



New Mexico Energy, Minerals and Natural Resources Department

**Bill Richardson**  
Governor

**Joanna Prukop**  
Cabinet Secretary  
**Reese Fullerton**  
Deputy Cabinet Secretary

**Mark Fesmire**  
Division Director  
Oil Conservation Division



May 20, 2008

**NOTIFICATION OF COMPLIANCE/ENFORCEMENT ACTION**

**Pieter Bergstein d/b/a Salty Dog, Inc.**  
P.O. Box 513  
Hobbs, NM 8824  
[OCD Address of Record]  
**Certified Mail No.** 7099 3220 0009 7873 0677

**Pieter Bergstein d/b/a Salty Dog, Inc.**  
P.O. Box 2724  
Lubbock, TX 79408  
**Certified Mail No.** 7099 3220 0009 7873 0448

**\*RESPONSE REQUIRED-DEADLINES ENCLOSED**

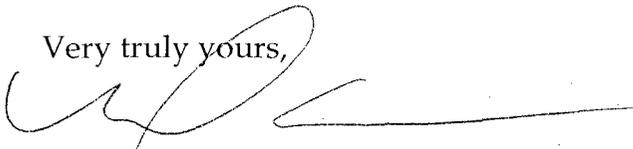
Re: **"Salty Dog, Inc." – OGRID 184208**  
Salty Dog Brine Supply Well No. 001, API No. 30-025-26307  
Violations of permit BW-008; Violations of WQCC Rules and the Water Quality Act

Dear Mr. Bergstein:

Please find enclosed an Administrative Compliance Order, designated as **ACO 2008 – 02** by the Oil Conservation Division, Environmental Bureau, directed to Pieter Bergstein d/b/a Salty Dog, Inc. and regarding your Salty Dog Brine Supply Well No. 001, API No. 30-025-26307.

If you have questions about the ACO you may call me at (505) 476-3480.

Very truly yours,



Mikal Altomare  
Assistant General Counsel

Encl: WQCC Administrative Compliance Order No. 2008 – 02 with Exhibits

Ec: Daniel Sanchez, Compliance and Enforcement Manager  
Chris Williams, Supervisor, Hobbs District Office  
Wayne Price, Environmental Bureau Chief  
Gail MacQuesten, Assistant General Counsel



STATE OF NEW MEXICO  
NEW MEXICO OIL CONSERVATION DIVISION

IN THE MATTER OF  
COMPLIANCE ORDER

Pieter Bergstein d/b/a  
"SALTY DOG, INC." (OGRID 184208),  
RESPONDENT.

NM-OCD 2008-2

**ADMINISTRATIVE COMPLIANCE ORDER**

Pursuant to the New Mexico Water Quality Act ("WQA"), NMSA 1978, §§ 74-6-1 to 74-6-17, the Director of the New Mexico Oil Conservation Division (OCD), acting through his designee, the Environmental Bureau Chief of the Oil Conservation Division, issues this Compliance Order ("Order") to **Respondent Salty Dog, Inc. (OGRID 184208)**, (hereafter referred to as "Mr. Bergstein" or "Salty Dog"), to enforce the WQA and the Water Quality Control Commission ("WQCC") Rules, 20.6.2 NMAC, for violations of the WQA and WQCC Rules.

**I. APPLICABLE/RELEVANT LEGAL STANDARDS**

1. WQCC Rule 20.6.2.5101.B NMAC requires that the operation of all Class III injection wells be "pursuant to a discharge permit meeting the requirements of Sections 20.6.2.3000 through 20.6.2.3999 NMAC and Sections

20.6.2.5000 through 20.6.2.5299 NMAC.”

2. WQCC Section 20.6.2.1203.A(5) requires that “[a]s soon as possible after learning of ... a discharge, the owner/operator of the facility shall take such corrective actions as are necessary or appropriate to contain and remove or mitigate the damage caused by the discharge.”

3. Section 74-6-10(C) of the WQA authorizes the assessment of a civil penalty of up to \$15,000 per day for non-compliance with any provision of NMSA 1978 Section 74-6-5, including any regulation adopted or a permit issued pursuant to that section. Section 74-6-10(C) also authorizes the assessment of civil penalty of up to \$10,000 per day for each violation of a provision of the WQA other than the provisions in Section 74-6-5 or of a regulation or water quality standard adopted pursuant to the WQA.

4. A discharge permit may be terminated when an operator fails to comply with the terms of the permit. WQCC Rule 20.6.2.5101.I(1) NMAC.

5. OCD Rule 116.D (compliance required by terms of permit) provides:

Corrective Action. The responsible person must complete division approved corrective action for releases which endanger public health or the environment. Releases will be addressed in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with Section 19 of 19.15.1 NMAC.

19.15.3.116.D NMAC.

6. For purposes of the OCD Rules, “[r]esponsible person shall mean the owner or operator who must complete division approved corrective action for pollution from releases.” 19.15.1.7.R(5) NMAC.

**II. FACTUAL BACKGROUND/FINDINGS OF FACT RELEVANT  
TO BOTH 1999 RELEASE & GROUNDWATER CONTAMINATION  
AND 2005 RELEASE**

7. OCD, a division of the executive branch agency, New Mexico Energy, Minerals, and Natural Resources Department, is charged with administration and enforcement of the Oil and Gas Act (OGA) and OCD Rules, including administration and enforcement of the WQA and the WQCC Rules as applied to New Mexico’s oil and gas activity, which includes EPA Underground Injection Control Class III brine wells such as the subject “Salty Dog Brine Supply Well #1.”

8. “Salty Dog, Inc.” (OGRID 184208) is listed as the operator of the BW-008 Discharge Plan Facility known as “Brine Supply Well #1,” located in the J Unit of Section 5, Township 19 South, Range 36 East, NMPM, Lea County, New Mexico, API No. 30-025-26307. Pieter Bergstein has been identified as the President of “Salty Dog, Inc.,” as reflected on the most recently issued BW-008 permit renewal in 2004. (Exhibit A).

9. Despite representations by Mr. Bergstein that he is the President of the “company” known as “Salty Dog, Inc.,” no company by that name, or any variation thereof, is currently registered as a corporation with the New Mexico Public Regulations Commission (“PRC”). The only “Salty Dog, Inc.” ever

registered with the New Mexico PRC (SCC No. 1009174) is currently listed as “inactive due to revoked and beyond appeal period,” and is not an entity with which Mr. Bergstein is identified as having any affiliation as either a director or an officer. **(Exhibit B).**

10. The Salty Dog Brine Supply Well #1 was initially permitted under Discharge Plan DP-325 on December 18, 1982, pursuant to Section 3 of the New Mexico Water Quality Control Commission (WQCC) Regulations. The initial permit was issued to Operator Brunson & McKnight, and was issued prior to the imposition of the requirements of Section 5 of the WQCC Regulations [providing for the classification of underground injection control wells and imposing limitations, prohibitions, and other regulations for the operation and maintenance of such wells].

11. Renewals of the discharge permit, with various additional conditions being imposed, were granted on April 18, 1989, April 20, 1995 and February 17, 2000, with permit renewals issued after the adoption of Section 5 of the WQCC integrating the additional requirements imposed by that Section. The permit then expired for a period of time in 2004 before the current operator, Pieter Bergstein d/b/a “Salty Dog, Inc.” (OGRID 184208), most recently renewed the permit in October of 2004.<sup>1</sup> Although originally designated as DP-325, the permit/discharge plan was ultimately re-designated as (and remains designated as) **Discharge Permit BW-008.**

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<sup>1</sup> The current permit renewal has an expiration date of April 18, 2009.

12. The permit (both as originally prepared and in the subsequently issued renewals) prohibits the discharge of effluent or leachate that may contaminate groundwater or surface water.

13. In addition, the 2004 BW-008 discharge permit renewal issued to Salty Dog, Inc. (as certified by Pieter Bergstein) specifically requires the following:

- a. Leak Detection Monitor Well: The leak detection monitor well for the single-lined brine storage pond must be inspected for fluids weekly. Records will be maintained to include quantity of fluid measured, conductivity and chlorides of fluid, date of inspection, and name of inspector. Any fluids found must be reported to the NMOCD Santa Fe office and the appropriate District office within 48 hours of discovery and in the quarterly report. The pond shall be inspected weekly and records maintained. These records shall be reported in the quarterly report. **Exhibit A, Condition # 3: Brine Storage Pond Inspection.**
- b. Volumes of fluids injected/produced are to be recorded monthly and submitted quarterly, and an analysis of injection fluid and brine water is to be provided quarterly. **Exhibit A, Conditions #8 & #9: Production/Injection Volumes and Analysis of Injection Fluid and Brine.**
- c. Salty Dog is ordered to "install an impermeable pad and curb at the Brine loading/unloading area...with [f]inal installation [to] be no later than 90 days from final approval of this permit." **Exhibit A, Condition #11: Process Areas.**
- d. All underground process/wastewater pipelines must be approved by the OCD prior to installation and must be tested to demonstrate their mechanical integrity every five years. Results of such test shall be maintained at the facility covered by this discharge plan and available for NMOCD inspection. Permit holders may propose various methods for testing such as pressure testing to 3 pounds per square

inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing. **Exhibit A**, Condition #16. *Underground Process/Wastewater Lines:*

- e. Spill collection or prevention systems are to be inspected to ensure proper operation, etc., with records being maintained and results reported in the quarterly report. Any problems discovered are to be corrected within forty-eight (48) hours. **Exhibit A**, Condition #19: *Housekeeping*.
- f. Previous investigations and remediation plans are to be addressed pursuant to the discharge permit, and any future contamination will be similarly addressed through the discharge permit. **Exhibit A**, Condition #25: *Vadose Zone & Water Pollution*.
- g. All spills or releases must be reported as provided by OCD Rule 116 and WQCC 1203 to both the Santa Fe office of the OCD and the Hobbs District OCD Office, and a summary of all leaks or spills must be reported in the Quarterly Report. **Exhibit A**, Condition #20: *Spill Reporting*.
- h. A quarterly "Groundwater Report" (distinct from the Condition #27 "Quarterly Report," described below) must be submitted to the OCD, reporting the results of sampling and analysis performed on monitoring wells using EPA approved methods, no later than the first day of January, April, July and October of each year that the permit is in force. **Exhibit A**, Condition #25.A: *Groundwater Report*.
- i. "A Quarterly report will be submitted to the OCD by the first day of January, April, July and October of each year..." containing information as specifically identified. **Exhibit A**, Condition #27: *Quarterly Report*.

### III. 1999 RELEASE & GROUNDWATER CONTAMINATION

#### A. FINDINGS OF FACT RELATING TO 1999 RELEASE & GROUNDWATER CONTAMINATION

14. On July 29, 1999, during a mechanical integrity test, a release was discovered to have occurred due to a hole in the casing of the Salty Dog Brine

Well, causing contamination of the fresh water well located on "Snyder Ranches," adjacent to the Salty Dog site. The Release was initially reported by a representative of Snyder Ranches to the OCD, who informed the OCD that the water was salty. Initial testing indicated the fresh water well was contaminated at a level of 5700 ppm of chlorides. **Exhibit C.**

15. At the time of the discovery of the release, the groundwater discharge permit for the site had expired (as of April 18, 1999), and the Operator (Pieter Bergstein d/b/a "Salty Dog, Inc.") had not yet applied for renewal.

16. On August 10, 1999, Mr. Bergstein was notified by certified letter from the OCD that the discharge plan (BW-008) had expired, and was ordered to cease operations until an approved discharge plan had been obtained pursuant to section 3-109.A of the WQCC Regulations. **Exhibit D.**

17. On September 8, 1999 Salty Dog filed a C-141 with the OCD regarding the July 29, 1999 release. **Exhibit C.** The C-141 noted that the brine well casing leak had been repaired, and that a new fresh water well had been drilled 150 yards northeast of the existing water well. Per the C-141, the water in the new well "is o.k." *Id.* The C-141 did **not** include an estimation of the total volume of the release. *Id.*

18. On September 15, 1999, Mr. Bergstein was informed by certified letter by the OCD that his recently submitted application for renewal of Discharge Plan BW-008 was incomplete. **Exhibit E.**

19. On November 9, 1999, Mr. Bergstein was informed by certified letter from the OCD a second time that the application for renewal was

incomplete, and was also informed that additional information/action was needed from Salty Dog, Inc. before review of the Application could begin (including but not limited to the submission of an abatement plan proposal for the investigation and abatement of the groundwater contamination relating to the recent brine well casing leak.) **Exhibit F.**

20. On January 5, 2000, the OCD again contacted Mr. Bergstein to advise him that the Salty Dog Discharge Plan Renewal Application was still deficient. The OCD reminded Mr. Bergstein that it had previously requested a significant amount of additional information necessary to process the application, and noted that the information and/or materials submitted in response to those requests were largely insufficient, and the application could therefore still not be processed and approved. **Exhibit G.**

21. On February 4 and 14, 2000, Salty Dog submitted information and materials in response to the requests made in the January 5, 2000 letter. **Exhibit H.**

22. On March 4, 2000, Salty Dog requested to drill a monitor well to test the water formation for chloride contamination which was approved via email with additional conditions for approval on April 7, 2000. **Exhibits I & J.**

23. On May 9, 2000, Salty Dog submitted a report by Eddie W. Seay regarding the site and the contamination thereon for review by the OCD. **Exhibit K.**

24. On June 16, 2000, after having reviewed the Seay report of May 9, 2000, the OCD instructed Salty Dog to submit a plan for OCD approval to

determine the extent of the groundwater contamination no later than July 15, 2000. At that time, the OCD also confirmed Salty Dog's request to begin pumping the 4" recovery well and utilizing the purged or contaminated groundwater for fresh water injection for its brine recovery process, and instructed Salty Dog to maintain records regarding the amount of contaminated water removed. **Exhibit L.**

25. On July 12, 2000, Salty Dog submitted a "plan for further investigation of the salt water contamination of the Salty Dog Brine Station" to the OCD. The Plan called for, among other things, the continued monitoring of the test monitoring well and the drilling of test borings at 100-foot increments "until the edge of the plume is found" to "determine the extent of the plume." **Exhibit M.**

26. On July 25, 2000, in response to this submission, the OCD issued a formal approval of the plan with the addition of a series of specifically articulated conditions. **Exhibit N.** The OCD's original specifications required that Salty Dog submit the results of its investigation to the OCD by September 30, 2000; however, the OCD ultimately allowed Salty Dog extensions of time until March 2, 2001 to provide this information.

27. On March 30, 2001, Salty Dog submitted its investigative plan results nearly a month late to the OCD. **Exhibit O.**

28. On May 22, 2001, after having reviewed the Salty Dog Inc. investigation plan results dated March 30, 2001, the OCD informed Mr. Bergstein that certain additional actions must be completed by June 29, 2001. **Exhibit P.**

29. On May 29, 2001, Salty Dog submitted sampling and testing data from the monitoring well, noting that the chloride content of the wells appeared to be dropping. **Exhibit Q.**

30. On September 18, 2001, the OCD again wrote Mr. Bergstein, noting that Salty Dog had failed to respond to the issues raised and requests made in the May 22, 2001 letter, and ordering Salty Dog to submit an investigation and remediation plan for OCD approval by October 8, 2001. **Exhibit R.**

31. On October 4, 2001, Salty Dog (through Eddie W. Seay) submitted another plan for investigation and remediation for review by the OCD. Seay further notes that it appears that the pumping efforts have lowered the chloride content, but does not appear to have affected the outer limits of the plume. **Exhibit S.** The submitted Investigation Plan indicated that “[a]fter the extent of the plume is found, an additional extraction well [will] be installed and piped into the system for recovery of brine.” *Id.*

32. On October 22, 2001, Salty Dog wrote to the OCD Environmental Bureau once again, providing analytical information from the sampling conducted at the monitor and test wells at the site, and further indicated that they had extracted “several thousand barrels of brine water from the recovery well.” **Exhibit T.**

33. On April 8, 2002 the OCD officially approved the investigation and remediation plan outlined in the October 4, 2001 correspondence from Salty Dog, and again imposed a number of additional requirements upon which such approval was being conditioned. **Exhibit U.** Included among these additional

conditions was the requirement that Salty Dog submit results of the investigation and remediation efforts to the OCD Santa Fe Office no later than July 15, 2002, with specific information required to be included in that submission. *Id.*

34. On July 11, 2002, Salty Dog submitted quarterly analytical data, noting that “the chlorides are continuing to drop.” **Exhibit V.**

35. On September 20, 2002, Salty Dog representative E. Seay contacted the OCD Environmental Bureau by letter to confirm completion of two additional wells, one a recovery well and one an extension of the monitor well plume. Mr. Seay noted that one of the monitor wells was showing elevated chlorides, and he was therefore recommending that Mr. Bergstein drill an additional monitor well. **Exhibit W.**

36. On October 31, 2002, Wayne Price of the OCD Environmental Bureau contacted Salty Dog representative Seay via email to acknowledge receipt of the September 20, 2002 report, and to advise that Item #7 of OCD’s April 8, 2002 letter remained unaddressed. Mr. Price gave Salty Dog a time limit of thirty (30) days to address the issue raised by Item #7 and install a minimum of three additional monitor wells, and he further provided some specific instruction regarding the installation thereof. **Exhibit X.**

37. On December 18, 2002, Salty Dog sent correspondence to the OCD, noting that “Zia, Salty Dog” had completed an inspection of the leak detection monitor well at the brine pit, finding that the hole was dry and contained no fluid. **Exhibit Y.**

38. On July 8, 2003, the OCD issued a Notice of Violation (“NOV”) to

Salty Dog Inc., Pieter Bergstein, via certified mail. The NOV related to violations discovered at an inspection conducted on November 14, 2002, and provided a deadline of August 15, 2003 for Salty Dog to respond by taking certain actions to correct the specified violations. **Exhibit Z.** The issues addressed by the July 8, 2003 NOV are summarized as follows:

- a. At a previously-conducted inspection on October 16, 2002, OCD inspectors advised Salty Dog of a leaking tank. However, Salty Dog took no action to correct the leak. At the subsequent inspection on November 14, 2002, OCD inspectors noted that water was being discharged to the ground from an above ground tank and observed that water had flowed off-site into a nearby fresh water playa lake. Water samples were collected from the tank and playa lake, yielding elevated chlorides in both samples in excess of the New Mexico groundwater standard for chlorides (250 mg/l). *Id.* **Salty Dog was informed that these actions and/or omissions constituted violations of discharge plan condition #21 regarding spill reporting (failure to report a discharge into a watercourse).** *Id.*
- b. Brine water was observed being discharged into an unauthorized, open, unlined pit. *Id.* **Salty Dog was informed that this constituted a violation of discharge plan condition #16 regarding below-grade tanks/sumps/pits.** *Id.*
- c. Salty Dog was found to have failed to properly investigate and remediate groundwater contamination at the site. Salty Dog had not properly responded to the request sent by the OCD on April 8, 2002 requiring further investigation and remediation of groundwater, had not installed additional monitor wells as planned, and the recovery wells that had been installed were not functional. *Id.* **Salty Dog was informed that these actions and/or omissions constituted violations of discharge plan condition #26 regarding groundwater contamination.** *Id.*
- d. Brine water was being discharged by Salty Dog onto the ground surface at the truck loading area. OCD met with Salty Dog personnel to address the issue, requesting that collection devices be installed, but when the OCD revisited the site in May of 2003, it was noted that "brine water [was] still being discharged to the

ground and no collection devices [had] been installed." *Id.* **Salty Dog was informed that this constituted a violation of discharge plan condition #12 regarding process areas.**

39. By written correspondence dated August 14, 2003 (but not received by the OCD until after the August 15<sup>th</sup> deadline on August 18, 2003), a "signed work plan outlining proposed remedial actions in response to the Notice of Violation dated July 8, 2003" was submitted by the Environmental Technology Group, Inc. ("ETG") on behalf of Salty Dog, relating to the Salty Dog Brine Station, Discharge Plan BW-008. **Exhibit AA.** The work plan was signed by Terry Wallace, Operations Manager of Salty Dog, Inc. and by the Regional Manager of ETG. The August 14, 2003 Plan noted the following with regard to the violations outlined in the July 8<sup>th</sup> NOV:

- a. Violation of Condition #21 regarding spill reporting: the tank that was discharging water onto the ground "has been permanently removed from the site." Salty Dog plans to collect soil samples from the former location of the tank at depths of four and eight feet below the ground surface, as well as sampling around the area adjacent to the southern edge of the playa and from within the playa, to test for chloride concentrations. *Id.*
- b. Violation of Condition #16 regarding below-grade tanks/sumps/pumps: the unpermitted pit was excavated at the time that the brine well work-over activities were being conducted in August of 1999, and is not used for day-to-day operations of the facility. Salty Dog plans to appropriately close the pit. *Id.*
- c. Violation of Condition #26 regarding groundwater contamination: existing groundwater monitor wells, recovery wells and water wells on-site "will be sampled and analyzed for General Chemistry and Water Quality Control Commission Sampling below." Salty Dog plans to use the groundwater sampling analysis results to "design the well field configuration necessary for plume delineation activities at the site." *Id.*

- d. Violation of Condition #21 [sic] [#12] regarding process area: Salty Dog intends to construct below grade sumps, reinforced by liners and equipped with release detection. Sumps “will be constructed using 500-gallon poly-tanks surrounded by a sand layer **sealed on the surface by a concrete pad with berms and installed in each of the three truck loading areas on-site.**” *Id. Emphasis added.*

40. On October 2, 2003, the OCD wrote to Mr. Bergstein to inform him that the work plan submitted in response to the July 8, 2003 NOV was approved, and to identify a series of additional requirements upon which said OCD approval was being conditioned. **Exhibit BB.** Among the additional requirements imposed by the OCD were a number of specific deadlines in October and November 2003, and February 2004, for completion of tasks and/or the submission of documentation relating to the remediation. *Id.*

41. On January 30, 2004, Mr. Bergstein provided the OCD with a status update letter. **Exhibit CC.**

42. On February 10, 2004, prior to the completion of the work detailed in the plan submitted in August, Environmental Technology Group, Inc. contacted the OCD to advise that as of January 15, 2004, it was no longer being retained to provide services relating to the Salty Dog site. **Exhibit DD.**

43. On February 13, 2004, Mr. Bergstein wrote to the OCD to provide analytical results from 115ft down gradient of the brine pond (testing done on 1/28/04). **Exhibit EE.**

44. On May 20, 2004, the OCD issued another Notice of Violation to Salty Dog, Inc., Pieter Bergstein, regarding the Salty Dog Discharge Plan BW-008. **Exhibit FF.** The issues embodied by the May 20, 2004 NOV are summarized as

follows:

- a. The NOV arises out of the fact that the **discharge permit (BW-008) had expired** on April 18, 2004, one month prior.
- b. The NOV further confirms receipt of the groundwater contamination progress report dated January 30, 2004, and notes that the analysis provided in that report shows a chloride content of 856 mg/l, which exceeds the groundwater standard of 250mg/l. *Id.* **The OCD therefore specifically requested that Salty Dog include an action plan for addressing the chlorides along with its discharge renewal application. *Id.***
- c. Finally, the NOV reiterates the fact that **Salty Dog was to have installed additional down-gradient and side-gradient monitor wells, but had failed to do so**, constituting a violation of condition #26. *Id.*

45. On June 4, 2004, Salty Dog filed a discharge plan renewal application for BW-008. **Exhibit GG.** On that application, "Operator" was listed as "Pieter Bergstein, Zia Transportation"; however, the cover page delineated the application as being that of "Salty Dog Brine, Inc." *Id.*

46. On July 7, 2004, Wayne Price of the OCD contacted Mr. Bergstein via email, acknowledging receipt of the June 4, 2004 application, and identifying four (4) specific tasks that the OCD would require to be completed in order for the OCD to re-issue the discharge permit, which was at that time expired. **Exhibit HH.** A deadline of July 30, 2004 was established for completion of the specified tasks. *Id.*

47. On July 22, 2004, *prior to the permit renewal being granted*, another release occurred at the Salty Dog Brine Well site involving the release of water onto the pad and along the fence-line on the South side of the location. **Exhibit**

II. According to the C-141, filed July 23, 2004 by Salty Dog, a vacuum truck was used to “clean up mess.” *Id.* The release was estimated to be approximately 20 bbls, with approximately 15 bbls estimated to have been recovered. *Id.* Salty Dog stated that no watercourse was reached by the release. *Id.*

48. On August 23, 2004, Wayne Price of the OCD contacted Mr. Bergstein by email, and provided him with an inspection report and photos arising out of an inspection conducted on August 19, 2004, which revealed various violations of the terms of permit BW-008. **Exhibits JJ and KK.** Mr. Price advised that Salty Dog had ten (10) days to correct the violations noted in the report. *Id.*

49. On August 27, 2004, Salty Dog agent Eddie Seay contacted the OCD to advise that Salty Dog had completed the additional work on the site consisting of three monitor wells and three soil borings, and provided information obtained through the conduction of that on-site work. **Exhibit LL.**

50. On August 31, 2004, Mr. Seay again contacted the OCD on behalf of Salty Dog to provide photographs and a “run ticket” of work performed, stating that “Zia lowered the level in it’s [sic] brine pit and cleaned up around drive area and loading area.” **Exhibit MM.** Seay stated that the soil was hauled to an OCD-approved facility. *Id.*

51. On October 14, 2004, Salty Dog was advised that the OCD was granting the application for renewal of the groundwater discharge plan (BW-008) under a number of specifically articulated conditions. **Exhibit NN.** The Discharge Plan Approval Conditions were outlined as an “Attachment to the

Discharge Plan BW-008 Approval.” **Exhibit OO.** One such condition, Condition #11, reiterated the requirement that Salty Dog install an impermeable pad and curb at the brine loading/unloading area. *Id.*

52. On October 26, 2004, Pieter Bergstein executed the Discharge Plan Approval Conditions Attachment on behalf of “Salty Dog, Inc.” *Id.*

53. On November 24, 2004, having never followed through with the installation of below-grade sumps with concrete pad and berms as specified in the August 2003 Work Plan, Salty Dog (B. Bird) submitted a proposal for the installation of a wastewater sump collection system for the loading and unloading area at the site. **Exhibit PP.** Wayne Price of the OCD approved of the proposal with the additional condition that secondary containment also be installed by noting this on the coversheet of the proposal and faxing it back to Salty Dog on December 1, 2004. *Id.*

54. On December 7, 2004, Brandon Bird of Salty Dog confirmed in writing to the OCD that Salty Dog would be installing an impermeable liner below the sump bay. **Exhibit QQ.**

55. OCD records reflect that Salty Dog never installed an impermeable pad and curb at the brine loading/unloading area either as required by Permit Condition #11 or as per the plan submitted by Salty Dog on November 24, 2004 and approved by the OCD on December 1, 2004, either within the timeframes allotted, or at any other time subsequent. OCD subsequently discovered that groundwater samples taken from monitor well PMW#1, which is located in the loading area and adjacent to the brine pond, were found to contain over 6000

mg/l of chlorides, which far exceeds the chloride groundwater standards of 250 mg/l by more than twenty times. (See Zia/Salty Dog 2004 investigation report, attached as **Exhibit PP**). The recommendations in the 2004 report indicated that the soil and groundwater should be cleaned up and a liner installed in this area. *Id.* To date Salty Dog has not reported the groundwater contamination, and has not taken any corrective action (such as the recommended clean-up and liner installation). Salty Dog's inaction also constitutes a failure to comply with Permit Condition #26.

