceding interrogatory that you obtained from any other present or past employee of Producers Minerals? _____. If so, set forth in detail the extent and nature of such information and the name of the individual who provided it.

76. State the names and addresses of all witnesses who you intend to call at the time of trial.

Exhibit

77. With regard to your answer to the preceding interrogatory, state the names of any of the above witnesses who are considered by you to be expert witnesses, and as to such expert witnesses, provide the following information:

(a) State the field in which such witness is qualified as an expert.

- R. B. Hopper - Extractive Metallurgy
- Clyde Osborn - Leaching & precipitation of Cu, Ag, Au
- H. Lamer - " " d308
- Acid - spent - people

(b) State the qualifications of such person.

(c) State the substance of the testimony that you expect to introduce from such person.

(d) State the opinions that will be offered by such expert.

(e) Provide a summary of the basis for each opinion set forth in your answer to the preceding subpart.

(f) Set forth with sufficient particularity to allow a Motion to Produce each and every exhibit that you intend to introduce at the time of trial.

DATED this 24th day of August, 1972.

O'CONNOR, CAVANAGH, ANDERSON,
WESTOVER, KILLINGSWORTH & BESHEARS

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Corporation and Producers Minerals
Corporation

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