56. With the exception of data submitted from two isolated samplings, one in October of 2007 and one in February of 2008, OCD records indicate that Salty Dog has not submitted any monitoring data or reports since August of 2004 that would allow OCD to continue to assess the status of any groundwater abatement actions being taken by Salty Dog, or that would come close to meeting the obligations imposed by Condition #25 of the Permit. **Exhibits QQ & RR.**

57. Salty Dog has failed to submit Quarterly Groundwater Reports (as mandated by the terms of Discharge Plan Permit BW-008 **Condition #25.A**, as renewed 2004, including all data and components specified in Condition #25, subparts A(i)-(vii)). Pursuant to BW-008(2004), Quarterly Groundwater Reports were due on the following dates subsequent to the August 2004 report:

- |                    |                     |
|--------------------|---------------------|
| a. October 1, 2004 | e. October 1, 2005, |
| b. January 1, 2005 | f. January 1, 2006, |
| c. April 1, 2005,  | g. April 1, 2006,   |
| d. July 1, 2005,   | h. July 1, 2006;    |

- |    |                    |    |                 |
|----|--------------------|----|-----------------|
| i. | October 1, 2006    | l. | July 1, 2007    |
| j. | January 1, 2007    | m. | October 1, 2007 |
| k. | April 1, 2007, and | n. | January 1, 2008 |

The OCD has not received any of the above-listed Quarterly Groundwater Reports required by Permit **Condition #25**.

58. Additionally, pursuant to BW-008(2004) Condition #25, Subpart B, Salty Dog was required to provide the OCD with advance notice of scheduled activities such that the OCD could coordinate to witness and split samples if it chose to do so. **Exhibit NN** at p. 8. OCD has no record of Salty Dog ever having provided notice of any sampling or other monitoring activity at this site as required by the terms of this permit.

59. Further, of significance, Salty Dog was required to submit an investigation and remediation plan for OCD approval within 15 days of the discovery of "the exceedance of a WQCC standard in any down gradient monitor or fresh water well where contaminant concentrations did not exceed WQCC standards during the preceding monitoring event." **Id.** **The recent sampling was conducted on February 27, 2008, which is when the new, elevated levels were discovered. Exhibit RR.** Comparison of the February 2008 report shows that monitor well MW-5 reported to show chlorides of 1280 mg/l compared to 100 mg/l for the previous reading taken in October 2007 for the same location. **Exhibits RR & QQ.** The groundwater standard for chlorides is 250 mg/l. Thus, pursuant to Condition #25, subpart B of the Permit BW-

008(2004), no later than March 12, 2008, Salty Dog was required to have submitted an investigation and remediation plan for OCD approval addressing the contaminant concentrations found to be in excess of WQCC standards upon sampling in February of 2008 that had not previously tested in excess of 250 mg/l.

60. Pursuant to BW-008(2004), **Condition #27**, Salty Dog is required to submit Quarterly Reports containing certain, specific information by the first day of January, April, July and October for each year that the permit is in effect. In addition to containing the groundwater monitoring information specified by Condition #25, these more comprehensive Quarterly Reports are to contain additional information including a summary of all leaks, spills and releases and corrective actions taken (Subpart B), a summary of all well activity, work-over and pressure tests (Subpart C), and each permit condition is to be addressed in the quarterly report (Subpart D).

61. At least one release/spill is known to have occurred since the last reporting of any kind was received from Salty Dog in August of 2004. A major release occurred on February 10, 2005; however, no Quarterly Report containing a summary of the facts of that release and the corrective actions taken was submitted by Salty Dog to the OCD as required by Condition #27, Subpart B.

62. Comprehensive Quarterly Reports were due from Salty Dog on the following dates subsequent to the August 2004 report [the last report of any kind reflected in OCD records as having been submitted by Salty Dog regarding this site]:

- |                     |                       |
|---------------------|-----------------------|
| a. October 1, 2004  | h. July 1, 2006;      |
| b. January 1, 2005  | i. October 1, 2006    |
| c. April 1, 2005,   | j. January 1, 2007    |
| d. July 1, 2005,    | k. April 1, 2007, and |
| e. October 1, 2005, | l. July 1, 2007       |
| f. January 1, 2006, | m. October 1, 2007    |
| g. April 1, 2006,   | n. January 1, 2008    |

The OCD has not received any of the above-listed comprehensive Quarterly Reports as required by **Condition #27** of the permit.

**B. CONCLUSIONS OF LAW AS TO 1999 RELEASE & GROUNDWATER CONTAMINATION**

63. OCD has jurisdiction over Pieter Bergstein d/b/a "Salty Dog, Inc." (OGRID 184208) and over the subject matter of this Order pursuant to the Oil and Gas Act [Section 70-2-12.B(22) NMSA 1978, as amended] the WQA and WQCC Rules.

64. Pieter Bergstein d/b/a "Salty Dog, Inc." (OGRID 184208) is a "person" as defined in Section 70-2-33.A of the Oil and Gas Act, Section 74-6-2.11 of the WQA and Section 20.6.2.711 NMAC.

65. Salty Dog Brine Supply Well #1 is a "source" for water contaminants that may be discharged directly or indirectly into surface or groundwater, as defined in New Mexico Water Quality Act Section 74-6-2.L.

66. Pieter Bergstein d/b/a "Salty Dog, Inc." (OGRID 184208) is currently the "responsible person" for the Salty Dog Brine Supply Well #1 under

the OCD Rules, and was the “responsible person” at all times pertinent to the above-articulated Findings of Fact.

67. Salty Dog is in violation of WQCC Rules as well as multiple, specific terms and conditions of its permit, BW-008 (as renewed in 2004), and is therefore in violation of the New Mexico Water Quality Act (“WQA”), NMSA 1978, §§ 74-6-1 to 74-6-17 as specified in further detail, below:

- a. Salty Dog violated WQCC Rule 20.6.2.5208.B.1 by failing to properly notify the Secretary within forty-eight (48) hours of a suspected leachate excursion. The July 29, 1999 Release was reported initially by the landowner, not by the Operator, Salty Dog. Further, the release was not formally documented and reported by Salty Dog until the submission of the C-141 on September 8, 1999, over a month later.
- b. Salty Dog violated, and is in continuing violation of WQCC Rule 20.6.2.1203.A(5), which requires the operator of a facility “[a]s soon as possible after learning of a ...discharge...shall take such corrective actions as are necessary or appropriate to contain and remove or mitigate the damage caused by the discharge.” At present, over eight (8) years after the date of the major release resulting in groundwater contamination, Salty Dog has still not fulfilled its obligations under this Section to “contain and remove or mitigate the damage caused by the discharge.” *Id.*
- c. Salty Dog is further in violation of Permit Condition #20: Spill Reporting (requiring Salty Dog to report spills and releases as required by OCD Rule 116 and in the Quarterly Report) because it failed to properly report and document the spills occurring at the site in both 1999 and 2005 and include this data in the comprehensive Quarterly Report as required by Condition #20, and further failed to properly report the spills to the OCD as required by OCD Rule 116 in a timely fashion.
  - i) Regarding the 1999 release: Salty Dog failed to provide immediate verbal notification to the OCD of a “major release” (in excess of 25 bbls and/or reaches a watercourse) per OCD Rule 116; failed to file a C141 providing written notice of the release to the OCD within 15 days of the incident (C141 submitted over a month later), and failed to completely fill out the C141 (did not include an estimation of the volume of the release).

- ii) Regarding 2002 release from tank: Salty Dog again failed to provide immediate verbal notification to the OCD of a "major release" per Rule 116 (release reached a watercourse/playa lake), and failed to properly document this release in the comprehensive Quarterly Report(s) filed pursuant to the terms of the permit.
  - iii) Regarding 2005 Release: Salty Dog has never provided documentation in the form of a comprehensive Quarterly Report regarding this release or any efforts to remediate the effects of this release. Further, subsequent inspections indicate that this release has recurred as indicated by soil staining identified in December of 2006, and Salty Dog has provided neither written nor verbal notice of this release recurrence as required by Rule 116/permit terms.
- d. To date, Salty Dog has failed to submit fourteen (14) comprehensive Quarterly Reports and Groundwater Monitoring Reports, due (pursuant to the terms of Permit BW-008) on 10/1/04, 1/1/05, 4/1/05, 7/1/05, 10/1/05, 1/1/06, 4/1/06, 7/1/06, 10/1/06, 1/1/07, 4/1/07, 7/1/07, 10/1/07 and 1/1/08. Because it has failed to perform the required monitoring and testing and/or has failed to submit the reports reflecting the results of such required monitoring conducted at the site on a quarterly basis, and/or has chronically failed to submit the comprehensive Quarterly Reports addressing each of the permit conditions as required by Condition #27, **Salty Dog has violated, and remains in violation of the following:**
- i) WQCC Rules 20.6.2.5207.C & 20.6.2.5208B.2(a)
  - ii) BW-008 Permit Condition # 3: *Brine Storage Pond Inspection,*
  - iii) BW-008 Permit Condition #8: *Production/Injection Volumes,*
  - iv) BW-008 Permit Condition #9: *Analysis of Injection Fluid and Brine,*
  - v) BW-008 Permit Condition #19: *Housekeeping,*
  - vi) BW-008 Permit Condition #16: *Underground Process/Wastewater Lines,*
  - vii) BW-008 Permit Condition #21: *Waste Disposal,*
  - viii) BW-008 Permit Condition #25: *Vadose Zone and Water Pollution (and #25, Subparts A and B regarding Groundwater Reports and Additional Requirements) and*
  - ix) BW-008 Permit Condition #27: *Quarterly Report*

Pieter Bergstein, as officer and representative of "Salty Dog, Inc.," signed the BW-008 list of Permit Conditions, certifying that he had read them and agreed

to comply with them. The above-referenced WQCC Rules and Permit Conditions imposed upon Salty Dog an obligation to provide a significant amount of specific information regarding this site on a quarterly basis, imposed an obligation to inform the OCD of plans for action and/or testing such that the OCD could witness and/or participate in the process, and imposed further obligations to take certain actions should the information yielded by the monitoring program exceed certain standards. **Salty Dog has failed to provide the required data, has failed to provide the OCD with the opportunity to witness sampling and/or split samples and has failed to take the required actions when the data exceeded the established parameters.**

- e. Salty Dog violated Permit Condition #11: Process Areas because it failed to “install an impermeable pad and curb at the Brine loading/unloading area” as it was specifically required to do. Salty Dog twice submitted proposals for addressing contamination at the loading and unloading location, once through the Work Plan prepared by Environmental Technology Group in August of 2003 in response to an NOV, and once in November of 2004 in a proposal submitted by Brandon Bird. Despite the fact that OCD ultimately approved both submissions, Salty Dog failed and refused to complete the work as proposed in either plan. **Salty Dog’s violation of the permit requirements for process areas has been ongoing, and testing has confirmed that it has resulted in actual harm to the environment.**
- f. Salty Dog has violated WQCC Rule 20.6.2.5101.B, which specifies that a permit is required for the operation of Class III Injection Wells such as the Salty Dog Brine Well. Salty Dog has failed to abide by WQCC Rules regarding the timely filing of applications for renewal of its permit, to ensure that no expiration of the permit occurred. Upon expiration - on at least two occasions - Salty Dog **continued operating despite the fact that the permit was no longer valid and such operation was in direct violation of WQCC Rules.** In fact, both the 1999 release and the subsequent 2004 release occurred during times that Salty Dog was operating without a valid permit.
  - i) With regard to the 1999 operation-without-permit, the permit for the Salty Dog Brine Well expired on April 18, 1999. The major release resulting in groundwater contamination occurred on July 29, 1999. Salty Dog was therefore operating without a permit and in violation of Rule 5101.B for over three months in 1999.
  - ii) With regard to the 2004 operation-during-expiration, on May 20, 2004, the OCD issued a Notice of Violation advising Salty Dog that the permit had expired as of April 18, 2004. Despite receiving this Notice, Salty Dog continued

operating, and prior to obtaining a permit renewal, the release occurred on July 22, 2004. Salty Dog thus operated in violation of Rule 5101.B for over three months, and was doing so knowingly and willfully, and did so despite having received actual notice from the OCD for at least two months in 2004.

68. Salty Dog's noncompliance has been ongoing and longstanding. The OCD has *conservatively* calculated that Salty Dog has therefore been in continuous violation of the WQCC and of the express terms and conditions of its permit, including the terms requiring compliance with OCD Rule 116, for a minimum of **four (4) years**, beginning with Salty Dog's operation without a permit starting in April of 2004, and continuing to the present.<sup>2</sup>

C. COMPLIANCE ORDER AS TO 1999 RELEASE & GROUNDWATER CONTAMINATION

69. Salty Dog shall comply with the following schedule of compliance. Salty Dog shall submit for OCD approval the following documents and/or perform the following tasks by the deadlines specified below:

a. All overdue/outstanding quarterly "Groundwater Reports" as required by Permit Condition #25, Subpart A, that have come due to the OCD since the renewal of BW-008 in 2004. According to OCD records, Salty Dog has failed to submit the Quarterly Reports due on the following dates:

- October 1, 2004
- January 1, 2005
- April 1, 2005,
- July 1, 2005,
- October 1, 2005,
- January 1, 2006,
- April 1, 2006,
- July 1, 2006;
- October 1, 2006
- January 1, 2007

<sup>2</sup> This is a conservative estimate, and OCD records indicate that noncompliance actually more realistically spanned from the initial release in 1998 to the present.

- April 1, 2007
- July 1, 2007,
- October 1, 2007, and
- January 1, 2008

The Quarterly Reports to be submitted should contain **all** information and materials, and meet **all** requirements established by WQCC Rules 20.6.2.5207.C, 20.6.2.5208B.2(a) and BW-008 Permit Condition #25: Vadose Zone and Water Pollution (subsections A and B). All outstanding quarterly "Groundwater Reports" shall be properly submitted in full, accurate and complete fashion **no later than thirty (30) days from the date of this Order.**

- b. For any down gradient monitor well or fresh water well where contaminant concentrations did not previously exceed WQCC standards during the preceding monitoring event but reveal levels in excess of WQCC standards on a subsequent monitoring event, submission of an investigation and remediation plan as required by Permit Condition #25, Subpart B(ii) is to be submitted **no later than thirty (30) days from the date of this Order.**
- c. All overdue/outstanding comprehensive "Quarterly Reports" as specifically required by Permit Condition #27 since the renewal of BW-008 in 2004. According to OCD records, Salty Dog has failed to submit the comprehensive "Quarterly Reports" due pursuant to Condition #27 on the following dates:

- October 1, 2004
- January 1, 2005
- April 1, 2005,
- July 1, 2005,
- October 1, 2005,
- January 1, 2006,
- April 1, 2006,
- July 1, 2006;
- October 1, 2006
- January 1, 2007
- April 1, 2007
- July 1, 2007,
- October 1, 2007, and
- January 1, 2008

The Quarterly Reports to be submitted should contain **all** information and materials, and meet **all** requirements established by WQCC Rules 20.6.2.5207.C, 20.6.2.5208B.2(a), specifically identified by BW-008 (2004) Permit Condition #27: Quarterly Report, and as referenced and further identified by/in Permit Conditions #8: Production/Injection Volumes, #9: Analysis of Injection Fluid and Brine, #19: Housekeeping, #20: Spill Reporting, and #21: Waste Disposal. All outstanding comprehensive

“Quarterly Reports” shall be properly submitted in full, accurate and complete fashion, as provided by Permit Condition #27, **no later than thirty (30) days from the date of this Order.**

- d. Salty Dog shall continue the groundwater remediation at the Brine Well area within seven (7) days of receipt of this Order. Salty Dog will take additional steps to capture the leading edge of the chloride plume and prevent its continued migration, including installation of additional groundwater recovery wells and monitor wells where contaminant concentrations exceed the groundwater standards. This recovery system, **including the additional monitor wells**, shall be installed **no later than thirty (30) days from the date of this Order.**
- e. Salty Dog shall submit for approval for the installation of an impermeable pad and curb at the brine loading/unloading area **within fourteen (14) days of the date of this Order.** Said plans shall include a designation of an estimated completion date for the installation of the pad and curb.
- f. Salty Dog shall submit for approval of the OCD a proposed plan for investigation and remediation regarding the oil stained soils located in the shed above the Brine Well **within fourteen (14) days of the date of this Order.**
- g. Salty Dog shall submit a closure plan for this facility **within thirty (30) days of the date of this Order** if the above-listed requirements and conditions cannot be met.
- h. Salty Dog shall submit a closure plan **within thirty (30) days of the date of this Order** for the single-lined brine pond, or submit a plan to retrofit the pond with secondary containment with leak detection including investigating under the pond.
- i. Salty Dog shall submit a clean-up plan **within thirty (30) days of the date of this Order for the vadose zone and groundwater under the brine pond and loading/unloading area.**
- j. Salty Dog shall file any and all appropriate and required OCD forms associated with any of the above-described tasks, including but not limited to any appropriate sundry forms relating to remedial work done on the site, etc., and will file such forms in a timely fashion.

- k. Salty Dog shall abide by all notice requirements imposed by WQCC and/or by the terms and conditions of Permit BW-008 (2004), including but not limited to Permit Condition #25.B(i) regarding providing notice prior to scheduled sampling activity.

D. CIVIL PENALTY AS TO 1999 RELEASE & GROUNDWATER  
CONTAMINATION

70. OCD hereby assesses a civil penalty against the Respondent in this Order of \$48,000 (Forty-Eight Thousand Dollars). This penalty amount is derived and calculated as follows:

\$1,000 per month of violation of the WQA/WQCC/permit terms and conditions for a total of forty-eight (48) months (four years).

This penalty assessment is specifically assessed as to violations relating to the 1999 release and groundwater contamination, as discussed in this Section (III), including but not limited to operation without a permit, major releases resulting in groundwater contamination, and numerous violations of WQCC Regulations and Permit Conditions, and is separate and apart from the penalty assessed as to the 2005 release, discussed below. **The penalty shall be due within thirty (30) days of the date of this Order.**

71. If Salty Dog fails to comply with the Schedule of Compliance set forth above:

- a. the Director of OCD may assess an additional civil penalty of up to \$25,000 for each day of noncompliance with the Order. NMSA 1978, § 74-6-10(F)(1), and
- b. the Director of OCD may cancel the subject permit, BW-008 (2004), pursuant to WQCC Rule 20.6.2.5101.I(1).

#### IV. 2005 RELEASE

##### A. FINDINGS OF FACT AS TO 2005 RELEASE

71. On the night of February 10, 2005, a major release occurred at the subject site, whereby a buried brine supply pipeline ruptured, resulting in a significant amount of brine being released above and below ground and into a nearby playa lake. The total volume of this release was estimated to be in the area of 425 barrels. **Exhibit PP.**

72. On February 11, 2005 at approximately 10:00 a.m., Salty Dog discovered the Release and notified the OCD. Salty Dog used vacuum trucks to recover 421 barrels of brine from the lakebed, which it then disposed of "at a public SWD," per the C-141 form filed on February 23, 2005 relating to the event.

73. Salty Dog further noted on the C-141 that it planned to let the flooded area dry, after which time it would consult with the landowner, OCD and EPA "to discuss the affected area and add fertilizer and salt neutralizing agents." The C-141 filed by Salty Dog on February 23, 2004 was approved with this language, and with the additional condition being imposed that Salty Dog submit a remediation plan no later than March 15, 2005.

74. An inspection conducted on December 19, 2006 revealed soil staining inside the pump house from the brine well casing and around the pump area indicating that leakage continued after the February 2005 Release at the pump house, reaching the ground level. Salty Dog has provided neither written nor verbal notice of this continued release at the pump house to the OCD, as required by OCD Rules 116.C(1) and (2).

75. Permit BW-008 (2004) Condition #20 requires Salty Dog to abide by OCD Rule 116 and WQCC Rule 1203 with regard to spills and releases. OCD Rule 116 provides that when a spill or release occurs, “[t]he responsible person must complete division approved corrective action for releases which endanger public health or the environment. Releases will be addressed in accordance with a remediation plan submitted to and approved by the division or with an abatement plan submitted in accordance with Section 19 of 19.15.1 NMAC.” OCD Rule 116 [19.15.3.116 NMAC].

76. To date, Salty Dog has not consulted with the OCD regarding final remediation of the flooded area and has not filed a remediation plan as required by the OCD (pursuant to Rule 116.D and Permit Condition #20). Further, to the knowledge of the OCD, to date, Salty Dog has not added fertilizer or salt neutralizing agents to the contaminated area, or performed any other efforts at completing remediation of the area.

77. In addition, Salty Dog has failed to submit Quarterly Reports as mandated by the terms of Discharge Plan Permit BW-008(2004) Condition #27, and which required Salty Dog to provide information including but not limited to information regarding all releases and spills and associated remediation. Pursuant to BW-008(2004) Condition #27, Quarterly Reports were due on the following dates subsequent to the date of the 2005 Release:

B. April 1, 2005,

C. July 1, 2005,

D. October 1, 2005,

E. January 1, 2006,

F. April 1, 2006,

G. July 1, 2006;

H. October 1, 2006

K. July 1, 2007

I. January 1, 2007

L. October 1, 2007

J. April 1, 2007, and

M. January 1, 2008

The OCD has not received any of the above-listed Quarterly Reports.

N. CONCLUSIONS OF LAW AS TO 2005 RELEASE

78. OCD has jurisdiction over Pieter Bergstein d/b/a "Salty Dog Inc." (OGRID 184208) and over the subject matter of this Order pursuant to the WQA and WQCC Rules.

79. Pieter Bergstein d/b/a "Salty Dog Inc." (OGRID 184208) is a "person" as defined in Section 74-6-2.11 of the WQA and Section 20.6.2.711 NMAC.

80. Salty Dog Brine Supply Well #1 is a "source" for water contaminants that may be discharged directly or indirectly into surface or groundwater, as defined in New Mexico Water Quality Act section 74-6-2.L.

81. Pieter Bergstein d/b/a "Salty Dog Inc." (OGRID 184208) is currently the "responsible person" for the Salty Dog Brine Supply Well #1 under the WQA and the WQCC Rules, and was the "responsible person" at the time of the referenced 2005 release.

82. Pieter Bergstein d/b/a "Salty Dog Inc." (OGRID 184208) has also violated the terms of its permit, BW-008 (2004) by failing to provide the proper maintenance and required testing of the brine well line as required per *Condition*

16. *Underground Process/Wastewater Lines.*

83. Because Salty Dog has refused and failed to submit a remediation plan as instructed and as required by Permit Condition #20 (and OCD Rule 116), has failed to submit comprehensive "Quarterly Reports" as required by Permit Condition #27, and has refused and failed to complete appropriate remediation at the site per OCD and WQA standards, Salty Dog is in violation of WQCC Rules 20.6.2.1203.A(5) and 20.6.2.5101. Moreover, by virtue of these same acts and omissions, Salty Dog has also violated the terms of its permit, BW-008 (2004) Permit Condition #20 (and OCD Rule 19.15.3.116.D NMAC) and Permit Condition #27, and is therefore in violation of the New Mexico Water Quality Act ("WQA"), NMSA 1978, §§ 74-6-1 to 74-6-17.

84. Salty Dog's noncompliance has been ongoing and longstanding, with a conservative start-date of March 15, 2005, and continuing to the present. OCD has calculated that Salty Dog has therefore been in violation of the WQCC and OCD Rules and of the terms of its permit for a minimum of **912** days (2 years plus 6.5 months).

**Now, therefore, OCD hereby orders:**

O. COMPLIANCE ORDER AS TO 2005 RELEASE

Pieter Bergstein d/b/a "Salty Dog Inc." (OGRID 184208) shall comply with the following schedule of compliance.

- a. Immediately collect samples from **all** wells listed in the August

2004 Investigation and installed thereafter, and provide data from such samples to the OCD **within 30 days of the date of this Order**;

- b. Upon review of the above-referenced analytical data by the OCD, comply with any additional requirements imposed by the OCD for the purpose of remediation and capture of groundwater contamination, including but not limited to the installation and monitoring of additional monitoring and/or recovery wells, by whatever deadlines are required by the OCD.
- c. Conduct quarterly sampling..
- d. Complete **all** items required by the WQCC Rules, OCD Rules, WQA, and Permit BW-008 (2004) identified by this Order as remaining incomplete and not otherwise herein provided with a deadline for completion **within two-hundred forty (240) days of entry of this Order**.

P. CIVIL PENALTY AS TO 2005 RELEASE

85. OCD hereby assesses a civil penalty against the Respondent in this Order of **\$18,000.00** (Eighteen Thousand Dollars). This penalty amount is derived and calculated as follows:

\$1,500 for each of the 12 missing comprehensive quarterly reports that Operator failed to properly document information regarding the February 2005 Release and remediation efforts associated with that release, as required by Permit Condition #27.

This penalty assessment is specifically assessed as to violations relating to the 2005 release, and is separate and apart from the penalty assessed as to the 1999 release and groundwater contamination. **The penalty shall be due within thirty (30) days of the date of this Order.**

86. If Salty Dog fails to comply with the Schedule of Compliance set forth above:

- a. the Director of OCD may assess an additional civil penalty of up to \$25,000 for each day of noncompliance with the Order. NMSA 1978, § 74-6-10(F)(1), and
- b. the Director of OCD may cancel the subject permit, BW-008 (2004), pursuant to WQCC Rule 20.6.2.5101.I(1).

**V. RIGHT OF OPERATOR TO ANSWER AND REQUEST A HEARING**

87. Pursuant to Section 74-6-10.G of the WQA, Respondent has the right to answer this Order and to request a hearing. If the Respondent (a) contests any material or legal matter upon which the Order is based, (b) contends that the Respondent is entitled to prevail as a matter of law, or (c) otherwise contests the appropriateness of the Order, the Respondent may request a hearing by mailing or delivering within thirty (30) days of receipt of this Order, a written "Request for Hearing and Answer to the Order" to:

Water Quality Control Commission Hearing Clerk  
C/O New Mexico Oil Conservation Division  
Harold Runnels Building, Rm. 2050 South  
1190 Saint Francis Drive  
P.O. Box 26110  
Santa Fe, New Mexico 87502-6110

The Respondent must attach a copy of this Order to the Request for Hearing.

88. The Respondent's Answer shall clearly and directly admit, deny or explain each of the factual allegations contained in the Order with regard to which the Respondent has any knowledge. Where the Respondent has no knowledge of a particular factual allegation, the Respondent shall so state, and the Respondent may deny the allegation on that basis. Any allegation of the Order not specifically denied shall be deemed admitted.

89. The Respondent's Answer shall also include any affirmative defense upon which the Respondent intends to rely. Any affirmative defense not asserted in the Answer, except a defense asserting lack of subject matter jurisdiction, shall be deemed waived.

#### **VI. FINALITY OF ORDER**

90. This Order shall become final unless the Respondent files a Request for Hearing and Answer with the WQCC within thirty (30) days of receipt of this Order. Failure to file an Answer constitutes an admission of all facts alleged in the Order and a waiver of the right to a hearing under Section 74-6-10(G) of WQA concerning this Order. Unless the Respondent requests a hearing and files an Answer, the Schedule of Compliance set forth in this Order shall become final.

#### **VII. SETTLEMENT CONFERENCE**

91. Whether or not Respondent requests a hearing and files an Answer, the Respondent may confer with OCD concerning settlement. OCD encourages settlement consistent with the provisions and objectives of the WQA and

applicable WQCC rules. Settlement discussions do not extend the thirty (30) day deadline for filing the Respondent's Answer and Request for Hearing, or alter the deadlines for compliance with this Order. Settlement discussions may be pursued as an alternative to and simultaneously with the hearing proceedings. The Respondent may appear at the settlement conference independently and/or be represented by legal counsel.

92. Any settlement reached by the parties shall be finalized by written stipulated final order. A stipulated final order must resolve all issues raised in the Order, must be approved by the Director of OCD, shall be final and binding all parties to the Order, and shall not be appealable.

93. To explore the possibility of settlement in this matter, contact Mikal Altomare, Assistant General Counsel, Office of General Counsel, New Mexico Oil Conservation Division, 1220 St. Francis Drive, Santa Fe, New Mexico 87505, 505-476-3480.

94. Compliance with the requirements of this Order does not relieve Respondent of the obligation to comply with all other applicable laws and regulations.

### **VIII. TERMINATION OF ORDER**

95. This Order shall terminate when Respondent certifies that all requirements of this Order have been met, and OCD has approved such certification, or when the Director of OCD approves a stipulated final order.



2 Mark Fesmire  
Director- Oil Conservation Division

Salty Dog - WQCC Administrative Compliance Order No. 2 -Exhibit List

- A. Bw-008 (2004) [10/14/04 approval w/conditions]
- B. NM PRC Documentation regarding "Salty Dog Inc."
- C. 1999 Release C141 [filed 9/8/99] + [8/4/99 email frm W/P]
- D. 8/10/99 letter from OCD to SD [cease operations order]
- E. 9/15/99 ltr from OCD to SD [incomplete application]
- F. 11/9/99 ltr from ocd to SD [add'l info needed]
- G. 1/5/00 ltr from OCD to SD [outstanding deficiencies in app]
- H. 2/4 and 2/14/00 submissions from SD [add'l requested info]
- I. 3/4/00 SD request to drill [mon. well]
- J. 4/7/00 OCD email approval SD request [w/conditions]
- K. 5/9/00 Seay rept [re mon well]
- L. 6/16/00 OCD order for plan by 7/15/00
- M. 7/12/00 investigation plan from SD [re salt H2O contam]
- N. 7/25/00 conditional approval of 7/12 plan by OCD
- O. 3/30/01 investigation plan results
- P. 5/22/01 OCD order for additional work [by 6/29/01]
- Q. 5/29/01 monitoring data from SD
- R. 9/18/01 ltr from OCD to SD [order to do invest & remed plan]
- S. 10/4/01 Seay/SD plan for investigation
- T. 10/22/01 data rept from SD
- U. 4/8/01 OCD conditional approval of SD plan
- V. 7/11/02 quarterly report from SD
- W. 9/20/02 status ltr from SD/Seay [2 add'l wells]
- X. 10/31/02 email from W. Price to Seay [order= 3 add'l Mwells]
- Y. 12/18/02 ltr from SD to OCD [inspect leak-detection @ brinepit]
- Z. 7/8/03 NOV[leaking tank]
- AA. 8/14/03 proposed work-plan [thru ETG re 7/8/03 NOV]
- BB. 10/2/03 OCD to PB- conditional approval
- CC. 1/30/04 status ltr from PB
- DD. 2/10/04 ltr from ETG [no longer servicing SD]
- EE. 2/13/04 data rept 115 ft down gradient
- FF. 5/20/04 NOV [expired permit]
- GG. Discharge Renewal Application 2004
- HH. 7/7/04 email W Price to PB [requesting action/info]
- II. 7/22/04 Release C141 [15bbbs]
- JJ. 8/23/04 W Price email to PB re inspection report [10 days]
- KK. 8/19/04 OCD Inspection Rept & photos [2 violations cited]
- LL. 8/27/04 status ltr/report from Seay to OCD
- MM. 8/31/04 status ltr from Seay to OCD
- NN. 11/24/04 proposal (thru B Bird) for transfer areas;  
12/1/04 – OCD [W/P] conditional approval of proposal
- OO. 12/7/04 letter from B. Bird confirming install liner
- PP. 2005 C141 & rept. for release occurring on February 10, 2005
- QQ. 10/26/07 Groundwater Analytical Results for Salty Dog
- RR. 2/27/08 Groundwater Analytical Results for Salty Dog

DRAFT

October 14, 2004

**CERTIFIED MAIL**  
**RETURN RECEIPT NO.**

Mr. Piter Bergstein  
Salty Dog Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

Re: Salty Dog Inc. Water Station  
Discharge Plan BW-008 Renewal Application

Dear Mr. Bergstein:

The groundwater discharge plan renewal application for the Salty Dog Inc. Water Station BW-008 operated by Salty Dog Inc. located in Section 5, Township 19 South, Range 36 East, NMPM, Lea County, New Mexico is hereby approved under the conditions contained in the enclosed attachment. Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 30 working days of receipt of this letter.**

The original discharge plan was approved on December 18, 1982 and subsequently renewed on April 18, 1989, April 20, 1995 and February 17, 2000 with an expiration date of April 18, 2004. The discharge plan renewal application, including attachments, dated June 04, 2004 submitted pursuant to Section 5101.B.3. of the New Mexico Water Quality Control Commission (WQCC) Regulations also includes all earlier applications and all conditions later placed on those approvals. The discharge plan renewal application was submitted pursuant to Section 20.6.2.5101 of the New Mexico Water Quality Control Commission (WQCC) Regulations. The discharge plan is renewed pursuant to Section 5101 and 3109.C. Please note Section 3109.G., which provides for possible future amendment of the plan. Please be advised that approval of this plan does not relieve Salty Dog Inc. of liability should operations result in pollution of surface or ground waters, or the environment.

Please be advised that all exposed pits, including lined pits and open top tanks (exceeding 16 feet in diameter) shall be screened, netted, or otherwise rendered nonhazardous to wildlife including migratory birds.

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit A

Mr. Piter Bergstein  
October 14, 2004  
Page 2

Please note that Section 3104. of the regulations requires that "when a plan has been approved, discharges must be consistent with the terms and conditions of the plan." Pursuant to Section 3107.C., Salty Dog Inc. is required to notify the Director of any facility expansion, production increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3109.H.4., this approval is for a period of five years. **This approval will expire April 18, 2009** and an application for renewal should be submitted in ample time before that date. Pursuant to Section 5101.F. of the regulations, if a discharger submits a discharge plan renewal application at least 120 days before the discharge plan expires and is in compliance with the approved plan, then the existing discharge plan will not expire until the application for renewal has been approved or disapproved. It should be noted that all discharge plan facilities will be required to submit plans for, or the results of, an underground drainage testing program as a requirement for discharge plan renewal.

The discharge plan application for the Salty Dog Inc. Water Station is subject to the WQCC Regulation 3114. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of \$100.00 plus a renewal fee of \$1700.00 for brine stations. The OCD has not received the \$1700.00 flat fee. The flat fee may be paid in a single payment due on the date of the discharge plan approval or in five equal installments over the expected duration of the discharge plan. Installment payments shall be remitted yearly, with the first installment due on the date of the discharge plan approval and subsequent installments due on this date of each calendar year.

Please make all checks payable to: **Water Quality Management Fund**  
**C/o: Oil Conservation Division**  
**1220 South Saint Francis Drive**  
**Santa Fe, New Mexico 87505.**

If you have any questions, please contact Wayne Price of my staff at (505-476-3487) or E-mail [wprice@state.nm.us](mailto:wprice@state.nm.us). On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,

Roger C. Anderson  
Environmental Bureau Chief  
RCA/lwp  
Attachment-1

xc: OCD Hobbs Office

**ATTACHMENT TO THE DISCHARGE PLAN BW-008 APPROVAL**

**Salty Dog Inc. Water Station (BW-008)**

**API # 30-025-26307-00-00**

**DISCHARGE PLAN APPROVAL CONDITIONS**

**October 14, 2004**

1. Payment of Discharge Plan Fees: The \$100.00 filing fee has been received by OCD. The \$1700.00 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.
2. Commitments: Salty Dog Inc. will abide by all commitments submitted in the discharge plan renewal application dated June 04, 2004 and these conditions for approval.
3. Brine Storage Pond Inspection: Leaks shall be reported pursuant to Item 20 (Spill Reporting) of these conditions. A minimum freeboard of three feet will be maintained in the pond so that no overtopping of brine occurs. Any repairs or modifications to the pond liner must receive prior OCD approval. If the pond liner is replaced or a new pond is constructed, a double synthetic liner with leak detection will be incorporated into the design.  
  
Leak Detection Monitor Well: The leak detection monitor well for the single-lined brine storage pond must be inspected for fluids weekly. Records will be maintained to include quantity of fluid measured, conductivity and chlorides of fluid, date of inspection, and name of inspector. Any fluids found must be reported to the NMOCD Santa Fe office and the appropriate District office within 48 hours of discovery and in the quarterly report.  
  
The pond shall be inspected weekly and records maintained. These records shall be reported in the quarterly report.
4. Production Method: Fresh water will be injected down the casing and brine shall be recovered up the tubing. Reverse flow will be allowed only once a month for up to 24 hours for clean out. Records of reverse flow shall be maintained and reported in the quarterly report.
5. Maximum Injection Pressure: The maximum operating injection and/or test pressure at the well head will be such that the fracture pressure of the injection formation will not be exceeded and will not cause new fractures or propagate existing fractures or cause damage to the system. Injection pressures shall be monitored weekly and records maintained and reported in the quarterly report.

6. Mechanical Integrity Testing: Conduct an annual open to formation pressure test by pressuring up the formation with fluids to one and one-half times the normal operating pressure or 300 psig whichever is greater for four hours. However, no operator may exceed surface injection or test pressures that may cause formation fracturing (see item 5 above) or system failures. Systems requiring test pressures less than 300 psig or methods that use testing media other than fluids, i.e. gas, must be approved by OCD prior to testing. Brine supply wells operating with isolation packers will have to pressure test both the cavern formation and casing/tubing annually.

At least once every five years and during well work-overs the cavern formation will be isolated from the casing/tubing annually and the casing pressure tested at 300 psig for 30 minutes. All pressure tests must be witnessed by OCD.

Operators shall maintain a chronologic list going back 5 years of all pressure test to include the type (i.e. open to formation, casing test only, etc), date, pass/fail criteria, copy of pressure chart, and any other pertinent information.

Records shall be maintained and reported in the quarterly report.

7. Capacity/Cavity Configuration and Subsidence Survey: The operator shall provide information on the size and extent of the solution cavern and geologic/engineering data demonstrating that continued brine extraction will not cause surface subsidence, collapse or damage to property, or become a threat to public health and the environment. This information shall be supplied in a report due on the first day of September of each year. OCD may require the operator to perform additional well surveys, test, and install subsidence monitoring in order to demonstrate the integrity of the system. If the operator cannot demonstrate the integrity of the system to the satisfaction of the Division then the operator may be required to shut-down, close the site and properly plug and abandoned the well.
8. Production/Injection Volumes: The volumes of fluids injected (fresh water) and produced (brine) will be recorded monthly and submitted in the quarterly report.
9. Analysis of Injection Fluid and Brine: Provide an analysis of the injection fluid and brine water quarterly. Analysis will be for General Chemistry (Method 40 CFR 136.3) using EPA methods. Records shall be maintained and reported in the quarterly report.

10. Drum Storage: All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums should be stored on their sides with the bungs in place and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets must also be stored on an impermeable pad with curbing.
11. Process Areas: All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.

**Salty Dog shall install an impermeable pad and curb at the Brine loading/unloading area. Plans for this system shall be submitted to OCD for approval within 30 days of final approval of this permit. Final installation shall be no later than 90 days from final approval of this permit.**

12. Above Ground Tanks: All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new facilities or modifications to existing facilities must place the tank on an impermeable type pad within the berm.
13. Above Ground Saddle Tanks: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.
14. Labeling: All tanks, drums, and other containers should be clearly labeled to identify their contents and other emergency information necessary if the tank were to rupture, spill, or ignite.
15. Below Grade Ponds/Pits/Tanks/Sumps: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All below grade tanks, sumps and pits must be tested annually, except systems that have secondary containment with leak detection. These systems with leak detection shall have a weekly inspection of the leak detection to determine if the primary containment is leaking. Results of tests and inspections shall be maintained at the facility covered by this discharge permit and available for NMOCD inspection. Any system found to be leaking shall be reported pursuant to Item # 20. Permit holders may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing.

Records shall be maintained and reported in the quarterly report.

16. Underground Process/Wastewater Lines: All underground process/wastewater pipelines must be approved by the OCD prior to installation and must be tested to demonstrate their mechanical integrity every five (5) years. Results of such tests shall be maintained at the facility covered by this discharge plan and available for NMOCD inspection. Permit holders may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing.

Records shall be maintained and reported in the quarterly report.

17. Class V Wells: No Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be approved for construction and/or operation unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD regulated facilities, which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only must be permitted by the New Mexico Environment Department.
18. Well Work Over Operations: API # 30-025-26307-00-00 OCD approval will be obtained from the Director prior to performing remedial work, pressure test or any other Work over. Approval will be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103.A.) with appropriate copies sent to the OCD Environmental Bureau and District Office.
19. Housekeeping: All systems designed for spill collection/prevention will be inspected to ensure proper operation and to prevent overtopping, leakage, spillage or system failure. Records shall be maintained showing who inspected the facility, date of inspection and problems found. Problems found shall be corrected within 48 hours and noted. The results shall be reported in the quarterly report.
20. Spill Reporting: All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Hobbs District Office and Santa Fe Office. A summary of all leaks and spills shall be reported in the quarterly report.
21. Waste Disposal: All wastes will be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous may be disposed of at an OCD approved facility upon proper waste

determination per 40 CFR Part 261. Any waste stream that is not listed in the discharge will be approved by OCD on a case-by-case basis.

Rule 712 Waste: Pursuant to Rule 712, disposal of certain non-domestic waste is allowed at solid waste facilities permitted by the New Mexico Environment Department as long as the waste stream is identified in the discharge, and existing process knowledge of the waste stream does not change without notification to the Oil Conservation Division.

A summary of all waste disposed of shall be reported in the quarterly report.

22. Transfer of Discharge Plan: The OCD will be notified prior to any transfer of ownership, control, or possession of a facility with an approved discharge plan. A written commitment to comply with the terms and conditions of the previously approved discharge plan must be submitted by the purchaser and approved by the OCD prior to transfer.
23. Closure: The OCD will be notified when operations of the facility are discontinued for a period in excess of six months. Prior to closure of the facility a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.
24. OCD Inspections: Additional requirements may be placed on the facility based upon results from OCD inspections.
25. Vadose Zone and Water Pollution: The previously submitted investigation(s) and remediation plans were submitted pursuant to the discharge permit and all future discoveries of contamination will be addressed through the discharge permit. Salty Dog shall abide by all previous and future requirements issued by OCD. Failure to comply will result in civil penalties.
  - A. Groundwater Report: A Quarterly report will be submitted to the OCD by the first day of January, April, July, and October of each year. All monitoring wells, water wells and recovery wells shall be sampled and analyzed for General Chemistry using EPA approved methods. After four quarters, a request may be made to reduce the sampling to contaminants of concern that exceed the New Mexico groundwater standards. The groundwater reports shall contain the following information:
    - i. A description of the monitoring and remediation activities, which occurred during the quarter including conclusions and recommendations for addressing existing and newly discovered contamination.

- ii. A chronologic summary table listing all laboratory analytic results of all monitoring and recovery points for contaminants of concern. Copies of the most recent laboratory analytical data sheets shall also be submitted.
- iii. A water table potentiometric elevation map using the water table elevation of the ground water in all wells. This map shall show well locations, pertinent site features, and the direction and magnitude of the hydraulic gradient using elevation contour lines.
- iv. Plots of water table elevation vs. time for each ground water monitoring point.
- v. A map showing all pertinent features such as brine well area, brine pond area, buildings, playa lakes, location of numbered fresh water wells, all monitor and recovery wells and isopleth lines for contaminants of concern.
- vi. The volume of liquid recovered in the recovery wells during each quarter and the total recovered to date.
- vii. Electronic filing: OCD would like to encourage reporting in an acceptable electronic format.

**B. Additional Requirements:**

- i. Salty Dog shall notify the OCD Santa Fe and local district office at least 2 weeks in advance of all scheduled activities such that the OCD has the opportunity to witness the events and split samples.
- ii. Salty Dog shall submit an investigation and remediation plan for OCD approval within 15 days of the discovery of the exceedance of a WQCC standard in any down gradient monitor well or fresh water well where contaminant concentrations did not exceed WQCC standards during the preceding monitoring event.
- iii. Salty Dog shall investigate the vadose zone and groundwater contamination around the Brine Pond and loading/unloading area. The result shall be reported in the quarterly reports with conclusions and recommendations for remediation.

2004-10-14 10:00 AM

- iii. Salty Dog shall continue the groundwater remediation at the Brine Well area. Additional groundwater recovery wells shall be installed where contaminant concentrations exceed the groundwater standards. This recovery system shall be installed no later than 30 days after final approval of this permit.
- 26. Storm Water: Stormwater runoff controls shall be maintained. As a result of operations, if any water contaminant that exceeds the WQCC standards listed in 20 NMAC 6:2.3101 is discharged in any stormwater run-off, then immediate actions shall be taken to mitigate the effects of the run-off, notify the OCD within 24 hours, and modify the discharge to include a formal stormwater run-off containment and submit for OCD approval within 15 days.
- 27. Quarterly Report: A Quarterly report will be submitted to the OCD by the first day of January, April, July, and October of each year. The report shall contain the following information:
  - A. All information as required in condition # 25 above and sub-items.
  - B. Summary of all leaks, spills and releases and corrective actions taken.
  - C. A Summary of all well activity, work-over, pressure test.
  - D. Each permit condition shall be addressed in the quarterly report.
- 28. Certification: **Salty Dog Inc.** by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. **Salty Dog Inc.** further acknowledges that these conditions and requirements of this permit may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

Conditions accepted by: **Salty Dog Inc.**

PITER BERGSTEIN  
Company Representative- print name

[Signature] Date 10/26/04  
Company Representative- Sign

Title PRESIDENT



New Search

# SALTY DOG, INC.

SCC Number: 1009174  
 Tax & Revenue Number: 01881594004  
 Incorporation Date: APRIL 16, 1979, in NEW MEXICO  
 Corporation Type: DOMESTIC PROFIT  
 Corporation Status: INACTIVE DUE TO REVOKED & BEYOND APPEAL PERIOD  
 Good Standing:  
 Purpose: WATER SALES

## CORPORATION DATES

Taxable Year End Date: 12/31/98  
 Filing Date:  
 Expiration Date:

## SUPPLEMENTAL POST MARK DATE

Supplemental:

## MAILING ADDRESS

PO BOX 1438 HOBBS , NEW MEXICO 88240

## PRINCIPAL ADDRESS

816 NW COUNTY RD. HOBBS NEW MEXICO 88240

## PRINCIPAL ADDRESS (Outside New Mexico)

## REGISTERED AGENT

**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit B**

JACK CLARK

816 NW COUNTY RD HOBBS NEW MEXICO 88240

Agent Designated:

Agent Resigned:

### COOP LICENSE INFORMATION

Number:

Type:

Expiration Year:

### OFFICERS

President: CLARK, JACK

Vice President: CLARK, JACK

Secretary: SAME

Treasurer: SAME

### DIRECTORS

Date of Election of Directors: 12/31/97

CLARK, JACK

District I - (505) 393-6161  
 P.O. Box 1980  
 Hobbs, NM 88241-1980  
 District II - (505) 748-1283  
 811 South First  
 Artesia, NM 88210  
 District III - (505) 334-6178  
 1000 Rio Brazos Road  
 Aztec, NM 87410  
 District IV - (505) 827-7131

State of New Mexico  
 Energy Minerals and Natural Resources Department  
 Oil Conservation Division  
 2040 South Pacheco Street  
 Santa Fe, New Mexico 87505  
 (505) 827-7131

Form C-141  
 Originated 2/13/97

Submit 2 copies to  
 Appropriate District  
 Office in accordance  
 with Rule 116 on  
 back side of form

Release Notification and Corrective Action

OPERATOR

Initial Report  Final Report

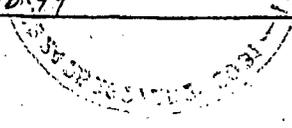
Name <i>Salty Dog, Inc.</i>		Contact <i>Terry Wallace</i>	
Address <i>P.O. Box 2724 Lubbock TX 79408</i>		Telephone No. <i>505-393-8352</i>	
Facility Name <i>Salty Dog</i>		Facility Type <i>Brine Water station</i>	
Surface Owner <i>Peter Bergstein</i>	Mineral Owner <i>Squires</i>	Lease No. <i>Brine 1</i>	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<i>J</i>	<i>5</i>	<i>193</i>	<i>36E</i>	<i>1980</i>	<i>South</i>	<i>1980</i>	<i>East</i>	<i>Lea</i>

NATURE OF RELEASE

Type of Release <i>Brine Water</i>	Volume of Release	Volume Recovered <i>N/A</i>
Source of Release <i>Hole in Casing</i>	Date and Hour of Occurrence <i>July 29 1999</i>	Date and Hour of Discovery
Was Immediate Notice Given? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom? <i>Gary Wink OCD</i>	
By Whom? <i>Snyder Ranches</i>	Date and Hour <i>July 30 1999</i>	
Was a Watercourse Reached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	
If a Watercourse was Impacted, Describe Fully. (Attach Additional Sheets If Necessary) <i>Snyder Ranches has a Fresh water well approximately 150 yards from Brine Well. A Representative informed Mr. Wink that water was salty. Test were done to determine salt in Fresh water.</i>		
Describe Cause of Problem and Remedial Action Taken. (Attach Additional Sheets If Necessary) <i>Well was shut in. Pulling Unit set up. Packer was set to determine where hole was. Squeeze job-Fix hole. Ran 5 1/2 casing and cemented to surface</i>		
Describe Area Affected and Cleanup Action Taken. (Attach Additional Sheets If Necessary) <i>A New Fresh Water well was drilled 150 yds N.E. of Existing water well. Water is O.K.</i>		
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Signature <i>Terry Wallace</i>	OIL CONSERVATION DIVISION	
Printed Name <i>Terry Wallace</i>	Approved by District Supervisor:	
Title <i>Manager</i>	Approval Date:	Expiration Date:
Date <i>9-8-99</i>	Phone <i>505-393-8352</i>	Conditions of Approval:
		Attached <input type="checkbox"/>



WQCC-ACO#2  
 Salty Dog, Inc.  
 OCD Exhibit C

**Price, Wayne**

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**From:** Price, Wayne  
**Sent:** Wednesday, August 04, 1999 2:45 PM  
**To:** Anderson, Roger; Bill Olson  
**Cc:** Williams, Chris  
**Subject:** Salty Dog Brine St. BW-008

District I has received a groundwater complaint from Larry Squires landowner. Mr. Squires has a fresh water well in very close proximity 100-200 feet to the brine well. This well has just come up contaminated with approximately 5700 ppm of chlorides

District I ask Salty Dog owner to shut well in until it can be checked!

History: Approximately 6 months to one year ago District I notify us that Sonny's trucking Co. operator of brine well went out of business. 3-4 months ago Gary Wink Called and lets us know that someone was operating the brine system. Gary investigated and found out it was Piter Bergstein of Lubbock, Texas. I called Mr. Bergstein and notified him that he is required to make notification concerning the transfer of the Brine St. Discharge Plan. He indicated he would do that. As of this date we have not received anything from him, also the discharge plan has since expired!

I recommend we keep Salt Dog shut in until they receive an approved plan!

Please advise!



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

August 10, 1999

*Wayne Price* SEP 7 1999

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. Z 357 870 120**

Mr. Piter Bergstein  
Salty Dog Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

RECEIVED  
SEP 15 1999  
Environmental Bureau  
Oil Conservation Division

Re: Salty Dog, Inc. Water Station  
Discharge Plan BW-008

Dear Mr. Bergstein:

The groundwater discharge plan BW-008 for the Salty Dog, Inc. Water Station, located in Section 5, Township 19 South, Range 36 East, NMPM, Lea County, New Mexico expired on April 18, 1999. Salty Dog Inc. is hereby ordered to cease operations until they have obtained an approved discharge plan pursuant to section 3-109.A. of the Water Quality Control Commission Regulations. The NMOCD will require the following information if Salty Dog Inc. wishes to renew its operations.

1. Submit a discharge plan application pursuant to section 3-106 of the Water Quality Control Commissions Regulations along with a \$50.00 filing fee. NMOCD has enclosed a blank form and a copy of the guidelines for your use.
2. Submit a completed Form C-103 for NMOCD approval to investigate the mechanical integrity of the well and a plan to determine cavity configuration.
3. Submit all past quarterly reports.
4. The NMOCD Environmental Bureau records in Santa Fe, NM indicate the last mechanical integrity test was performed on October 11, 1995. Please provide all records pertaining to this well, i.e. testing, work-over, releases, etc.

If Salty Dog, Inc does not wish to continue operations then please submit a closure plan for NMOCD approval by September 15, 1999.

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7152).

Sincerely Yours,

Roger C. Anderson  
Environmental Bureau

cc: OCD Hobbs District

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit D



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

September 15, 1999

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. Z 274 520 503**

Mr. Piter Bergstein  
Salty Dog Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

Re: Salty Dog, Inc. Water Station  
Discharge Plan BW-008 Renewal Application

Dear Mr. Bergstein:

The groundwater discharge plan BW-008 renewal application for the Salty Dog, Inc. Water Station, located in Section 5, Township 19 South, Range 36 East, NMPM, Lea County, New Mexico is incomplete in the following areas:

1. The application and cover letter are not signed. Please sign and send originals.
2. Salty Dog only sent one copy. Please send two complete copies to the Santa Fe office and one to the district office.

In order for the New Mexico Oil Conservation to proceed please provide the above information. If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Sincerely Yours,

Wayne Price-Pet. Engr. Spec.  
Environmental Bureau

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit E

591

State of New Mexico  
Energy, Minerals and Natural Resources Department  
OIL CONSERVATION DIVISION  
P.O. Box 2088  
Santa Fe, NM 87501

**DISCHARGE PLAN APPLICATION FOR BRINE EXTRACTION FACILITIES**  
(Refer to OCD Guidelines for assistance in completing the application.)

NEW       RENEWAL

- I. FACILITY NAME: Salty Dog Brine Station
- II. OPERATOR: Salty Dog, Inc.  
ADDRESS: PO Box 2724 Lubbock, TX 79408  
CONTACT PERSON: Pieter Bergstein PHONE: 741-1080
- III. LOCATION:   /4/4 Section 5 Township 19 Range 36 East  
*Submit large scale topographic map showing exact location.*
- IV. Attach the name and address of the landowner of the facility site.  
Salty Dog, Inc. PO Box 2724 Lubbock, TX 79408
- V. Attach a description of the types and quantities of fluids at the facility.  
Brine water & Fresh water
- VI. Attach a description of all fluid transfer and storage and fluid and solid disposal facilities.  
Fresh Water-2 - 750 bbl. capacity welded tanks, brine-5,000 bbl. lined
- VII. Attach a description of underground facilities (i.e. brine extraction well). earth pit.
- VIII. See attached for description of underground facilities.  
Attach a contingency plan for reporting and clean-up of spills or releases.
- IX. See attached for contingency plan for reporting & clean-up of spills.  
Attach geological/hydrological evidence demonstrating that brine extraction operations will not adversely impact fresh water. See attached
- X. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.

XI. CERTIFICATION

*I hereby certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.*

Name: Pieter A. Bergstein Title: President

Signature: \_\_\_\_\_ Date: 9/1/99

DISTRIBUTION: Original and one copy to Santa Fe with one copy to appropriate Division District Office.



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

November 9, 1999

CERTIFIED MAIL  
RETURN RECEIPT NO. P 410 425 202

Mr. Piter Bergstein  
Salty Dog Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

Re: Salty Dog Inc. Water Station  
Discharge Plan BW-008 Renewal Application

Dear Mr. Bergstein:

The New Mexico Oil Conservation Division (NMOCD) requires the additional information in order to process the renewal application:

1. The renewal application was not signed. Please provide with signature.
2. Please provide to NMOCD Environmental Bureau the signed approved copy of the C-103's for the recent brine well work over. Please include pressure charts with detail explanation on how test was performed, a typed written detailed description and well bore schematic showing the construction and completion of the well. Please indicate where leaks were found in the casing and how they were repaired.
3. Salty Dog Inc. shall determine and provide the new maximum operating injection pressure, new average flow rates and formation fracture pressures.
4. Please provide a plan to address how Salty Dog Inc. will monitor the brine pond for leaks.
5. Salty Dog Inc. shall submit for NMOCD approval an abatement plan pursuant to 20 NMAC 6.2.4105.6 to investigate and abate the groundwater contamination caused by the recent brine well casing leak.

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Sincerely Yours,

Wayne Price-Pet. Engr. Spec.  
Environmental Bureau

cc: OCD Hobbs Office

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit F



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

January 05, 2000

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. Z 142-564-922**

Mr. Piter Bergstein  
Salty Dog Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

Re: Salty Dog Inc. Water Station  
Discharge Plan BW-008 Renewal Application

Dear Mr. Bergstein:

On November 08, 1999 the New Mexico Oil Conservation Division (NMOCD) requested additional information in order to process the renewal application for the Salty Dog Inc. Water Station. On January 03, 2000 the NMOCD received your response and after reviewing the submitted information, it appears Salty Dog Inc.'s response is still deficient. Below are the bullet items that were requested in the November 08, 1999 letter and below each item is NMOCD's response.

Item 1. The renewal application was not signed. Please provide with signature.

Response: Salty Dog, Inc. submitted the signed applications. No further action required on this item.

Item 2. Please provide to NMOCD Environmental Bureau the signed approved copy of the C-103's for the recent brine well work over. Please include pressure charts with detail explanation on how test was performed, a typed written detailed description and well bore schematic showing the construction and completion of the well. Please indicate where leaks were found in the casing and how they were repaired.

Response: The pressure chart date does not match the C-103 description. The C-103 indicated the test was ran on 8/24/99. The chart is dated 8/25/99 and does not contain sufficient information. Please provide a detail explanation on how test was performed and cross-reference the chart to this explanation. Please include well name and legal location, recorder information, OCD witness signature, and send in original chart.

The well bore sketch appears to be wrong. The drawing shows an outside water protection casing. After reviewing the file it appears there is no outside casing for water protection. Please correct and re-submit.

Item 3. Salty Dog Inc. shall determine and provide the new maximum operating injection pressure, new average flow rates and formation fracture pressures.

Response: Salty Dog, Inc. provided the maximum operating injection pressure but did not provide the estimated average flow rates and formation fracture pressure. Please provide this information.

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit G

Mr. Piter Bergstein

01/05/00

page 2

Item 4. Please provide a plan to address how Salty Dog Inc. will monitor the brine pond for leaks.

Response: Salty Dog Inc. stated " In the event a dike should leak, all drainage would be captured in a natural basin. It is located approximately 1200' south-southwest of the brine station (see topographic map-figure 1)." Please note playa lakes are considered waters of the state and therefore NMOCD cannot accept your plan. Please propose another plan which includes controls to prevent run-off from the facility site, such as berming etc.

In addition, please mark the location of the brine water station and the brine well on the topographic map and re-submit.

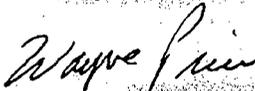
Item 5. Salty Dog Inc. shall submit for NMOCD approval an abatement plan pursuant to 20 NMAC 6.2.4105.A.6 to investigate and abate the groundwater contamination caused by the recent brine well casing leak.

Response: Salty Dog, Inc.'s commitment to modify the discharge to include ground-water investigation cannot be accepted because it does not follow the procedures listed in 20 NMAC 6.2.4105.A.6 to investigate and remediate (abate) groundwater contamination. The plan submitted was only for investigation and monitoring, no commitment to remediate (abate) groundwater was included. Please re-submit and commit to modifying the discharge plan to include investigation and remediation (abatement) of groundwater pursuant to the above New Mexico Water Quality Control Commission (WQCC) Regulation 20 NMAC 6.2.4105.A.6.

Please note facilities under the authority of a ground-water discharge plan which has been approved by the NMOCD is exempted from parts of the WQCC regulations (Subpart IV -Prevention and Abatement of Water Pollution). Pursuant to 20 NMAC 6.2.4105.A.6, this exemption allows the discharge plan operator to investigate and remediate (abate) ground-water contamination under a less rigorous procedure "provided that such abatement is consistent with the requirements and provisions of WQCC sections 4101, 4103, 4106.C, 4106.E, 4107 and 4112 of this part." The complete New Mexico Water Quality Control Commission Regulations may be obtained off the Internet at address ([www.nmenv.state.nm.us/](http://www.nmenv.state.nm.us/)).

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Sincerely Yours,



Wayne Price-Pet. Engr. Spec.  
Environmental Bureau

cc: OCD Hobbs Office

FEB 10 2000

February 4, 2000

NEW MEXICO CONSERVATION DIVISION

New Mexico Oil Conservation Division  
Environmental Bureau  
2040 South Pacheco Street  
Santa Fe, NM 87505

Re: Salty Dog Water Station  
Discharge Plan BW-008 Renewal Application  
Response to letter dated January 5, 2000

Dear Mr. Price:

Attached please find responses to those requests for additional information raised in your letter dated January 5, 2000. Mr. Piter Bergstein, owner/operator of the facility has agreed to all items listed within.

The construction of the protective secondary berm on the outside of the southwest corner of the existing berm surrounding the brine pond will, if approved, begin immediately. Construction should be completed shortly thereafter.

The revised groundwater investigation and remediation (abatement) work will begin as soon as feasible, subject to approval.

As you review these responses and the discharge plan, we would like permission to resume operations at the facility. Please let us know at your earliest convenience if that is acceptable.

I appreciate your time and your patience in this manner and apologize for any inconvenience that the Salty Dog facility may have caused. If I can provide any further information or clarification, please call.

Sincerely,

  
Eddie Seay, agent

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit H

Discharge Plan BW-008  
Salty Dog Inc. Water Station  
Lea County, NM

Response to the request for additional information, letter dated January 5, 2000:

- Item 1. No further action requested
- Item 2. The description of form C-103 submitted in the permit inadvertently stated that the date that the mechanical integrity test was performed was August 24, 1999. The date of the test was actually August 25, 1999, which corresponds to the date contained on the pressure test chart. The original pressure test which includes the well name, legal location, recorder information and OCD witness signature is attached.

How was the test performed?

The mechanical integrity test was performed according to OCD guidelines and accepted industry practices. A retrievable bridge plug was set at the bottom of the casing. The casing was loaded with water and pressure tested at 300 psi, and a pressure meter was used to record the pressure on the well. The resulting pressure was plotted on a chart. As shown on the attached chart, the pressure stabilized and held for seven hours.

The well bore sketch as originally submitted inadvertently identified surface casing and a liner. In reality, the Salty Dog Brine Supply Well # 1 has a 8 5/8 inch production casing and a 5 1/2 inch casing lining. There is no surface casing on this well.

- Item 3: The maximum pressure for the injection is 275 psi.  
The average flow rate for the facility is 35 barrels per hour.  
According to the OCD office in Hobbs, the formation fracture pressure for the salt section varies throughout Lea County from 900 to 1100 psi.

- Item 4: A secondary berm will be constructed outside the southwest corner of the existing primary protective berm surrounding the brine pond in order to protect the identified playa lake from leaks in the primary berm, in case of accidental leaks or overflows.

A topographic map is attached which identifies the location of the brine water station and the brine well.

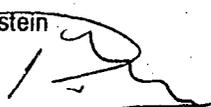
- Item 5: Salty Dog commits to modifying the discharge plan to include investigation and remediation (abatement) of the groundwater, pursuant to the applicable rules and regulations of the state.

CERTIFICATION

I hereby certify under penalty of law that I have personally examined and am familiar with the information submitted in this document. I do agree and adhere to all listed therein.

NAME: Piter Bergstein

TITLE: Owner/operator

SIGNATURE: 

DATE: 2/7/00

RECEIVED  
FEB 17 2000  
NEW MEXICO CONSERVATION DIVISION

February 14, 2000

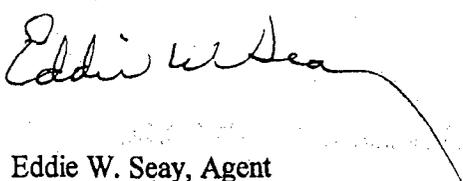
New Mexico Oil Conservation Division  
Environmental Bureau  
ATTN: Wayne Price  
2040 South Pacheco St.  
Santa Fe, NM 87505

RE: Salty Dog Water Station BW-008

Dear Mr. Price:

Find within the revised well bore sketch as we discussed. If you have any questions, please call.  
Thank you for your attention on this permit.

Sincerely,



Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

# WELL BORE SKETCH

Hole at 60'

Hole Size 12 1/4"

## CASING:

Size 8 5/8" Weight 24# & 32# Grade J-55

Set at 1877' with 850 Sacks Cement

Circulate 200 Sacks to Surface

Hole at 250'

## CASING LINER:

Size 5 1/2" Weight 15.50# Grade J-55

Set at 1829' with 275 Sacks Cement

Circulate 10 bbls Sacks to Surface

## TUBING:

Size 2 7/8" Weight 6.5# Grade J-55

Number of Joints 82 Set at 2534'

Bottom arrangement: Open ended with notched collar

Salt Cavity

March 4, 2000

8

CONSERVATION DIVISION

RECEIVED

MAR 08 2000

Environmental Bureau  
Oil Conservation Division

NMOCD Environmental Bureau  
ATTN: Wayne Price  
2040 South Pacheco  
Santa Fe, NM 87505

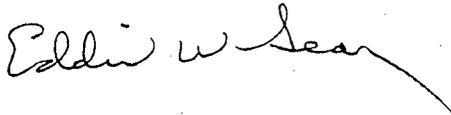
RE: Salty Dog Water Investigation

Dear Mr. Price:

At your request and according to the proposed plan, the operator of Salty Dog Brine wishes to drill a monitor well and test the water formation for chloride contamination. The location for the proposed well will be located approximately 15 ft. SSE of the brine well. The well will be completed according to OCD guidelines. A well bore schematic is within. The well will be developed and tested for TDS, chloride and conductivity. All results will be sent to OCD for review. The well will be left in place for future monitoring.

If you have any questions or need additional information, please call.

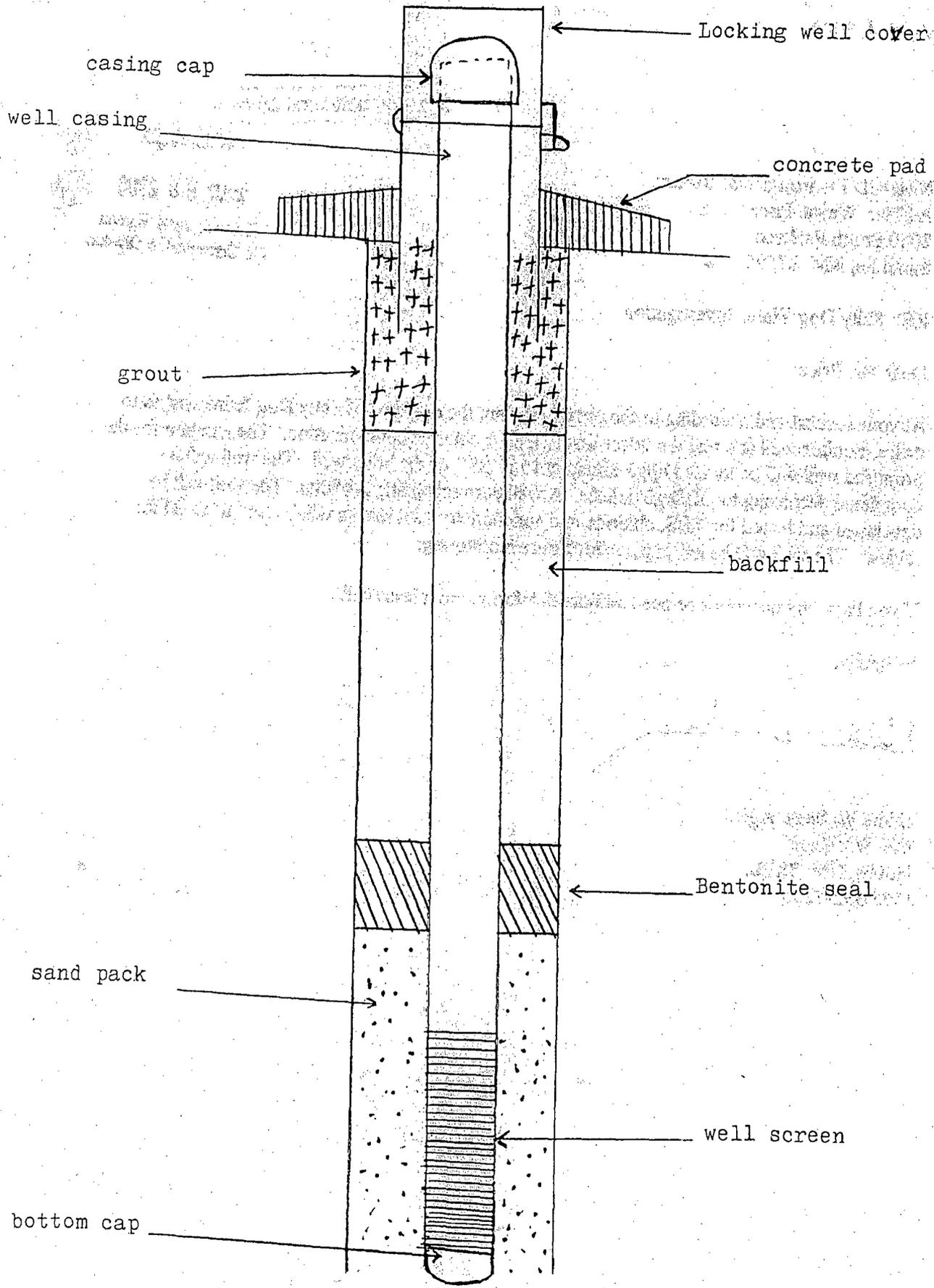
Sincerely,



Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit I

# PROPOSED MONITOR WELL SCHEMATIC



## WELL INFORMATION

3" Sch 40 PVC Casing  
20' of well screen with .10 slot  
20-40 sand  
bentonite pellets  
conventional cement

The well will be drilled to the base of the water formation approximately 75 ft., and completed by running 3" PVC casing with 20' of .10 slot screen. A sand pack will be put behind casing to five feet above the top of the screen. A ten foot bentonite seal will be put above the sand pack. Ambient backfill material will be used for the top of the bentonite to within 20 ft. of surface. Cement grout will be put from 20 ft. to surface. A pad and locking device will be installed over the well. The well will be developed and tested.

**Price, Wayne**

---

**From:** Price, Wayne  
**Sent:** Friday, April 07, 2000 12:59 PM  
**To:** 'SMTP:seay04@leaco.net'  
**Subject:** RE: Salty Dog Monitor Well

TO: Salty Dog Inc.

The monitor well installation plan dated March 4, 2000 submitted by Eddie Seay is hereby approved subject to the following conditions:

1. Salty Dog Inc. will notify the OCD Santa Fe office and the OCD District office at least 48 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and/or split samples during OCD's normal business hours.
2. The well(s) shall be developed after construction using EPA approved procedures.
3. No less than 48 hours after the well(s) are developed, ground water from all monitor well(s) shall be purged, sampled and analyzed for concentrations of total dissolved solids (TDS) and New Mexico Water Quality Control Commission (WQCC) metals and major cations and anions using EPA approved methods and quality assurance/quality control (QA/QC) procedures.
4. All wastes generated during the investigation shall be disposed of at an OCD approved facility.
5. Salty Dog Inc. shall submit the results of the investigation to the OCD Santa Fe Office by **May 15, 2000** with a copy provided to the OCD Hobbs District Office and shall include the following investigative information:
  - a. A description of all investigation, remediation and monitoring activities which have occurred including conclusions and recommendations.
  - b. A geologic/lithologic log and well completion diagram for each monitor well.

Please be advised that NMOCD approval of this plan does not relieve Salty Dog, Inc. of liability should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve Salty Dog inc. of responsibility for compliance with any other federal, state, or local laws and/or regulations.

-----  
**From:** Rena Seay[SMTP:seay04@leaco.net]  
**Reply To:** Rena Seay  
**Sent:** Friday, April 07, 2000 9:40 AM  
**To:** Price, Wayne  
**Subject:** Salty Dog Monitor Well

April 7, 2000

Wayne Price NMOCD Environmental Dept.  
Santa Fe, NM

RE: Salty Dog Monitor Well

Dear Mr. Price:

As per our discussion of the proposed monitor well at Salty Dog Brine West of Hobbs, we will agree to alter

**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit J**

the proposed well completion by grouting or cementing the well from the top of the bentonite to surface instead of using backfill.  
Thank you for your time in this matter.

Sincerely,

Eddie W. Seay, Agent

**Price, Wayne**

---

**From:** null@leaco.net[SMTP:null@leaco.net]  
**Sent:** Friday, April 07, 2000 12:57 PM  
**To:** Price, Wayne  
**Subject:** Ack: "RE: Salty Dog Monitor Well"

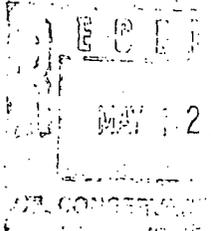
Your message headed:

RE: Salty Dog Monitor Well.

has been delivered to seay04@leaco.net.

This receipt does not guarantee that the mail has been read.

May 9, 2000



NMOCD Environmental Bureau  
ATTN: Wayne Price  
2040 S. Pacheco  
Santa Fe, NM 87505

RE: Salty Dog Monitor Well

Dear Mr. Price:

Find within this report data pertaining to the monitor well drilling and sampling near Salty Dog brine well. If you need any other information, please call.

Sincerely,

Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit K

## SALTY DOG MONITOR WELL

The drilling of the monitor well started on April 24, 2000, and completed on April 26, 2000. The well is located 15 ft. SSE of the brine well.

Started drilling with a 7 7/8" bit.

TD at 137'.

Encountered a perch zone of water at approximately 61', red clay at 84' to 88'. Then water sand at 88' and redbed at 135'.

Ran 5 1/2" pvc well pipe with 60' of .20 screen in well, top of screen at 75'. Sifted in small gravel behind casing to 65'. Poured 4 sacks of bentonite chips on top of gravel to 20'. Cemented from 20' to surface. Note well bore diagram.

April 26 to pump and sample.

Water level at 61'.

Ran in hole with 1 1/4" pvc and 1 1/2 horse pump. Pump and developed well until water clean. Start pumping well to extract 3 casing volumes, approximately 250 gal. All fluid put into transport for disposal. After pumping samples were taken and delivered to Cardinal Lab for analysis. The fluid pumped out was taken to Rice SWD for disposal.

From the review of the analytical data, it is determined that the groundwater around the brine well is impacted by salt or salt water probably from the casing leaks that were found in the brine well.

It is my recommendation that the monitor well be equipped with a pump and tubing. Tie the well into the flow line, which goes to the Salty Dog Brine Pit. Pump the well so as to hold the contaminant in place and also extract the salt water from the groundwater. The water will be metered and testing done on a weekly schedule. Whenever the salt concentration in the monitor well reaches a level that the OCD will accept, the monitor well will be used to circulate water down and make brine water at the brine well.

STATE ENGINEER OFFICE  
WELL RECORD

Section 1. GENERAL INFORMATION

(A) Owner of well SALTY DOG INC Owner's Well No. \_\_\_\_\_  
Street or Post Office Address \_\_\_\_\_  
City and State Hobbs NM

Well was drilled under Permit No. MONITOR Well and is located in the:  
a. 1980/5 1980/8 unit J  
of Section 5 Township 19 Range 34 N.M.P.M.

b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_

c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_  
Subdivision, recorded in \_\_\_\_\_ County.

d. X= \_\_\_\_\_ feet, Y= \_\_\_\_\_ feet, N.M. Coordinate System \_\_\_\_\_ Zone in the \_\_\_\_\_ Grant.

(B) Drilling Contractor GRIFFIN License No. WD 603

Address \_\_\_\_\_

Drilling Began 4/25 Completed 4/26 Type tools ROTARY Size of hole 7 7/8 in.

Elevation of land surface or \_\_\_\_\_ at well is \_\_\_\_\_ ft. Total depth of well 137 ft.

Completed well is  shallow  artesian. Depth to water upon completion of well 60 ft.

Section 2. PRINCIPAL WATER-BEARING STRATA

Depth in Feet		Thickness in Feet	Description of Water-Bearing Formation	Estimated Yield (gallons per minute)
From	To			
<u>61</u>	<u>86</u>	<u>25</u>	<u>BROWN SANDSTONE SOFT</u>	
<u>88</u>	<u>135</u>	<u>47</u>	<u>Reddish BROWN SANDSTONE SOFT</u>	<u>80 gpm</u>

Section 3. RECORD OF CASING

Diameter (inches)	Pounds per foot	Threads per in.	Depth in Feet		Length (feet)	Type of Shoe	Perforations	
			Top	Bottom			From	To
<u>5 1/2</u>	<u>PVC</u>	<u>—</u>			<u>137</u>	<u>NA</u>	<u>75</u>	<u>135</u>

Section 4. RECORD OF MUDDING AND CEMENTING

Depth in Feet		Hole Diameter	Sacks of Mud	Cubic Feet of Cement	Method of Placement
From	To				
<u>70</u>	<u>20</u>	<u>8"</u>	<u>4/3 SACKS</u>		<u>POURED DOWN ANNULES</u>
<u>20</u>	<u>0</u>	<u>8"</u>		<u>15 gals water</u> <u>3 SACKS</u>	<u>" " "</u>

Section 5. PLUGGING RECORD

Plugging Contractor \_\_\_\_\_

Address \_\_\_\_\_

Plugging Method \_\_\_\_\_

Date Well Plugged \_\_\_\_\_

Plugging approved by: \_\_\_\_\_

State Engineer Representative

No.	Depth in Feet		Cubic Feet of Cement
	Top	Bottom	
<u>1</u>			
<u>2</u>			
<u>3</u>			
<u>4</u>			

FOR USE OF STATE ENGINEER ONLY

Date Received \_\_\_\_\_

Quad \_\_\_\_\_ FWL \_\_\_\_\_ FSL \_\_\_\_\_

File No. \_\_\_\_\_ Use \_\_\_\_\_ Location No. \_\_\_\_\_

Rem	TO	TOTAL	
0	26	26	CALiche - INDURATED
26	49	23	SANDSTONE - Red - SOFT
49	58	9	CLAY - GREY
58	61	3	QUARTZITE - Red-White BROWN-MARbled
61	86	25	SANDSTONE - BROWN - W/B - SOFT
86	88	2	CLAY Red
88	135	47	SANDSTONE - Redish BROWN - W/B - SOFT
135	137	2	Red Bed T.D.

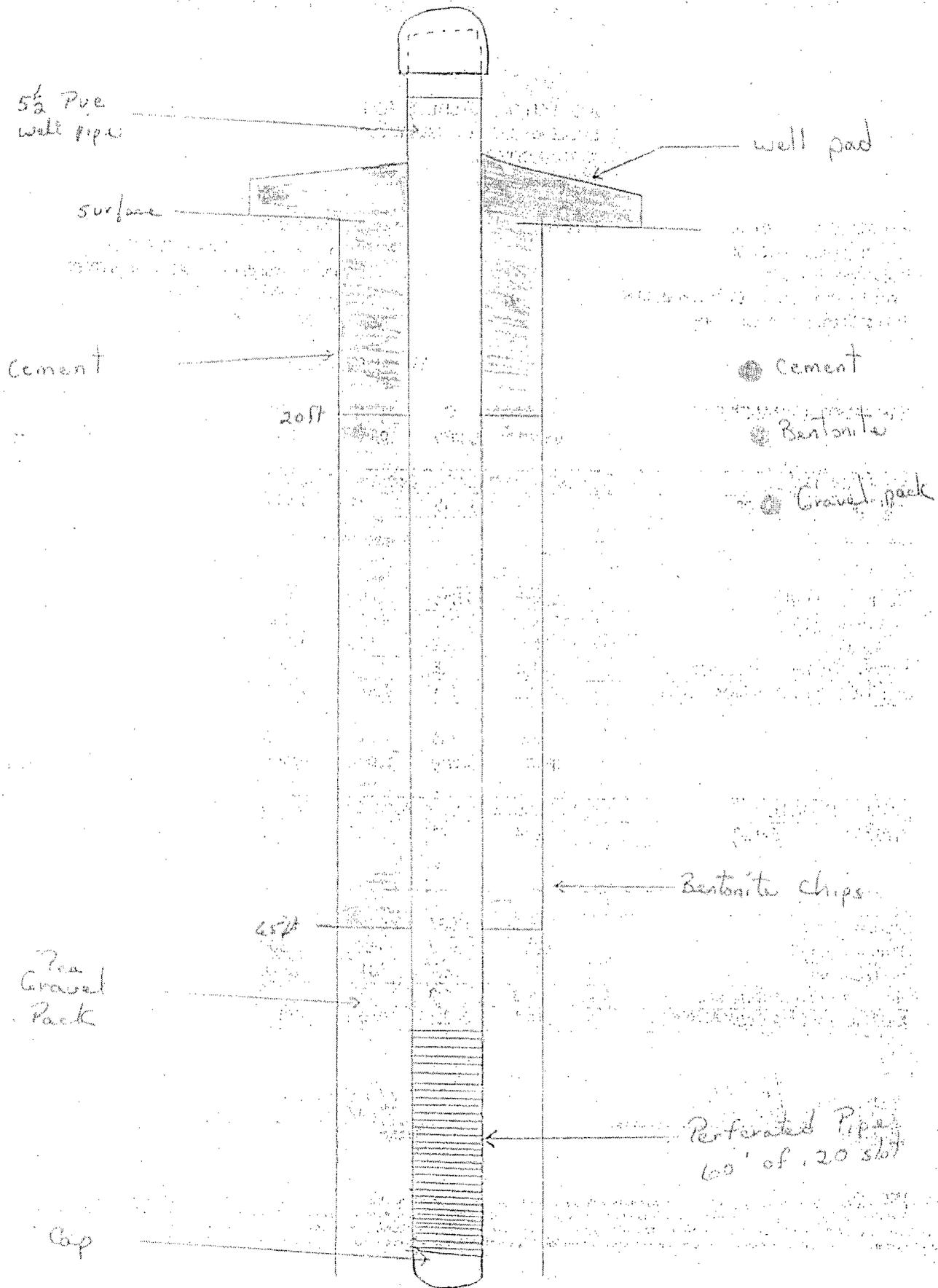
**Section 7. REMARKS AND ADDITIONAL INFORMATION**

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Carl L. Amelton  
Driller

INSTRUCTIONS: This form should be executed in triplicate, preferably typewritten, and submitted to the appropriate district office of the State Engineer. All sections, except Section 5, shall be answered as completely and accurately as possible when any well is drilled, repaired or deepened. When this form is used as a plugging record, only Section 1(a) and Section 5 need be completed.

# TRONATOR WELL





**ARDINAL  
LABORATORIES**

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

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

**ANALYTICAL RESULTS FOR**  
**EDDIE W. SEAY CONSULTING**  
 ATTN: EDDIE SEAY  
 601 W. ILLINOIS  
 HOBBS, NM 88242  
 FAX TO:

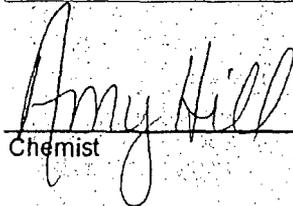
Receiving Date: 04/26/00  
 Reporting Date: 04/27/00  
 Project Number: 001  
 Project Name: SALTY DOG BRINE MW  
 Project Location: HOBBS-WEST

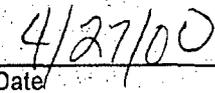
Sampling Date: 04/26/00  
 Sample Type: GROUNDWATER  
 Sample Condition: COOL AND INTACT  
 Sample Received By: BC  
 Analyzed By: AH

**TOTAL METALS**

LAB NUMBER	SAMPLE ID	Al (ppm)	Co (ppm)	Cu (ppm)	Fe (ppm)
ANALYSIS DATE:		04/27/00	04/27/00	04/27/00	04/27/00
H4831-1	SD #3	<5	1.349	<1	1.242
Quality Control		8.852	5.010	5.003	1.044
True Value QC		10.000	5.000	5.000	1.000
% Recovery		88.5	100.2	100	104.4
Relative Percent Difference		1.3	0.8	1.1	4.4
METHODS: EPA 600/04-79-020		202.1	219.1	220.1	236.1

		Mn (ppm)	Mo (ppm)	Ni (ppm)	Zn (ppm)
ANALYSIS DATE:		04/27/00	04/27/00	04/27/00	04/27/00
H4831-1	SD #3	0.264	<1	1.541	<10
Quality Control		2.002	1.087	5.072	0.503
True Value QC		2.000	1.000	5.000	0.500
% Recovery		100	108.7	101.4	100.6
Relative Percent Difference		1.8	4.3	2.7	9.0
METHODS: EPA 600/04-79-020		243.1	246.1	249.1	289.1

  
 Chemist

  
 Date

**H4831B.XLS**  
 PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



**ARDINAL  
LABORATORIES**

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

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

ANALYTICAL RESULTS FOR  
EDDIE W. SEAY CONSULTING  
ATTN: EDDIE SEAY  
601 W. ILLINOIS  
HOBBS, NM 88242  
FAX TO:

Receiving Date: 04/26/00  
Reporting Date: 04/28/00  
Project Number: 001  
Project Name: SALTY DOG BRINE MW  
Project Location: HOBBS-WEST

Sampling Date: 04/26/00  
Sample Type: GROUNDWATER  
Sample Condition: COOL AND INTACT  
Sample Received By: BC  
Analyzed By: AH

RCRA METALS

LAB NUMBER: SAMPLE ID	As ppm	Ag ppm	Ba ppm	Cd ppm	Cr ppm	Pb ppm	Hg ppm	Se ppm
ANALYSIS DATE:	04/27/00	04/27/00	04/27/00	04/27/00	04/27/00	04/27/00	04/28/00	04/27/00
H4831-1 SD #3	<0.1	0.084	2.295	0.215	<0.05	0.065	<0.002	<0.05
Quality Control	0.049	5.004	51.94	1.998	4.977	5.043	0.0039	0.210
True Value QC	0.050	5.000	50.00	2.000	5.000	5.000	0.0040	0.200
% Recovery	98	100	103.9	99.9	99.5	100.8	97.5	105
Relative Percent Difference	2.7	0.6	3.1	0.7	0.4	9.4	2.6	1.4
METHODS: EPA 600/4-79-020	206.2	272.1	208.1	213.1	218.1	239.1	245.1	270.2
METHODS: SW-846	7060A	7760A	7080A	7130	7190	7420	7470A	7740

*Amy Hill*  
Chemist

4/28/00  
Date

PLEASE READ: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



**ARDINAL  
LABORATORIES**

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

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

ANALYTICAL RESULTS FOR  
EDDIE W. SEAY CONSULTING  
ATTN: EDDIE SEAY  
601 W. ILLINOIS  
HOBBS, NM 88242  
FAX TO:

Receiving Date: 04/26/00  
Reporting Date: 05/02/00  
Project Number: 001  
Project Name: SALTY DOG BRINE MW  
Project Location: HOBBS-WEST

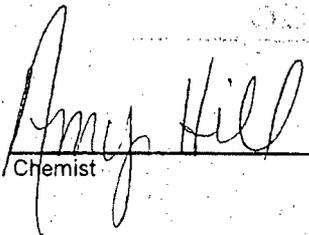
Sampling Date: 04/26/00  
Sample Type: GROUNDWATER  
Sample Condition: COOL AND INTACT  
Sample Received By: BC  
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (mS/cm)	T-Alkalinity (mgCaCO <sub>3</sub> /L)
ANALYSIS DATE:		04/28/00	04/28/00	04/28/00	04/28/00	04/28/00	04/28/00
H4831-1	SD #1 & #2	24374	257	233	164	87216	212
Quality Control		NR	48	53	5.08	1392	NR
True Value QC		NR	50	50	5.00	1413	NR
% Accuracy		NR	96.2	106.9	101.5	98.5	NR
Relative Percent Difference		NR	8.3	9.4	0.4	0.2	NR

METHODS:	SM3500-Ca-D3500-Mg E	8049	120.1	310.1
----------	----------------------	------	-------	-------

	Cl <sup>-</sup> (mg/L)	SO <sub>4</sub> (mg/L)	CO <sub>3</sub> (mg/L)	HCO <sub>3</sub> (mg/L)	pH (s.u.)	TDS (mg/L)	
ANALYSIS DATE:	04/28/00	04/28/00	04/28/00	04/28/00	04/28/00	04/29/00	
H4831-1	SD #1 & #2	37988	1038	0	259	7.57	59040
Quality Control		1000	102	NR	97.1	6.95	NR
True Value QC		1000	100	NR	1000	7.00	NR
% Accuracy		100	102	NR	97.1	99.3	NR
Relative Percent Difference		0.1	0	NR	-	0	NR

METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
----------	-------------	-------	-------	-------	-------	-------

  
Chemist

5/2/00  
Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates, or agents, out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Page      of     

**ARDINAL LABORATORIES, INC.**

2111 Beechwood, Abilene, TX 79603 101 East Marland, Hobbs, NM 88240  
 (915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

BILL TO										ANALYSIS REQUEST									
Company Name: <u>Eddie W Sean Consulting</u> Project Manager: <u>Eddie W Sean</u> Address: <u>601 W Illinois</u> State: <u>NM</u> Zip: <u>88240</u> City: <u>Hobbs</u> Phone #: <u>2-22-36</u> Fax #: <u>    </u> Project #: <u>901</u> Project Owner: <u>Patsy Bernstein</u> Project Name: <u>Sally Dog Brine MW</u> Project Location: <u>Hobbs - West</u> Sampler Name: <u>Eddie W Sean</u>										Company: <u>    </u> Attn: <u>    </u> Address: <u>    </u> City: <u>    </u> State: <u>    </u> Zip: <u>    </u> Phone #: <u>    </u> Fax #: <u>    </u>									
FOR LAB USE ONLY		PRESERV		MATRIX		SAMPLING		DATE		TIME		ID'S		Methods		Options		Amions	
Lab I.D.	Sample I.D.	GROUNDWATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE:	ICE/COOL	OTHER:	DATE	TIME							
H483-1	SD # 1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4/26	11:05	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
	SD # 2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4/26	11:05	<input checked="" type="checkbox"/>	<input type="checkbox"/>										
	SD # 3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4/26	11:05	<input checked="" type="checkbox"/>	<input type="checkbox"/>										

PLEASE NOTE: Liability and Damages: Cardinal's liability and that's exclusive remedy for any claim arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise, shall be limited to the amount paid by the client for the analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable services. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruption, loss of time, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Received By: Eddie W Sean Date: 4/26 Time: 1:45  
 Received By: (Lab Staff)      Date:      Time:       
 Delivered By: (Circle One)       
 Sampler - UPS - Bus - Other:       
 Checked By:      (Initials)  
 Sample Condition:       
 Yes  No   
 Phone Result:  Yes  No   
 Fax Result:  Yes  No   
 Add'l Phone #:       
 Add'l Fax #:       
 REMARKS:     

† Cardinal cannot accept verbal changes. Please fax written changes to 505-393-2476.

# RICE Operating Company

122 W. Taylor

Hobbs, N.M. 88240

(505) 393-9174

Well F-29

Salt Water Disposal

Date 4-26

Transporter ZIA

FROM Salty Dog  
Company

water well  
Lease

Bbls: 10

Driver Vince Bennett  
Plw

Truck No. 256 N<sup>o</sup> 034809

03-00-2000-2PT-33601



NEW MEXICO ENERGY, METALS and  
NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON  
Governor  
Jennifer A. Salisbury  
Cabinet Secretary

June 16, 2000

Lori Wrotenbery  
Director  
Oil Conservation Division

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. 5051 5628**

Mr. Piter Bergstein  
Salty Dog Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

Re: Salty Dog Inc. Water Station  
Discharge Plan BW-008 Monitor/Recovery Well

Dear Mr. Bergstein:

The New Mexico Oil Conservation Division (NMOCD) is in receipt of Salty's Dog's May 09, 2000 report submitted by Eddie W. Seay. After reviewing the report the NMOCD will require Salty Dog to submit a plan for OCD approval to determine the extent of the groundwater contamination. Please submit this plan by July 15, 2000.

The NMOCD also confirms Salty Dog's verbal request to start pumping the 4" recovery well. Salty Dog shall maintain records of the amount of contaminated water removed.

If you require any further information or assistance please do not hesitate to write or call me at (505-827-7155).

Sincerely Yours,

Wayne Price-Pet. Engr. Spec.  
Environmental Bureau

cc: OCD Hobbs Office  
Eddie Seay-Hobbs

**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit L**

July 12, 2000

NMOCD Environmental Bureau  
ATTN: Wayne Price  
2040 South Pacheco St.  
Santa Fe, NM 87505

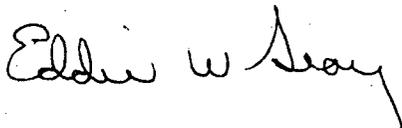
RE: Salty Dog Contamination Investigation

Dear Mr. Price:

Within is Salty Dogs' plan for further investigation of the salt water contamination of Salty Dog Brine Station.

If you have any questions or need additional information, please call.

Sincerely,



Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit M**

## SALTY DOG INVESTIGATION

As per the OCD request, a plan for determining the extent of the salt plume is listed.

- (1) Continue to monitor new drilled test well MW #1 volumes and CL.
- (2) Monitor up dip water wells.
- (3) It is proposed to drill additional test borings SE to determine extent of plume. The starting point will be 100 ft. SE of MW #1 and will continue moving SE until the edge of the plume is found.
- (4) Submit test taken and report to OCD.
- (5) Notify OCD prior to start.

It is planned to drill 5 1/4" hole, run 2" pvc with .10 slot screen, develop well with air and test water. If the water is contaminated, pull 2" pvc, grout hole and move another 100 ft., and continue this process until the plume has been defined. After the plume has been determined, the 2" will be left in place, it will be sand packed, bentonite and grouted according to specifications from MW #1. This will give us a well to monitor the movement of the salt plume.

We will continue to monitor the existing wells and monitor well and volumes pumped out. To date we have extracted a little over 6,000 bls. and the chloride has dropped to approximately 35,000. The offset and up dip water wells are both less than 100 ppm CL.

All updated test dates will be set with final report.

We can start this program as soon as we get approval and a rig becomes available.

N  
↓  
S

WATER RESOURCES DIVISION

Water Resources Division, State of California, Department of Water Resources

Water Resources Division, State of California, Department of Water Resources

Water Resources Division, State of California, Department of Water Resources

Water Resources Division, State of California, Department of Water Resources

Water Resources Division, State of California, Department of Water Resources

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Water Resources Division, State of California, Department of Water Resources

Water Resources Division, State of California, Department of Water Resources

Water Resources Division, State of California, Department of Water Resources

Water Resources Division, State of California, Department of Water Resources

Water Resources Division, State of California, Department of Water Resources

● Proposed Test wells

● new monitor well #1

Existing water wells

□ Brine wall



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON

Governor

Jennifer A. Salisbury

Cabinet Secretary

July 25, 2000

Lori Wrotenbery

Director

Oil Conservation Division

**CERTIFIED MAIL**

**RETURN RECEIPT NO. 5051 5222**

Mr. Piter Bergstein  
Salty Dog Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

Re: Salty Dog Inc. Water Station  
Discharge Plan BW-008  
Groundwater Contamination Investigation

Dear Mr. Bergstein:

The New Mexico Oil Conservation Division (OCD) is in receipt of the Salty Dog Inc. Investigation plan dated July 12, 2000 submitted by Eddie W. Seay, Agent. The plan is hereby approved with the following additional conditions:

1. Install a sufficient number of monitor wells to properly define the site specific groundwater flow gradient(s) and the extent of contamination from the source area. Once contamination has been defined there will be a minimum of one monitor well located between the source well and the farthest down gradient well(s). All exploratory groundwater bore holes shall be developed and remain open for a minimum of 24 hours and then purged five (5) well bore volumes of groundwater before collecting samples.
2. All new bore holes, monitor and recovery well(s) on site shall be sampled and analyzed for General Chemistry and WQCC metals.
3. Salty Dog Inc. shall have the option to plug the exploratory bore hole(s) with cement grout or complete as a monitor well. If bore hole(s) are complete as monitor well(s) then they must be completed pursuant to OCD standards.
4. Salty Dog Inc. will notify the OCD Santa Fe office and the OCD District office at least 72 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and/or split samples during OCD's normal business hours.

Oil Conservation Division \* 2040 South Pacheco Street \* Santa Fe, New Mexico 87505

Phone: (505) 827-7131 \* Fax (505) 827-8177 \* <http://www.emnrd.state.nm.us>

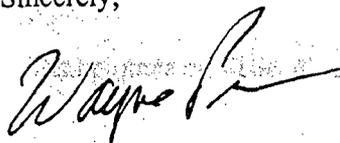
**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit N**

5. Salty Dog Inc. shall submit the results of the investigation to the OCD Santa Fe Office by September 30, 2000 with a copy provided to the OCD Hobbs District Office and shall include the following investigative information:

- a. A description of all investigation, remediation and monitoring activities which have occurred including conclusions and recommendations.
- b. A geologic/lithologic log and well completion diagram for each monitor well.
- c. A water table potentiometric map showing the location of the leaks and spills, excavated areas, monitor wells, and any other pertinent site features as well as the direction and magnitude of the hydraulic gradient.
- d. Isopleth maps for contaminants of concern which were observed during the investigations.
- e. Summary tables of all ground water quality sampling results and copies of all laboratory analytical data sheets and associated QA/QC data taken within the past year.
- f. The quantity and disposition of all recovered product and/or wastes generated.

Please be advised that NMOCD approval of this plan does not relieve Salty Dog Inc. of liability should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve Salty Dog Inc. of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Sincerely;



Wayne Price-Pet. Engr. Spec.

cc: OCD Hobbs Office

March 30, 2001

NMOCD Environmental Bureau  
ATTN: Wayne Price  
P.O. Box 6429  
1220 S. Saint Francis Drive  
Santa Fe, NM 87504

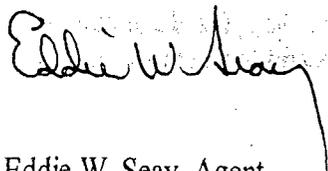
RE: Investigation, Salty Dog Brine

Mr. Price:

Find within information for additional work performed at Salty Dog Brine. As we talked about, two monitor wells and a test boring were drilled and tested. The reason for this additional work was to try and find the extent of the contamination plume. I feel this has been accomplished.

If you have any question or need additional information, please call.

Thanks,



Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit O**

SALTY DOG

Monitor Well #1

Located 100 ft. ESE of the brine well.  
Drilled to top of redbed 139' TD 140'.  
Completed with 2" well completion and locking box.  
Developed well and sampled.

Test Boring #1

Located 200 ft. ESE of the brine well.  
Drilled to top of redbed 144' TD 146'.  
Ran pipe, developed well, collected sample and plugged well.

Monitor Well #2

Located 500 ft. ESE of the brine well.  
Drilled to top of redbed 147' TD 148'.  
Completed with 2" well completion and locking box.  
Developed well and sampled.

SALTY DOG  
CONCLUSION

With the drilling of the recovery well and now the additional monitor wells and test boring, I believe that the contamination is staying in close proximity to the recovery well. By continuing to pump the contamination from the recovery well and using it through our brine system, it will not only clean up the fresh water, but will be put to a beneficial use. I think that samples should be taken on a quarterly schedule of the recovery well and both monitor wells, and reported to the OCD.





**ARDINAL  
LABORATORIES**

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

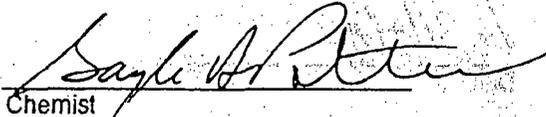
PHONE (505) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
EDDIE SEAY CONSULTING  
ATTN: EDDIE W. SEAY  
601 W. ILLINOIS  
HOBBS, NM 88242  
FAX TO:

Receiving Date: 02/26/01  
Reporting Date: 02/27/01  
Project Owner: P. BERNSTEIN (ZIA SALTY DOG)  
Project Name: SALTY DOG BRINE  
Project Location: WEST HOBBS

Sampling Date: SEE BELOW  
Sample Type: GROUNDWATER  
Sample Condition: COOL & INTACT  
Sample Received By: BC  
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Conductivity ( $\mu$ S/cm)	Cl (mg/L)
ANALYSIS DATE:		02/27/01	02/27/01
H5653-1	MW #1 (02/19/01)	66430	29000
H5653-2	MW #2 (02/23/01)	1455	408
H5653-3	T-#1 (02/20/01)	37807	15100
Quality Control		1489	992
True Value QC		1413	1000
% Recovery		105	99.2
Relative Percent Difference		0.3	3.9
METHODS: EPA 600/4-79-02		120.1	325.3

  
Chemist

02/27/2001  
Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates, or any other person arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

H5653.XLS



Section 6. LOG OF HOLE

Depth in Feet		Thickness in Feet	Color and Type of Material Encountered
From	To		
1'	5'	5'	BROKEN WEATHERED CALICHE
5'	28'	23'	CALICHE INDURATED - GREY
28'	37'	9'	QUARTZITE - HARD - RED BROWN
37'	49'	12'	SANDSTONE - SOFT - TAN
49'	51'	2'	QUARTZITE - HARD - WHI.
51'	54'	3'	CLAY - Red BROWN
54'	102'	48'	SANDSTONE - SOFT - TAN - W/B
102'	104'	2'	CLAY - Red - BROWN
104'	136'	32'	SANDSTONE - SOFT - TAN - W/B
136'	139'	3'	SANDSTONE - SOFT - Red - BROWN - W/B
139'	140'	1'	Red Bed - T.D
			installed 20 FT. dia slot 2" PVC well screen and 119' + 3' 2" PVC riser pipe
			Backfill w/ Brady sand to 112 FT.
			Placed bentonite chips from 112 FT to 26" below surface - install well guard and cement to top of surface
			Develop with air until clean.
			BORE FROM SURFACE TO 4' used 8 3/4" bit
			BORE FROM 4' TO 140' used 5 1/2" bit

Section 7. REMARKS AND ADDITIONAL INFORMATION

MONITOR WELL NO. I 100 FT FROM REM. WELL #1  
 LAT. 32° - 41.30 N. CO. Griffin well serv.  
 LON. 103° - 22.45 W. Driller Carl Smelcer  
 WD 603

Company Drilled for:

Zia Transportation

Salty Dog

# Monument Type Monitor Well Diagram

Location:

Sect 5 Tws 19 Rng 36 E

Job Number:

Installation Date:

Monitor Well Number:

Feb. 16

mw #1

140

Bore Size:

5 1/2

Casing Size:

2

Casing Elevation:

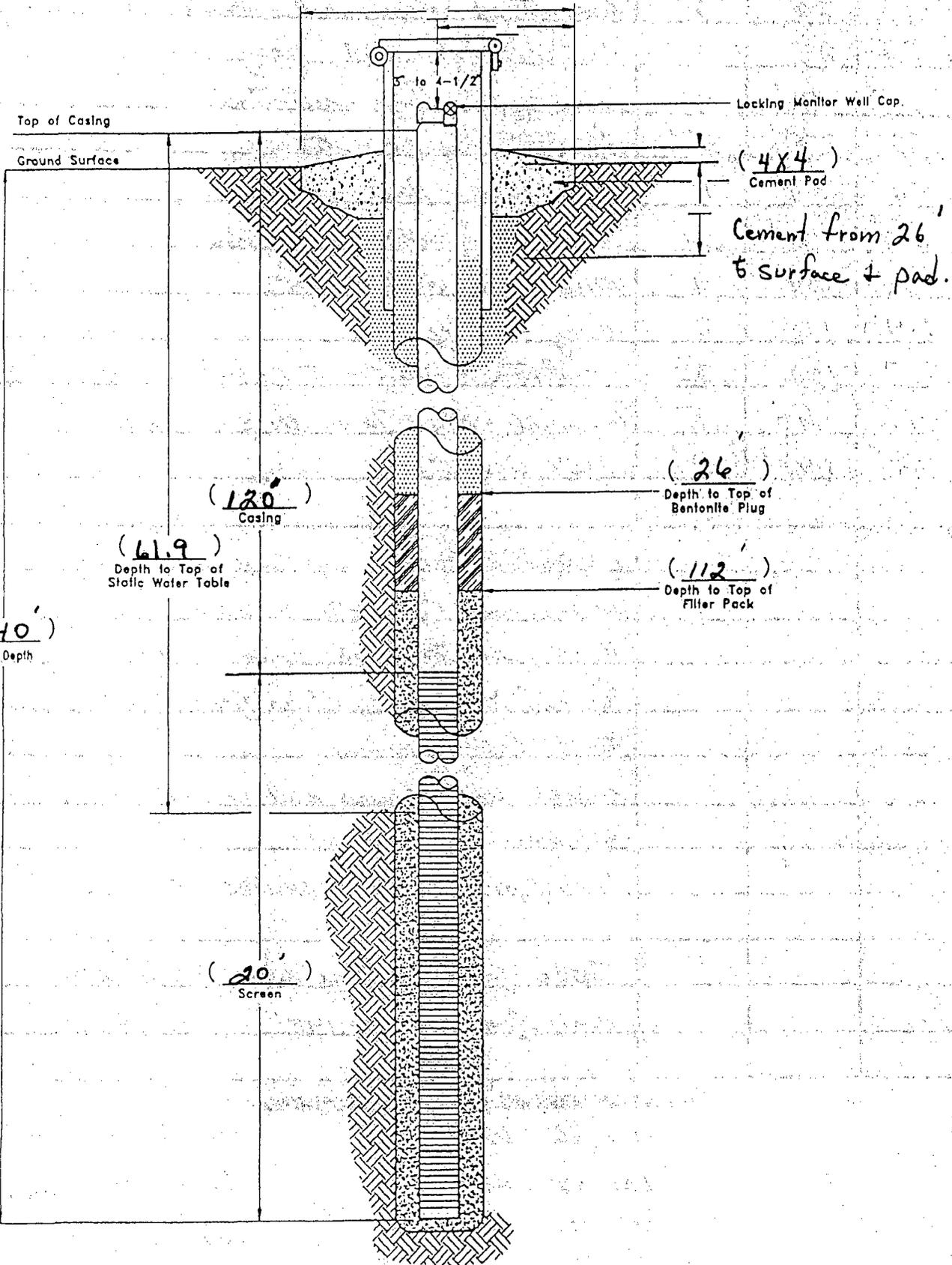
3907.4

Screen Size:

.010

Top of Water Elevation:

3745.5



## Section 6. LOG OF HOLE

Depth in Feet		Thickness in Feet	Color and Type of Material Encountered
From	To		
0'	1'	1'	SOIL & WEATHERED CALICHE
1'	20'	19'	Caliche indurated - Grey
20'	22'	2'	Quartzite - hard - red - brown
22'	25'	3'	Caliche - indurated - grey - wlt.
28'	32'	4'	Quartzite - hard - red - brown
32'	58'	26'	Sandstone - soft - tan
58'	59'	1'	Quartzite - hard - wlt
59'	110'	51'	Sandstone - soft - w/B - tan
110'	114'	4'	Quartzite - hard - wlt
114'	117'	3'	Clay - buff
117'	142'	25'	Sandstone - soft - tan - w/B
142'	147'	5'	Gravel - sharp $\frac{3}{8}$ multi col. w/B
147'	148'	1'	Red bed TD
			Installed 20 FT. 1010 SLOT PVC WELL SCREEN and 127' + 3' RISER PIPE 2"
			Back fill with Brady sand to 117'
			Placed Bentonite chips from 117' to 4' below surface.
			install well guard and cement to surface.
			Develop with air until clean.
			BORE from surface to 4' - 8 $\frac{3}{4}$ " bit
			BORE from 4' to 148' - 5 $\frac{1}{2}$ " bit

## Section 7. REMARKS AND ADDITIONAL INFORMATION

monitor well # 2

LAT. 32° - 41.27 N

LON. 103° - 23.39 W

Co. Griffin well serv.

Driller Carl Amelco

WD 603

Company Drilled for:

Zia Transportation

Salty Dog

# Monument Type Monitor Well Diagram

Location:

Seat 5 Tws 19 Rng 36 E

Job Number:

Installation Date:

2/21

Monitor Well Number:

MW# 2

148

Bore Size:

5 1/2

Casing Size:

2

Casing Elevation:

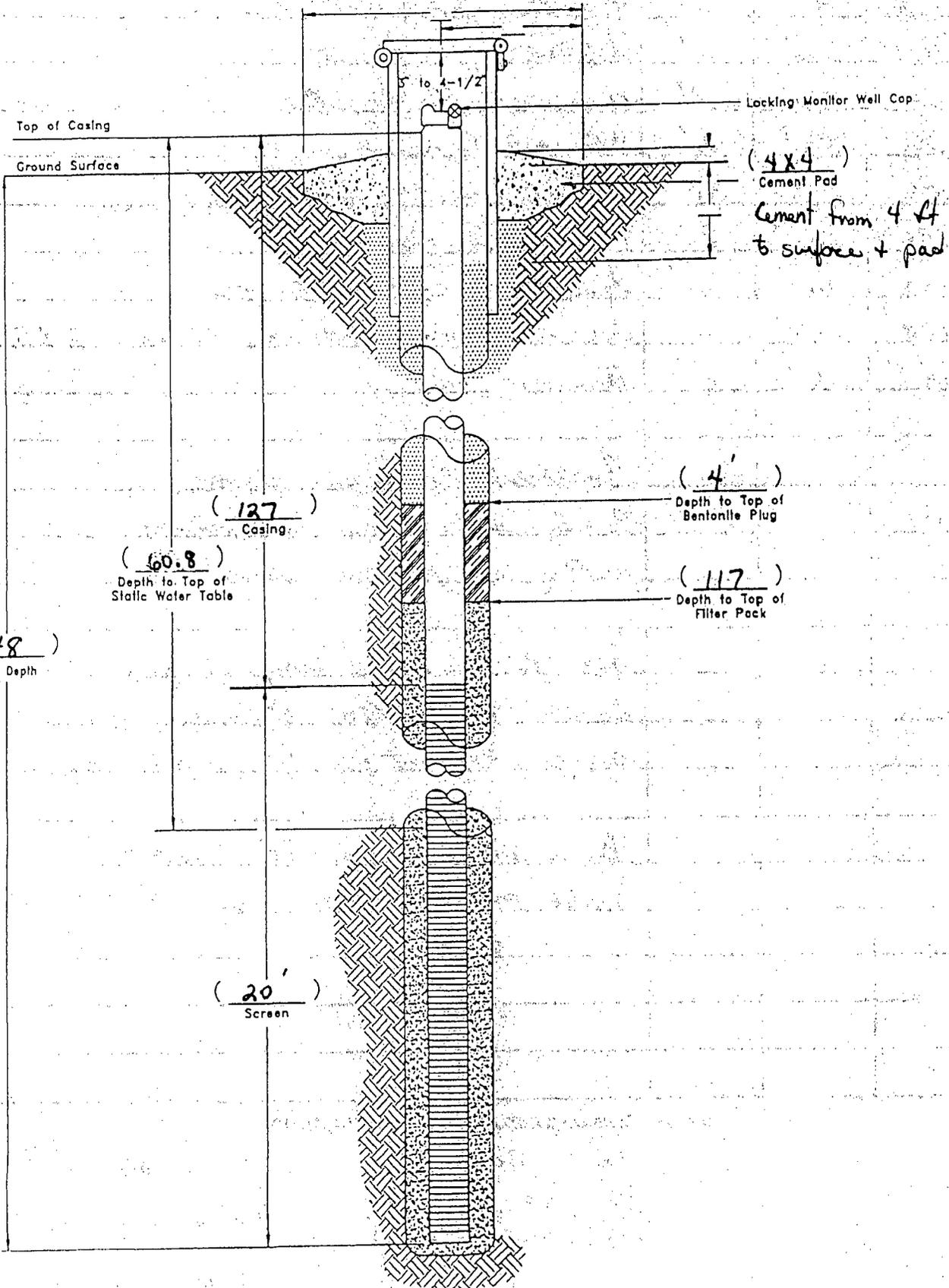
3803.7

Screen Size:

.010

Top of Water Elevation:

3745.2



Section 6. LOG OF HOLE

Depth in Feet		Thickness in Feet	Color and Type of Material Encountered
From	To		
0'	1'	1'	Weathered Caliche & soil
1'	30'	29'	Caliche - indurated - G.R.V.
30'	41'	11'	Quartzite - hard - red-brown
41'	52'	11'	Sandstone - soft - tan
52'	54'	2'	Quartzite - hard - white
54'	56'	2'	Clay - Red - brown
56'	106'	50'	Sandstone - soft - w/B - tan
106'	108'	2'	Clay - red-brown
108'	138'	30'	Sandstone - soft - w/B - tan
138'	144'	6'	Gravel - small - <sup>3/8</sup> sharp multicolored - w/B
144'	146'	2'	Red Bed T.D.
			Installed screen and cased pipe
			Develop until clean water sample
			pulled back pipe and abandon
			Back fill with cuttings from 146'
			to 54' place bentonite chips to 4' from
			surface - cement from 4' to surface.
			BORE FROM SURFACE TO 4' used 8 3/4" BIT
			BORE FROM 4' TO 146' used 5 1/2" BIT.

Section 7. REMARKS AND ADDITIONAL INFORMATION

TEST BORE # 1  
~~30~~ LAT. 32° - 42.28 N.  
 LONG. 103° - 22.46 W.

CO. Gibbin well serv.  
 Driller Carl Smelley

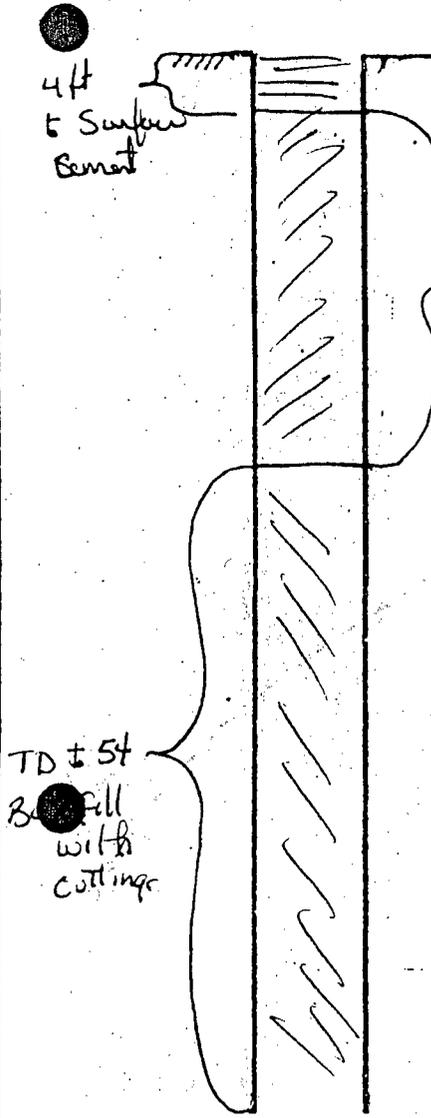
W.D. 603

Zia Salty Dog

Test Boring #1

Surface elevation  
3804.0

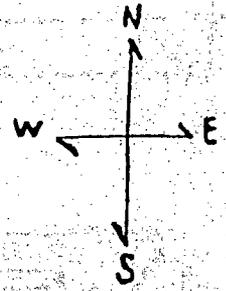
P+A



from 54 to 4  
Bentonite

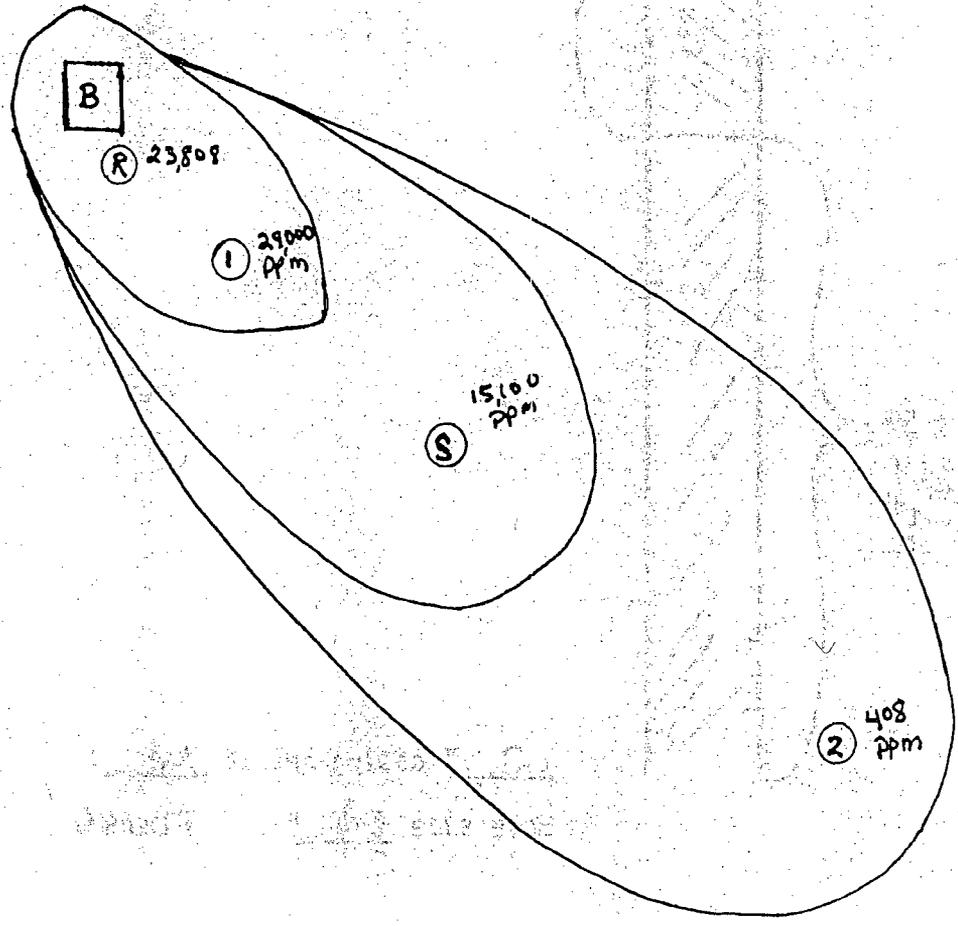
TD ± 5ft  
Fill with  
cuttings

0 " casing set at NA  
Hole size 8 3/4 " TD 146'



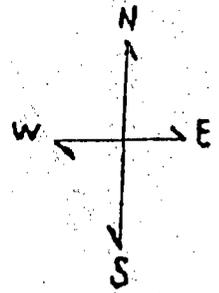
(W)

(W)



- B** Brine well (Sally Dog)
- R** Recovery well
- 1** Monitor well #1
- S** Test Boring
- 2** Monitor well #2
- W** Water wells

# Chloride Map



W

W

B

R

1

S

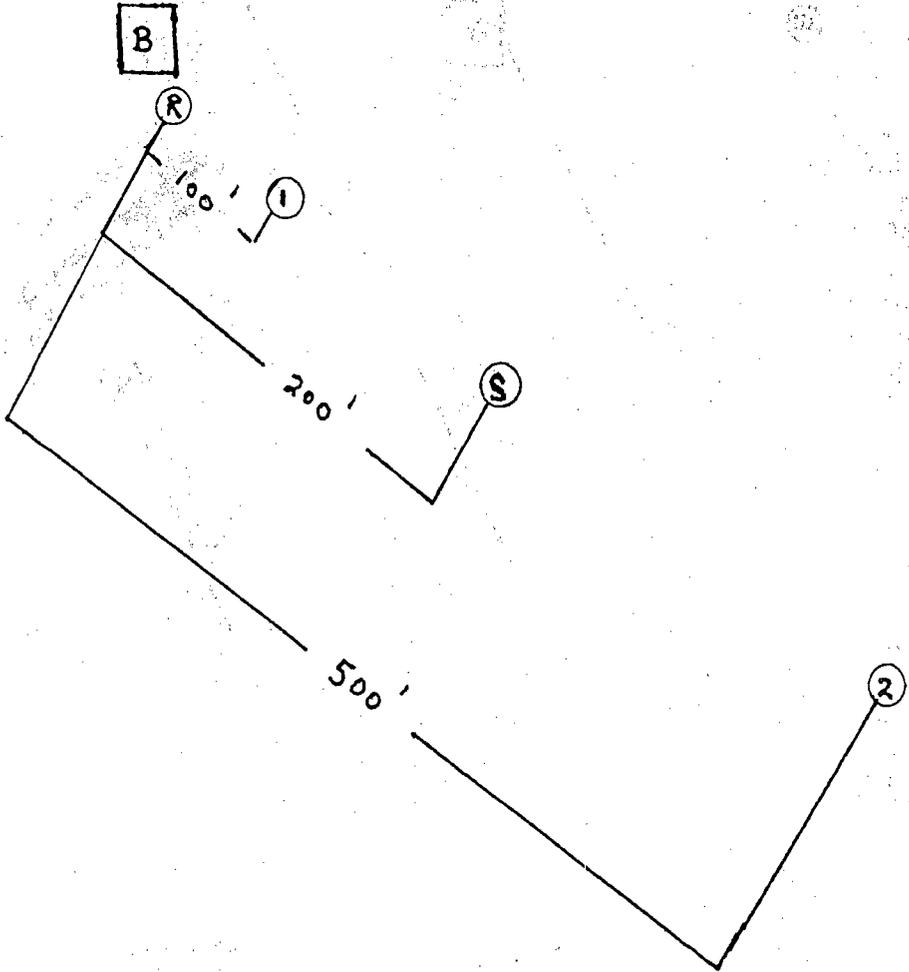
2

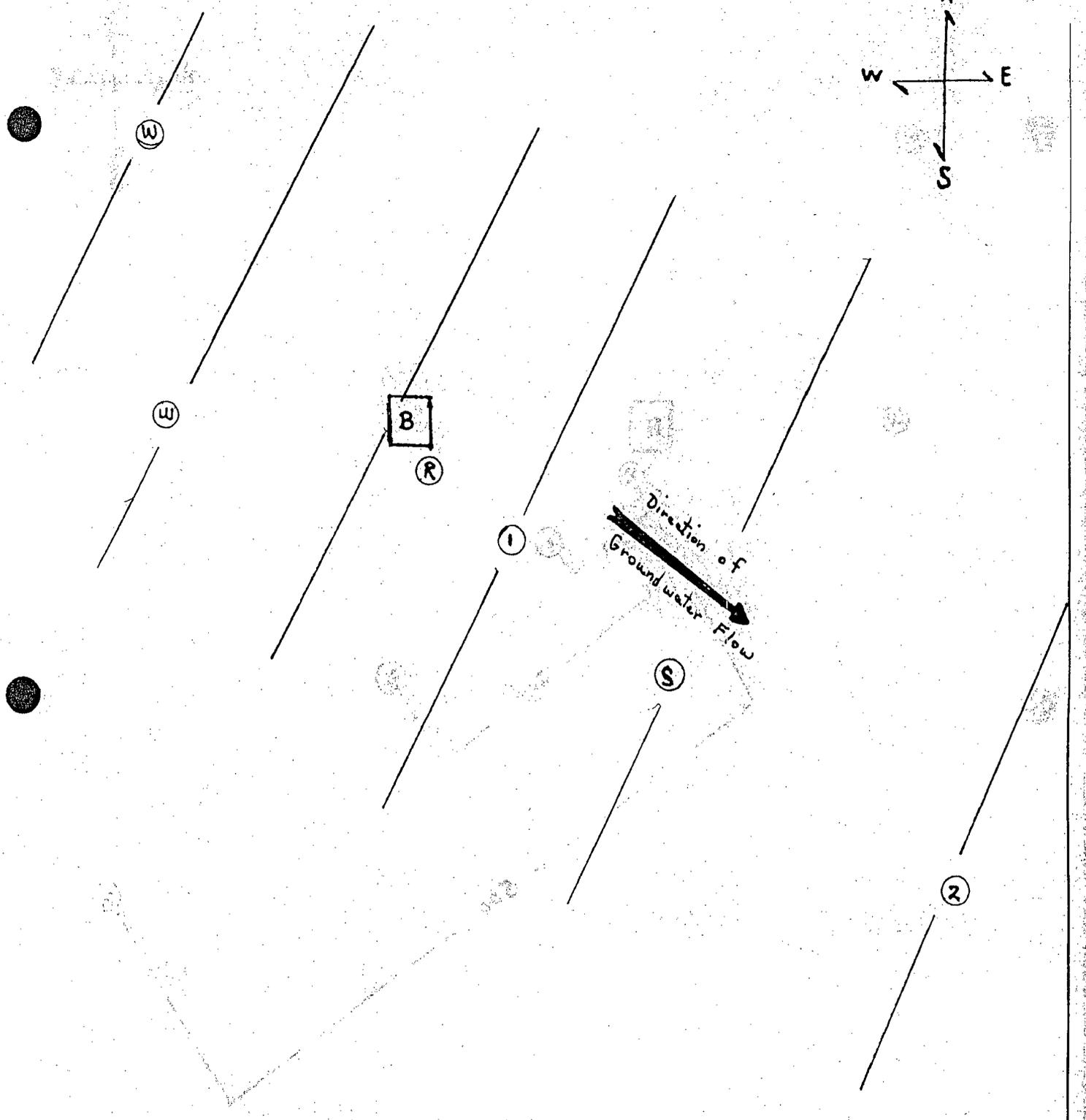
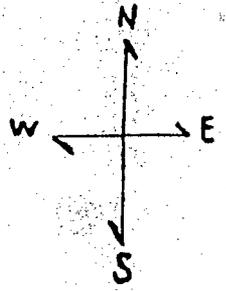
100'

200'

500'

- B** Brine well
- R** Recovery well
- 1** Monitor well #1
- S** Test Boring
- 2** Monitor well #2
- W** Water wells





- B** Brine well (Salty Dog)
- R** Recovery well
- 1** Monitor well #1
- S** Test Boring
- 2** Monitor well #2
- W** Water wells

**GRWES**

10/19/2000

Slul	Slsec	Sltn	Slhns	Slmg	Slorw	Spotloc	Addlocinfo	Datasourc1	Datewlev1	Waterlev1
J	5	19	S	36	E	41121		SEO	01/25/197	49.50
J	5	19	S	36	E	411213		SEO	03/02/196	51.17
J	5	19	S	36	E	411412		SEO	04/18/199	54.93

mw # 1

59.42

mw # 2

58.23



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON  
Governor  
Jennifer A. Salisbury  
Cabinet Secretary

May 22, 2001

Lori Wrotenbery  
Director  
Oil Conservation Division

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. 3771 7293**

Mr. Piter Bergstein  
Salty Dog Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

Re: Salty Dog Inc. Water Station  
Discharge Plan BW-008  
Groundwater Contamination Investigation

Dear Mr. Bergstein:

The New Mexico Oil Conservation Division (OCD) is in receipt of the Salty Dog Inc. Investigation plan results dated March 30, 2001 submitted by Eddie W. Seay, Agent. The OCD has reviewed the plan and **hereby requires the following actions to be completed by June 29, 2001.**

1. Install additional monitor well(s) down gradient of Monitor well #2 to determine the horizontal delineation of the salt-water plume.
2. Install additional recovery well(s) down gradient of the test boring.
3. Salty Dog Inc. will notify the OCD Santa Fe office and the OCD District office at least 72 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and/or split samples during OCD's normal business hours.
4. Submit a progress report by July 31, 2001.

If you have any questions please do not hesitate to call me at 505-476-3487.

Sincerely;

Wayne Price-Pet. Engr. Spec.

cc: OCD Hobbs Office

**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit P**

May 29, 2001

E.C.F.F.

JUN 4 2001

REMEDIATION DIVISION

NMOCD Environmental Bureau  
ATTN: Wayne Price  
P.O. Box 6429  
1220 S. Saint Francis Drive  
Santa Fe, NM 87504

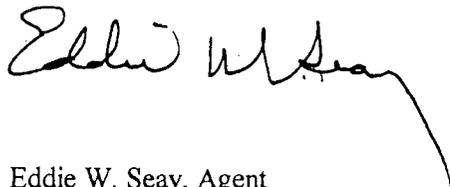
RE: Salty Dog, Remediation site

Mr. Price:

Find within analytical from the sampling and testing of the wells at the Salty Dog Brine contamination site. To date we have extracted several thousand barrels of water from the recovery-remediation well. The chloride content of the wells appears to be dropping, so it appears our recovery well is serving its purpose. By continuing to monitor and pump this well, I am in hopes of having the chloride content continue to decrease.

If you have any questions, please call.

Sincerely,



Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit Q



NEW MEXICO ENERGY, MINERALS and  
NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON  
Governor  
Jennifer A. Salisbury  
Cabinet Secretary

Lori Wrotenbery  
Director  
Oil Conservation Division

September 18, 2001

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. 5357 7607**

Mr. Piter Bergstein  
Salty Dog Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

Re: Salty Dog Inc. Water Station  
Discharge Plan BW-008  
Groundwater Contamination Investigation and Remediation

Dear Mr. Bergstein:

The New Mexico Oil Conservation Division (OCD) sent Salty Dog Inc. a letter dated May 22, 2001 requiring investigation and remediation actions. Salty Dog Inc. has not responded to this requirement. Therefore, you are hereby ordered to submit an investigation and remediation plan for OCD approval by October 08, 2001.

**Failure to comply will result in OCD issuing Salty Dog Inc. a Notice of Violation.**

If you have any questions please do not hesitate to call me at 505-476-3487.

Sincerely;

Wayne Price-Pet. Engr. Spec.

cc: OCD Hobbs Office

**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit R**

RECEIVED  
OCT 09 2001  
Environmental Bureau  
Oil Conservation Division

October 4, 2001

NMOCD Environmental Bureau  
ATTN: Wayne Price  
P.O. Box 6429  
1220 S. Saint Francis Drive  
Santa Fe, NM 87504

RE: Salty Dog, Investigation Plan - BW-008

Mr. Price:

At the request of Mr. Piter Bergstein of Salty Dog, Inc., I am submitting a plan for investigation and remediation. Our plan was to give our original extraction well enough time to create a coning effect on the formation so the salts could be extracted. From review of the analytical, the pumping has lowered the chloride content but has not affected out limits of the plume. We find it necessary to do further monitor well testing and extracting. Find within our plan for further work.

Please excuse the delay in responding, and if you have any questions, please call.

Sincerely,



Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit S

## SALTY DOG INVESTIGATION PLAN

As per the OCD requirements:

- 1) Continue to monitor existing monitor wells and extraction well. Sample quarterly and submit results to OCD.
- 2) Continue drilling test borings southeast on 100 ft. spacing until the extent of the plume is defined.
- 3) After the extent of the plume is found, an additional extraction well be installed and piped into the system for recovery of brine.
- 4) All test and data will be sent to OCD after completion.
- 5) We will notify OCD prior to starting any activities.

### MONITOR WELL

It is planned to drill 5 1/4" hole and run 2" pvc with .10 slot screen, develop the well with air and test the water. If the water continues to be contaminated, we will pull the 2" pvc, grout the hole and move another 100 ft. and continue this process until the plume has been defined. After the plume has been determined, the 2" will be left in place, the well will be sand packed, a bentonite cap added and grouted according to OCD specifications.

### RECOVERY WELL

After all the data is reviewed, the placement of the additional recovery well will be determined, most likely somewhere between MW #1 and MW #2. The well will be completed similar to our first recovery well.

Drill 7 7/8" hole.

Run 5 1/2" pvc well pipe to top of redbed.

Install 20 ft. of .10 screen on bottom.

Put 20/40 sand from TD to 10 ft. above screen.

Put bentonite from top of sand pack to 20 ft. of surface.

Grout from 20 ft. to surface and pad.

Run in hole with 1 1/2" pvc and pump and begin pumping well. All fluid will be diverted through the brine system and used.

As soon as this plan is approved and we can acquire the services of a drilling rig, we will begin.

OIL CONSERVATION DIV.

01 OCT 26 PM 1:09

October 22, 2001

NMOCD Environmental Bureau  
ATTN: Wayne Price  
P.O. Box 6429  
1220 S. Saint Francis Drive  
Santa Fe, NM 87504

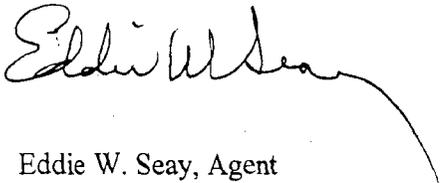
RE: Salty Dog Remediation Site

Mr. Price:

Within is the analytical from the sampling of the monitor wells and test well at Salty Dog brine. Salty Dog has extracted several thousand barrels of brine water from the recovery well and in comparing the analytical with the May report, the chlorides have decreased significantly. By continuing to pump and monitor this system, in time we have hopes of extracting the salts from the formation. We will continue to monitor and report results.

If you have any questions, please call.

Sincerely,



Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit T



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**GARY E. JOHNSON**  
Governor  
Betty Rivera  
Cabinet Secretary

April 08, 2002

**Lori Wrotenbery**  
Director  
Oil Conservation Division

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. 7923 4207**

Mr. Piter Bergstein  
Salty Dog Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

Re: Groundwater Contamination Investigation & Remediation  
Salty Dog Inc. Water Station  
Discharge Plan BW-008

Dear Mr. Bergstein:

The New Mexico Oil Conservation Division (OCD) is in receipt of the Salty Dog Inc.'s investigation and remediation plan dated October 04, 2001 submitted by Eddie W. Seay, Agent. The plan is hereby approved and OCD requires Salty Dog Inc. to complete the following actions:

1. Install a sufficient number of monitor wells to properly define the site-specific groundwater flow gradient(s) and the extent of contamination from the source area. All exploratory groundwater bore holes shall be developed and remain open for a minimum of 24 hours and then purged five (5) well bore volumes of groundwater before collecting samples.
2. Install a sufficient number of recovery well(s) or propose alternate methods to prevent contamination migration.
3. All new bore holes, monitor and recovery well(s) on site shall be sampled and analyzed for General Chemistry and WQCC metals.
4. Salty Dog Inc. shall have the option to plug the exploratory bore hole(s) with cement grout or complete as a monitor/recovery well. If bore hole(s) are complete as monitor/recovery well(s) then they must be completed pursuant to OCD standards.

5. Salty Dog Inc. will notify the OCD Santa Fe office and the OCD District office at least 72 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and/or split samples during OCD's normal business hours.
6. Salty Dog Inc. shall submit the results of the investigation and remediation efforts to the OCD Santa Fe Office **by July 15, 2002** with a copy provided to the OCD Hobbs District Office and shall include the following investigative information:
  - a. A description of all investigation, remediation and monitoring activities which have occurred including conclusions and recommendations.
  - b. A geologic/lithologic log and well completion diagram for each monitor well.
  - c. A water table potentiometric map showing the location of the leaks and spills, excavated areas, monitor wells, and any other pertinent site features as well as the direction and magnitude of the hydraulic gradient.
  - d. Isopleth maps for contaminants of concern which were observed during the investigations.
  - e. Summary tables of all ground water quality sampling results and copies of all laboratory analytical data sheets and associated QA/QC data taken within the past year.
  - f. The quantity and disposition of all recovered product and/or wastes generated.
7. Future contamination found beyond the most down gradient recovery system that exceeds the Water Quality Control Commission Regulation (WQCC) groundwater standards shall require immediate corrective action. Salty Dog Inc. shall submit a corrective action plan within 30 days of discovery.

Please be advised that NMOCD approval of this plan does not relieve Salty Dog Inc. of liability should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve Salty Dog Inc. of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Mr. Piter Bergstein  
April 08, 2002  
Page 3

Salty Dog Inc. committed in the discharge plan submittal dated 9/1/99 to investigating and remediating the groundwater contamination. Failure to abide by that commitment and past requirements, including requirements herein may result in OCD issuing Salty Dog Inc. a notice of violation for non-compliance of the Discharge Plan BW-008.

Sincerely;

A handwritten signature in cursive script that reads "Wayne Price".

Wayne Price-Pet. Engr. Spec.

cc: OCD Hobbs Office  
Mr. Eddie W. Seay

July 11, 2002

NMOCD Environmental  
ATTN: Wayne Price  
Box 6429  
1220 S. Saint Francis Drive  
Santa Fe, NM 87504

RE: Zia Transportation, Salty Dog

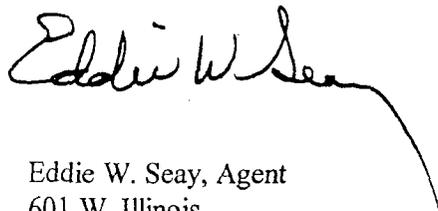
Mr. Price:

Find within quarterly analytical from Zia, Salty Dog remediation project. It appears the chlorides are continuing to drop.

The WW sample was taken from the water storage and not the well, this was for Zia's information.

If you have any questions or need anything else, please call.

Sincerely,



Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

*WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit V*

September 20, 2002

Wayne Price  
NMOCD Environmental  
Box 6429  
1220 S. Saint Francis Drive  
Santa Fe, NM 87504

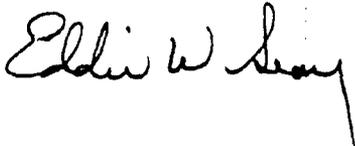
RE: Salty Dog Brine

Mr. Price:

As you requested, Salty Dog has completed the two additional wells. One well as a recovery well and the other as an extension of the monitor well plume. All pertinent data is enclosed in this report. I will be recommending to Mr. Bergstein that an additional monitor well be drilled, since the MW #3 showed elevated chlorides.

If you have any questions or need additional information, please call.

Sincerely,



Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

*WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit W*

**Salty Dog  
Remediation Site**

Drilling started on August 27, 2002, OCD notified. Carl Smelcer with Griffin Water Well Service installed both wells. The well logs and completion information is within.

**Remediation Well #2**

This well is being installed to pump additional salt water from the formation. The well is located 25 ft. SE of MW#1. A nine inch hole was drilled to TD of 150' and 5" PVC casing with 40' of well screen was installed. Diagram of well completion and log is within.

**Monitor Well #3**

MW#3 was installed to extend and try and find the outer limits of the salt water plume. This well is located 150' SE of MW#2. A 6" hole was drilled to TD of 147'. 2 in. PVC with 15 ft. of well screen was installed in the well. The log and well diagram are within.

The two wells were completed on September 6, 2002. On September 11, 2002, bail samples were obtained from new wells, the analytical is within. On September 13, a development pump and water containers were taken to location to develop and properly sample wells. The OCD was notified of this sampling exercise.

Monitor Well #3, installed a 1 1/2" pump in the well at 110'. Water level was 59.49' at ground level, and TD was at 147'. Three casing volumes for this well would have been 33 gallons. We extracted 45 gal. from the well and samples. Analytical is within.

Recovery Well #2, installed a 1 1/2" pump in the well at 110'. Water level was 58.79' from ground level, and TD was 150'. Three casing volumes would be 225 gallons. We extracted 240 gal. from the well and sampled. Analytical is within.

The new recovery well #2 will be tied into the recovery well #1 and used within the brine system. Salty Dog will continue to monitor all wells quarterly or as OCD requires, and keep up with volumes extracted.

It is my recommendation that Zia Salty Dog drill an additional MW Southeast to determine the extent of the plume.

Within are:

- 1) Logs
- 2) Well Diagram
- 3) Analytical
- 4) Photos

**Price, Wayne**

---

**From:** Price, Wayne  
**Sent:** Thursday, October 31, 2002 1:37 PM  
**To:** 'seay04@leaco.net'; 'pabpayton@aol.com'  
**Cc:** Sheeley, Paul; Johnson, Larry  
**Subject:** Zia Salty Dog Brine well

**Contacts:** Eddie Seay

Dear Mr. Seay:

The OCD is in receipt of the Groundwater Remediation report dated September 2002. Please note action item # 7 of OCD's letter dated April 08, 2002. Please address this issue within 30 days. Please install a minimum of three addition monitor wells. One well shall be located in line and directly down gradient of the existing wells. The other two wells shall be located to the south and east of the existing MW#3.

Sincerely:



Wayne Price  
New Mexico Oil Conservation Division  
1220 S. Saint Francis Drive  
Santa Fe, NM 87505  
505-476-3487  
fax: 505-476-3462  
E-mail: WPRICE@state.nm.us

*WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit X*

RECEIVED  
JAN 03 2003  
Environmental Bureau  
Oil Conservation Division

December 18, 2002

NMOCD Environmental  
ATTN: Wayne Price  
Box 6429  
1220 S. Saint Francis Drive  
Santa Fe, NM 87504

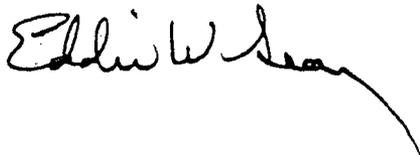
RE: Salty Dog Brine

Mr. Price:

As required, Zia, Salty Dog Brine, has inspected the leak detection monitor well at its brine pit. The inspection hole was dry and contained no fluid. Now that it has been brought to our attention, we will inspect this on regular schedule.

Thanks for your help.

Sincerely,



Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit Y



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**  
Governor  
Joanna Prukop  
Cabinet Secretary

July 08, 2003

Lori Wrotenbery  
Director  
Oil Conservation Division

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. 3929 9857**

Mr. Piter Bergstein  
Salty Dog Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

**Subject: NOTICE of VIOLATION**

Re: Discharge Plan BW-008  
Salty Dog Inc. Brine Station

Dear Mr. Bergstein:

New Mexico Oil Conservation Division (NMOCD) inspectors Wayne Price, Paul Sheeley and Larry Johnson made a routine site visit on November 14, 2002 at the Salty Dog Brine Station facility located in Section 5, Township 19 South, Range 36 East, NMPM, Lea County, New Mexico. As a result of that visit NMOCD finds Salty Dog Brine Station in violation of its Discharge Plan requirements and Section 3104 of the Water Quality Control Commission (WQCC) regulations (20 NMAC 6.2.3104) for the deficiencies listed below:

1. During a well test on or about October 16, 2002, OCD inspector Buddy Hill informed Salty Dog Inc. personnel of a leaking tank. Salty Dog took no action upon Mr. Hill's request to correct the problem.

On November 14, 2002 OCD inspectors Price, Sheeley and Johnson noted that water was being discharged to the ground from an above-ground tank. In addition, OCD observed where water had flowed off-site into a nearby fresh water playa lake. OCD collected water samples from the tank and playa lake. Analyses from the sampling event showed elevated chlorides in both samples. The above-ground tank water was 59,300 mg/l and the playa lake water was 16,500 mg/l. These values exceed the New Mexico groundwater standard for chlorides which is 250 mg/l.

***This is a Violation of discharge plan condition #21. Spill Reporting:  
Failure to report a discharge into a watercourse.***

Oil Conservation Division \* 1220 South St. Francis Drive \* Santa Fe, New Mexico 87505  
Phone: (505) 476-3440 \* Fax (505) 476-3462 \* <http://www.enr>

**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit Z**

2. Brine water was being discharged into an unauthorized open unlined pit.

***This is a Violation of discharge plan condition #16 Below Grade Tanks/Sumps/Pits: All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design.***

3. Salty Dog Inc. has failed to properly investigate and remediate groundwater contamination at the site. OCD sent Salty Dog Inc. correspondence dated April 08, 2002 requiring further investigation and remediation of groundwater. Salty Dog Inc. has not properly responded to this request. In addition, recovery wells installed are not functional and additional monitor wells requested have not been installed.

***This is a Violation of discharge plan condition #26 Groundwater Contamination; Failure to abate water pollution per terms and conditions of the discharge plan.***

4. Brine water is being discharged to the ground surface at the truck loading area. OCD met with Salty Dog Inc. personnel and requested they install collection devices. OCD revisited the site in May of 2003 and noted brine water still being discharged to the ground and no collection devices have been installed.

***This is a Violation of discharge plan condition #12 Process Areas.***

**Salty Dog Brine Station is hereby required to respond by August 15, 2003 with actions to be taken to correct the above violations. Failure to respond to this Notice of Violation may result in a compliance order being issued pursuant to Section 74-6-10, NMSA 1978, against Salty Dog Brine Station assessing penalties and requiring Salty Dog Brine Station to comply with the requested actions.**

If you have any questions, please contact Wayne Price of my staff at (505-476-3487).  
Sincerely,



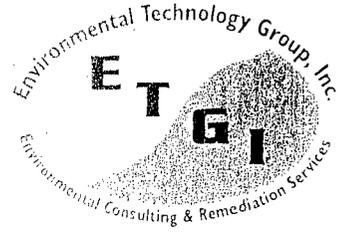
Roger C. Anderson  
Environmental Bureau Chief

RCA/lwp

Cc: OCD Hobbs District Office

Attachment-1 Copy of filed inspection report

August 14, 2003



RECEIVED

Mr. Wayne Price  
New Mexico Oil Conservation Division  
1220 South St. Francis  
Santa Fe, NM 87505

Aug 14 2003  
OIL CONSERVATION  
DIVISION

RE: Salty Dog Brine Station  
Discharge Plan: BW-008  
ETGI Project Number: SB 2100

Dear Mr. Price:

A signed work plan outlining proposed remedial actions in response to the Notice of Violation dated July 8, 2003 is enclosed. If you have any questions or if additional information is needed, please contact Robert B. Eidson at the numbers below.

Sincerely,  
ENVIRONMENTAL TECHNOLOGY GROUP, INC.

A handwritten signature in black ink, appearing to read 'R. B. Eidson', is written over the typed name.

Robert B. Eidson  
Geologist / Senior Project Manager  
(505) 397-4882 office  
(505) 631-2974 cell  
[reidson@etgi.com](mailto:reidson@etgi.com)

Attachments: Work Plan

cc: Hobbs project file  
Midland project file

**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit AA**



**WORK PLAN  
RESPONSE TO NOTICE OF VIOLATION  
JULY 08, 2003**

**Zia Transportation  
Salty Dog Brine Station  
Discharge Plan BW-008  
Lea County, New Mexico  
Section 05, Township 19 South, Range 36 East**

Prepared for:

**Mr. Piter Bergstein**  
Salty Dog, Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

ETGI Project No. SR 2100

Prepared by:

**Environmental Technology Group, Inc.**  
2540 West Marland Street  
Hobbs, NM 88240

**August 2003**

## 1.0 Introduction

On behalf of Salty Dog, Inc., Environmental Technology Group, Inc. (ETGI) has prepared this Work Plan in response to the Notice of Violation (NOV) from the New Mexico Oil Conservation Division (NMOCD), dated July 08, 2003, concerning Discharge Plan BW-008, Salty Dog Brine Station. The facility is located in Section 05, Township 19 South, Range 36 East, rural Lea County, New Mexico. For reference, a site location map and a site plan are included as Figures 1 and 2, respectively. The purpose of this work plan is to outline the proposed response to conditions considered to be in violation listed in the above referenced NOV.

The facility is a brine water processing station consisting of one fresh water well, one brine well, one brine pit, three truck loading positions and two 1,000-barrel fresh water above ground storage tanks (AST).

## 2.0 Scope of Work

According to item one in the NOV, referencing a violation of discharge plan condition # 21, Spill Reporting. The AST that was discharging water onto the ground has been permanently removed from the site. Soil samples will be collected from the location of the former AST in two positions at depths of four and eight feet below ground surface (bgs) utilizing a hand auger and submitted for laboratory analysis for chloride concentrations. Soil samples will also be collected from the area adjacent to the southern edge of the playa and from within the playa and analyzed for chlorides. All soil samples will be collected and analyzed according to the methods listed in Section 4.1 Soil Sampling, below.

Referencing item two in the NOV, a violation of discharge plan condition #16 Below Grade Tanks/Sumps/Pits. The unpermitted pit was excavated coinciding with brine well work over activities conducted in August 1999. The pit is not utilized in the day-to-day operations of the facility and will be closed following the Unlined Surface Impoundment Closure Guidelines dated February 1993, New Mexico Energy, Minerals and Natural Resources Department.

Referencing item three in the NOV, a violation of discharge plan condition #26 Groundwater Contamination. Existing groundwater monitor wells, recovery wells and water wells on-site will be sampled and analyzed for General Chemistry and Water Quality Control Commission (WQCC) Metals concentrations utilizing the methods listed in Section 4.2 Groundwater Sampling below. Analysis of the groundwater sampling results will be used to design the well field configuration necessary for plume delineation activities at the site. The precise number of additional wells installed will be determined by the results of the field investigation conducted for plume delineation purposes. Following completion of plume delineation action, groundwater recovery wells will be installed in locations designed to achieve hydraulic control of the plume and in areas of the highest chloride concentrations.

Referencing item four in the NOV, a violation of discharge plan condition #21 Process Areas. Below grade sumps will be constructed using 500-gallon poly-tanks surrounded by a sand layer sealed on the surface by a concrete pad with berms and installed in each of the three truck

loading areas on-site. Each sump will be contained within the sand layer and an exterior reinforced poly-liner. The base of the sand layer will be sloped toward the southwest corner in the sump areas. Release detection will be achieved utilizing one observation well constructed in the southwest corner of the sumps, within the sand layer. The observation wells will consist of a vertical, two-inch PVC riser pipe connected to a threaded, PVC 0.020-inch, screened PVC pipe terminating at the sand/liner interface. Two steel ballards will be installed on the east side of the sumps to protect from truck traffic on the sumps. A steel reinforced grate will be positioned directly below the brine hose nozzle to capture spillage associated with the loading process. The observation wells will be monitored monthly for the presence of fluids. If fluids are detected, a sample will be obtained with a disposable sample bailer and analyzed for chloride content by the method listed in Section 4.2, Groundwater Sampling.

### **3.0 Schedule of Abatement Activities**

Groundwater recovery operations from the two existing recovery wells will resume immediately. ETGI will provide a remediation systems specialist technician to install two recovery pumps applicable to the brine conditions found on-site. All water produced through site remediation actions will be filtered through the existing sand trap and reinjected into the brine production process. Installation of sumps as described in Section 2.0, Scope of Work will commence within 30 days from acceptance of this Work Plan by Salty Dog, Inc. and approval by the NMOCD.

### **4.0 Cost Estimate**

A cost estimate will be provided following client and NMOCD approval of actions outlined in the Work Plan. This estimate will include only those items listed in the specified Scope of Work. Additional work, if required, will be billed on a time and materials basis after obtaining approval from the authorized representative of the Salty Dog Brine Station.

### **5.0 Media Sampling**

#### **5.1 Soil Sampling**

Soil samples collected with the hand auger or stainless steel hand trowel will be packed into sterile glass containers equipped with a Teflon-lined lid furnished by the analytical laboratory. The container will be filled to capacity to limit the amount of headspace present. Soil samples obtained during well installation actions will be collected at five-foot intervals utilizing a split spoon sampler and field-screened with a photoionization detector (PID) calibrated to a 100 parts per million (ppm) isobutylene standard. Each sample collected will be visually inspected and described as to soil type, grain size, sorting characteristics, odor and staining present. Representative soil samples will be divided into two separate portions using clean, disposable gloves and clean sampling tools. One portion of the soil sample will be placed and sealed in a zip-lock baggie. The baggie will be labeled and sealed for headspace analysis using a PID calibrated to a 100-ppm isobutylene standard. Each sample will be allowed to volatilize for approximately thirty minutes at ambient temperature prior to conducting the analysis. The soil sample collected from the apparent capillary fringe, the sample registering the

highest PID reading and any sample with a PID reading greater than or equal to 100 ppm will be selected for laboratory analysis.

The other portion of the soil sample will be placed in a sterile glass container equipped with a Teflon-lined lid furnished by the analytical laboratory and filled to capacity to limit the amount of headspace present. Each container will be labeled and placed on ice in an insulated cooler and sealed for shipment to the laboratory. Proper chain-of-custody documentation will be maintained throughout the sampling process.

Soil samples will be delivered to ELOT in Odessa, Texas for General Chemistry and WQCC analyses using the methods described below.

- WQCC regulated metals in accordance with EPA SW Methods 6010B and 7470;
- Chlorides in accordance with EPA SW846 Method 9253.
- TDS in accordance with EPA Method 160.1;

## **5.2 Groundwater Sampling**

After purging the wells, groundwater samples will be collected with a disposable Teflon sampler and polyethylene line by personnel wearing clean, disposable gloves. The filled containers will be labeled and placed on ice in an insulated cooler. The cooler will be sealed for transportation to the analytical laboratory. Proper chain-of-custody documentation will be maintained throughout the sampling process.

Groundwater samples will be delivered to Analy Sys, Inc., in Austin, Texas for analyses using the methods described below. All groundwater samples collected from existing monitor and recovery wells will be analyzed for dissolved-phase chloride concentrations in accordance with EPA Method 9253. All groundwater samples collected from the newly installed monitor and recovery wells will be analyzed for:

- WQCC regulated metals in accordance with EPA SW Methods 6010B and 7470;
- Chlorides in accordance with EPA SW846 Method 9253, and;
- TDS in accordance with EPA Method 160.1.

## **6.0 Decontamination Of Equipment**

Cleaning of drilling equipment is the responsibility of the drilling company. In general, the cleaning procedures consisted of using high-pressure steam to wash the drilling and sampling equipment prior to drilling and prior to starting each hole. Prior to each use, the split spoon sampling tool will be cleaned with Liqui-Nox® detergent and rinsed with distilled water.

## **7.0 Laboratory Protocol**

The laboratory will be responsible for proper QA/QC procedures after signing the chain-of-custody form. These procedures are either transmitted with the laboratory reports or are on file at the laboratory.

8.0 References

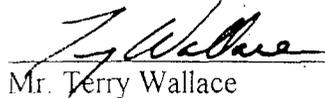
Guidelines for Remediation of Leaks, Spills and Releases; August 1993 (NMOCD, 1993);

Title 19; New Mexico Administrative Code (NMAC) 15.A.19;

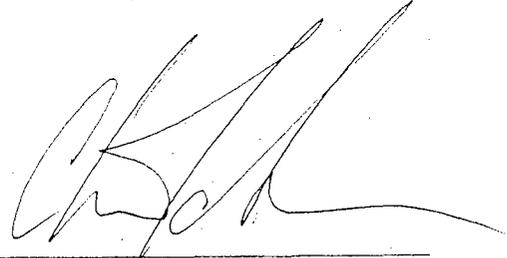
Title 20; NMAC 6.2.3104;

Practical Techniques for Groundwater and Soil Remediation; Evan K. Nyer, CRC Press, 1993;  
and;

Remediation of Petroleum Contaminated Soils; Eve-Riser-Roberts, Lewis Publishers, CRC Press, 1998.



Mr. Terry Wallace  
Operations Manager  
Salty Dog, Inc.



Chance I. Johnson  
New Mexico Regional Manager  
Environmental Technology Group, Inc.



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor  
Joanna Prukop  
Cabinet Secretary

October 2, 2003

Lori Wrotenbery  
Director  
Oil Conservation Division

**CERTIFIED MAIL**  
**RETURN RECEIPT NO. 3929 9932**

Mr. Piter Bergstein  
Salty Dog Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

**Subject:** *Remedial actions to be taken in response to the Notice of Violation*

Re: Discharge Plan BW-008  
Salty Dog Inc. Brine Station

Dear Mr. Bergstein:

New Mexico Oil Conservation Division (NMOCD) is in receipt of the work plan outlining remedial actions to be taken in response to the Notice of Violation issued to Salty Dog Inc. July 08, 2003. The plan is hereby approved with the following conditions:

1. Provide a drawing of the loading/unloading sumps for OCD approval by October 15, 2003.
2. The two recovery wells shall be in operation by no later than November 15, 2003. All recovery water shall be metered and recorded.
3. All plume delineation wells shall be installed and completed pursuant to OCD previously approved methods. Wells shall be designed and installed to compensate for density gradient effects, if any. Samples shall be collected, analyzed and submitted to OCD by February 01, 2004.
4. A groundwater monitor well shall be installed in close proximity and on the down-gradient side of the brine pond. This plan shall be submitted for OCD approval in the February 01, 2004 report.
5. A progress report shall be submitted by February 01, 2004 with all data collected, conclusions and recommendations.

Oil Conservation Division \* 1220 South St. Francis Drive \* Santa Fe, N.M.  
Phone: (505) 476-3440 \* Fax (505) 476-3462 \* <http://www.emn>

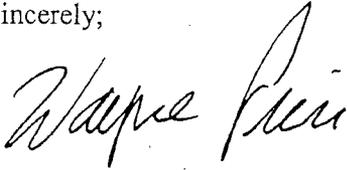
**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit BB**

Mr. Piter Bergstein  
October 02, 2003  
Page 2

Please be advised that NMOCD approval of this plan does not relieve Salty Dog Inc. of liability should their operations fail to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD approval does not relieve Salty Dog Inc. of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Failure to abide by the proposed plan and these requirements will result in a compliance order being issued to Salty Dog Inc. requiring actions to be taken including civil penalties as allowed by the New Mexico WQCC regulations. If you have any questions please do not hesitate to contact me within 30 days at 505-476-3487 or e-mail [WPRICE@state.nm.us](mailto:WPRICE@state.nm.us).

Sincerely;

A handwritten signature in cursive script that reads "Wayne Price".

Wayne Price-Pet. Engr. Spec.

cc: OCD Hobbs Office

SALTY DOG  
P.O. Box 2724  
Lubbock, TX 79408

RECEIVED

FEB 2 2004

Oil Conservation Division  
1220 S. St. Francis Drive  
Santa Fe, NM 87505

January 30, 2004

Wayne Price  
New Mexico Energy, Minerals and  
Natural Resources Department  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: Salty Dog Brine Station Progress Report

Dear Mr. Price,

We would like to update you on our current progress.

1. Request for loading sumps which have now been installed at each of the 3 loading stations trapping and collecting all spilled fluids from loading brine and unhooking hose connections.
2. To date we have installed 3 monitor wells and 2 recovery wells and have pumped a total of 518,400 gallons which we have used in the make up of brine.
3. To date all wells are installed and samples have been taken. We have attached all analytical results from each well, and have already seen a reduction in the chloride levels detected.
4. You have requested a ground water monitor well by the brine pond for which at this time we request that we may use our fresh water well located at the tank about 115 ft. down gradient from the brine pond. We are in the process of building a tap to take samples which should be finished by next week. See diagram.
5. It is our recommendation to continue sampling on a regular basis (60) days to

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit CC

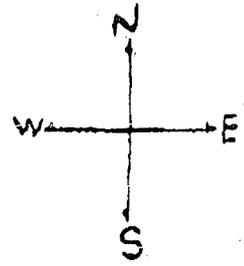
show that the 2 recovery wells are reducing the chloride levels in the affected water table. Also, we will provide you within the next 15 days an analytical result from the water well by the brine pond.

Hope this progress meets your approval so we may continue.

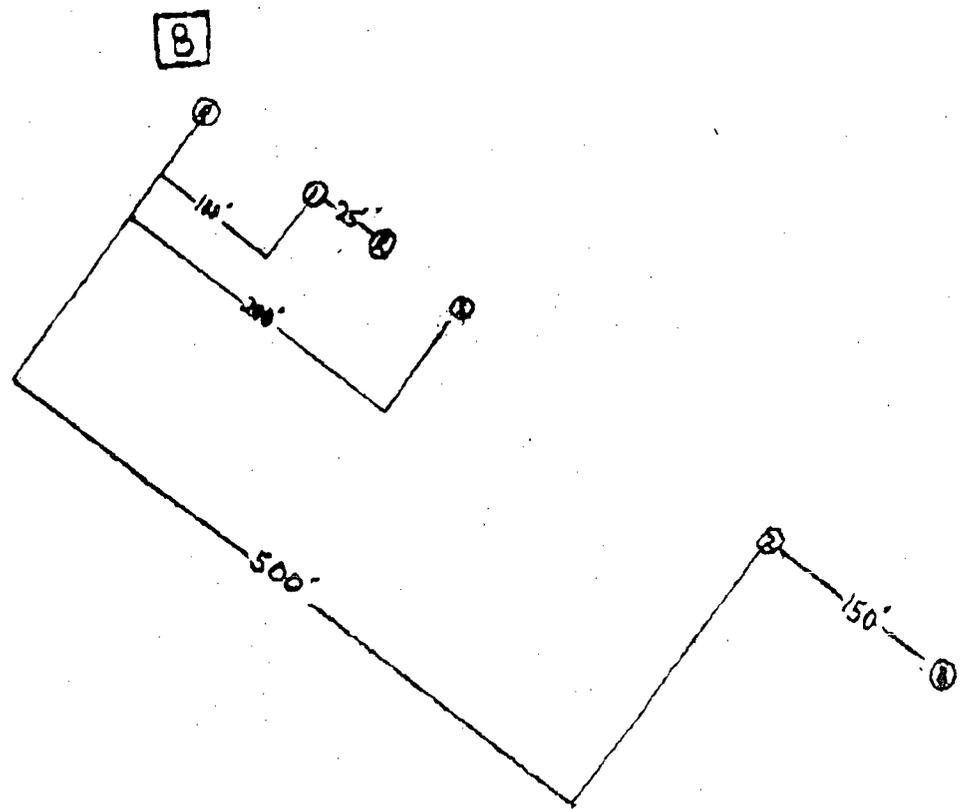
Sincerely,

A handwritten signature in black ink, appearing to read 'Pieter Bergstein'. The signature is stylized with a large, sweeping initial 'P' and a long, horizontal tail.

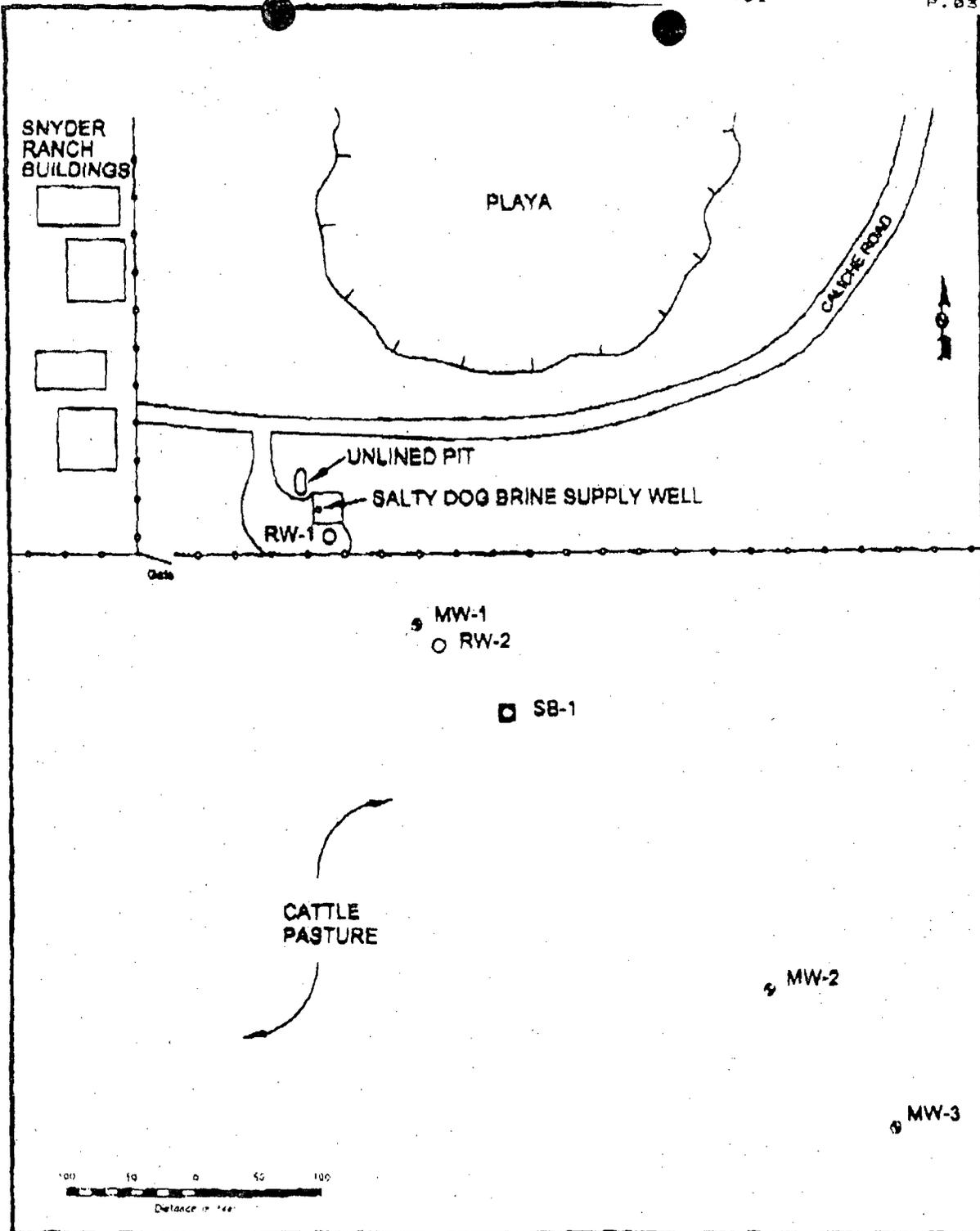
Pieter Bergstein



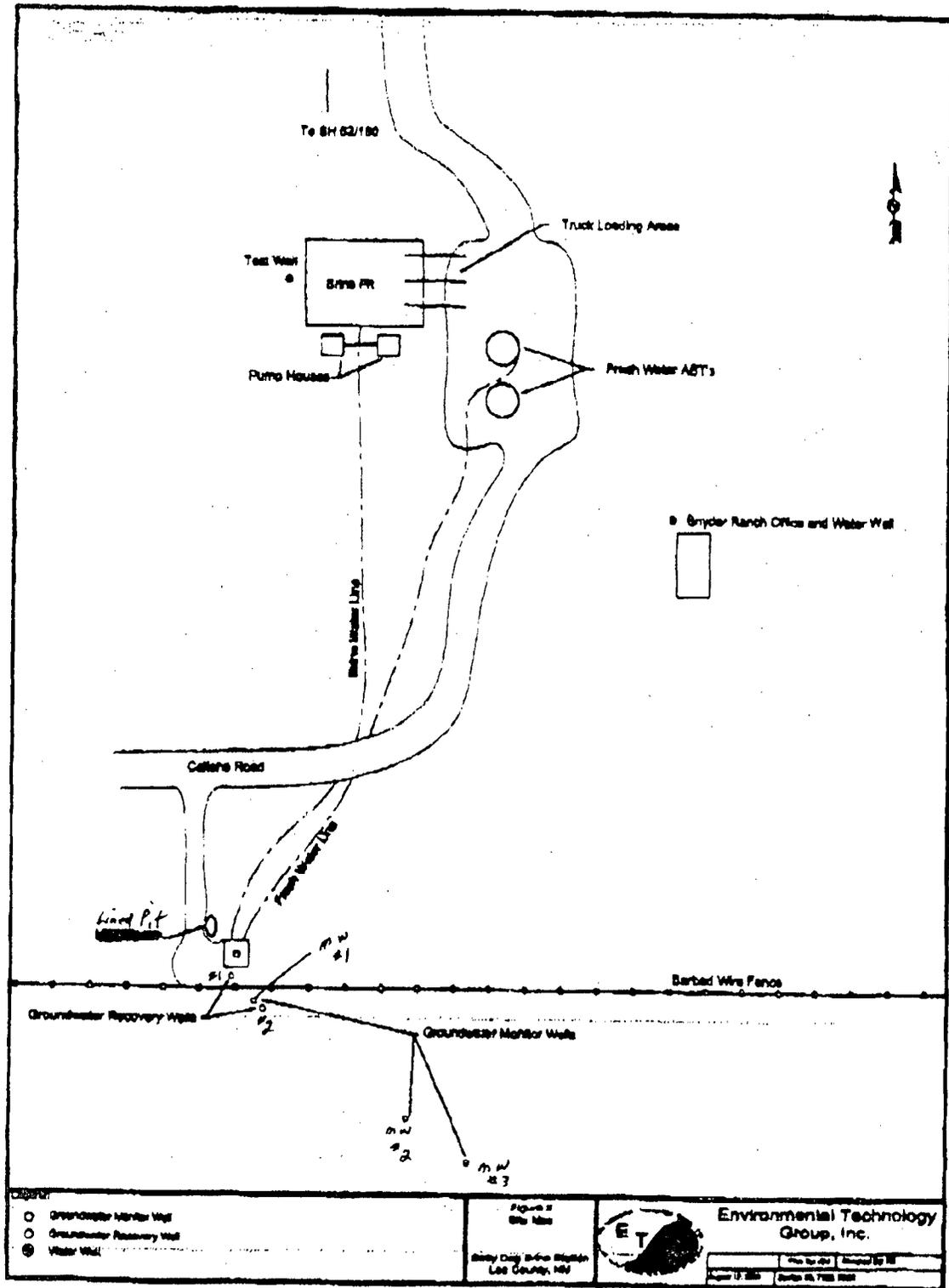
①  
②



- ⓑ Brine Well
- ⓐ Recovery wells
- ① Monitor Well #1
- ④ Test Borings
- ② Monitor Well #2
- ⑤ Water Wells



<ul style="list-style-type: none"> <li>○ Groundwater Monitor Well</li> <li>○ Groundwater Recovery Well</li> <li>○ Water Well</li> <li>○ Salt Spring</li> <li>○ Observation Well</li> </ul>	<p>Figure 2A Supply Well Area Detail Salty Dog Brine Basin Lea County, NM</p>
--	---



February 10, 2004



Mr. Wayne Price  
New Mexico Oil Conservation Division  
Environmental Bureau  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505  
Via Certified Mail

RE: Discontinuance of Consulting Services  
Salty Dog Brine Pond Leak Site  
Lea County, New Mexico

Mr. Price:

Environmental Technology Group, Inc. (ETGI) is contacting you at this time to inform you that as of Thursday, January 15, 2004 we will no longer be providing environmental consulting services at the above referenced facility.

If you have any questions, please contact me at 505-397-4882.

Thank you.

Sincerely,  
ENVIRONMENTAL TECHNOLOGY GROUP, INC

Robert B. Eidson  
Geologist / Senior Project Manager

cc: Hobbs Project File

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit DD



Midland, TX: 915-262-5952  
4600 W. Wall, 79703  
Houston, TX: 281-484-3939  
12727 Featherwood Drive,  
Suite 220, 77034



Midland, TX: 915-522-1484  
4600 W. Wall, 79703  
Hobbs, NM: 505-391-0908  
2540 W. Marland, 88240



Midland, TX: 915-262-5627  
2057 Commerce, 79703



Midland, TX: 915-522-1139  
4600 W. Wall, 79703  
Houston, TX: 281-484-3595  
12727 Featherwood Drive,  
Suite 220, 77034  
Hobbs, NM: 505-397-4882  
2540 W. Marland, 88240



Midland, TX: 915-520-7720  
2057 Commerce, 79703

**SALTY DOG**  
**P.O. BOX 2724**  
**LUBBOCK, TX 79408**

February 13, 2004

Wayne Price  
New Mexico Energy, Minerals and  
Natural Resources Dept.  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: Salty Dog Brine Station

Dear Mr. Price,

We have enclosed the analytical results from the water supply well located 115 ft. down gradient of the brine pond.

We also checked the monitor well West of the brine pond and found no evidence of leaked fluid.

Hope this meets your approval.

Sincerely,



Pieter Bergstein

*WQCC-ACO#2*  
*Salty Dog, Inc.*  
*OCD Exhibit EE*



# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON  
Governor

May 20, 2004

Joanna Prukop  
Cabinet Secretary  
Acting Director  
Oil Conservation Division

CERTIFIED MAIL  
RETURN RECEIPT NO. 3929 8409

Mr. Piter Bergstein  
Salty Dog Inc.  
P.O. Box 2724  
Lubbock, Texas 79408

Subject: NOTICE OF VIOLATION

Re: Discharge Plan BW-008 Expiration  
Salty Dog Inc. Brine Station

Dear Mr. Bergstein:

New Mexico Oil Conservation Division (NMOCD) is hereby notifying you that the Salty Dog Inc. Brine Station Discharge Permit BW-008 expired on April 18, 2004. It is a Violation of the Water Quality Commission Regulations WQCC 20.6.2.3104 to operate without an approved permit. If you wish to continue operations at this site please submit a renewal application along with a \$100.00 filing fee by June 10, 2004.

The OCD is in receipt of the groundwater contamination progress report dated January 30, 2004 and the water analysis from the fresh water well located near the brine pond. This analysis shows a chloride content of 856 mg/l, which exceeds the groundwater standard of 250 mg/l. Please include an action plan in the discharge plan renewal application to address this situation.

In addition, Salty Dog Inc. was required to install additional down gradient and side gradient monitor wells. Salty Dog Inc. failed to abide by this request, which is a violation of the permit condition 26. Please submit a commitment and map showing the location of the new wells and a sampling plan for all wells with the discharge plan renewal application.

Failure to abide by the above request will result in a compliance order being issued to Salty Dog Inc. requiring operations to cease until the permit is approved and possible civil penalties imposed. If you have any questions please do not hesitate to contact me within 10 days at 505-476-3487 or e-mail [WPRICE@state.nm.us](mailto:WPRICE@state.nm.us).

Sincerely;

Wayne Price-Pet. Engr. Spec.  
cc: OCD Hobbs Office

**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit FF**

**SALTY DOG BRINE, INC.  
HOBBS, NM**

**NMOCD DISCHARGE PLAN BW-008  
JUNE 2004**

*WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit GG*

## DISCHARGE PLAN APPLICATION FOR BRINE EXTRACTION FACILITIES

(Refer to the OCD Guidelines for assistance in completing the application)

New

Renewal

- I. Facility Name: Salty Dog, Inc. Brine Station BW-008
- II. Operator: Piter Bergstein, Zia Transportation
- Address: Box 2724 Lubbock, TX 79408
- Contact Person: Terry Wallace Phone: (505)393-8352
- III. Location: NE /4          /4 Section 5 Township 19 S Range 36 E
- Submit large scale topographic map showing exact location.
- IV. Attach the name and address of the landowner of the facility site.
- V. Attach a description of the types and quantities of fluids at the facility.
- VI. Attach a description of all fluid transfer and storage and fluid and solid disposal facilities.
- VII. Attach a description of underground facilities (i.e. brine extraction well).
- VIII. Attach a contingency plan for reporting and clean-up of spills or releases.
- IX. Attach geological/hydrological evidence demonstrating that brine extraction operations will not adversely impact fresh water.
- X. Attach such other information as is necessary to demonstrate compliance with any other OCD rules, regulations and/or orders.
- XI. CERTIFICATION:

*I hereby certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.*

Name: Eddie W. Seay  
seay04@leaco.net

Signature: Eddie W. Seay

E-mail Address:

**Price, Wayne**

---

**From:** Price, Wayne  
**Sent:** Wednesday, July 07, 2004 3:38 PM  
**To:** Eddie Seay (E-mail); Piter Bergstein (E-mail)  
**Cc:** Sheeley, Paul; Johnson, Larry  
**Subject:** Salty Dog Brine Station BW-008

Dear Mr. Bergstein:

OCD is in receipt of the Discharge Plan Application dated June 04, 2004 and \$100 filing fee submitted by Eddie Seay. As noted in OCD's N.O.V. letter sent to you on May 20, 2004 your permit has expired. In order for OCD to re-issue the permit please perform the following requested actions:

1. Install a groundwater monitoring well near the southeast corner of the brine pond. The well shall be drilled, constructed, developed, purged and sampled pursuant to OCD standards and shall have a minimum of 15 foot screen with 10 feet below the water table. The well shall be sampled for general chemistry and results provided to OCD by no later than July 30, 2004. In addition, during the drilling of this well a soil sample shall be collected every 5 feet and sampled for chlorides.
2. Install two additional groundwater plume detection wells as committed to in the discharge plan renewal application Item X. These wells shall be drilled, constructed, developed, purged and sampled pursuant to OCD standards and shall have a maximum of 10 foot screen located at the approximate depth of the other existing monitor wells. One well shall be located down gradient of the farthest monitor well (i.e. MW#3) and the other one located to the east of MW-3. The wells shall be sampled for general chemistry and results provided to OCD by no later than July 30, 2004. Please provide a groundwater gradient map.
3. Please provide photos and a brief description of the loading/unloading area describing how the system will protect groundwater. Please delineate this area to determine vertical and horizontal extent of the salt contamination. Please provide this information no later than July 30, 2004.
4. Please provide the status of the pit located next to the brine well.

Failure to perform these actions in a timely may result in cancellation of your permit.

Sincerely:

Wayne Price  
New Mexico Oil Conservation Division  
1220 S. Saint Francis Drive  
Santa Fe, NM 87505  
505-476-3487  
fax: 505-476-3462  
E-mail: WPRICE@state.nm.us

**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit HH**

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

### Release Notification and Corrective Action

#### OPERATOR

Initial Report  Final Report

Name of Company	<i>Salty Dog</i>	Contact	<i>Terry Wallace</i>
Address	<i>P.O. Box 513 Hobbs Nm 88241</i>	Telephone No.	<i>505-393-8352</i>
Facility Name	<i>Salty Dog Brine Station</i>	Facility Type	<i>Brine Water Station</i>
Surface Owner	Mineral Owner	Lease No.	

#### LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<i>J</i>	<i>5</i>	<i>19S</i>	<i>36E</i>	<i>1980</i>	<i>South</i>	<i>1980</i>	<i>East</i>	<i>10a</i>

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

#### NATURE OF RELEASE

Type of Release	<i>Brine Water</i>	Volume of Release	<i>20 Bbl/s</i>	Volume Recovered	<i>15 Bbl/s</i>
Source of Release	<i>Truck ran over</i>	Date and Hour of Occurrence	<i>7/23/04</i>	Date and Hour of Discovery	<i>7/23/04 7:00A</i>
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required				
By Whom?	Date and Hour				
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
If YES, Volume Impacting the Watercourse.					

If a Watercourse was Impacted, Describe Fully.\*

Describe Cause of Problem and Remedial Action Taken.\*

*It appears that a truck was loading and ran his trailer over or a belly line busted.*

Describe Area Affected and Cleanup Action Taken.\*

*Water was on the pad and by the fence line on the South side of location. A vacuum truck was called to clean up mess. He hauled approximately 15 bbls to an approved salt water disposal.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature:	<i>Terry Wallace</i>	<u>OIL CONSERVATION DIVISION</u>	
Printed Name:	<i>Terry Wallace</i>	Approved by District Supervisor:	<i>Chris Williams</i>
Title:	<i>Manager</i>	Approval Date:	<i>7/26/04</i> Expiration Date: -
E-mail Address:		Conditions of Approval:	Attached <input type="checkbox"/>
Date:	<i>7/23/04</i>	Phone:	<i>393-8352</i>

\* Attach Additional Sheets If Necessary

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit II

## **PIT**

The workover pit located next to the brine well was cleaned out and backfilled with permission from OCD. I have no written documentation of the pit closure, only through conversations with Zia and ETGI that the pit was closed and authorized by OCD.

## **SPILL**

The spill in question occurred 8/22/04.

Terry Wallace with Zia, filed a C-141 with OCD. Fluid was picked up and area cleaned. (copy of C-141)

**Price, Wayne**

---

**From:** Price, Wayne  
**Sent:** Monday, August 23, 2004 5:07 PM  
**To:** Piter Bergstein (E-mail); Eddie Seay (E-mail)  
**Cc:** Williams, Chris; Sheeley, Paul; Johnson, Larry  
**Subject:** Salty Dog Brine Station BW-008 Notice of Violation of Permit Conditions

Please find enclosed a copy of OCD's inspection report and photos. Salty Dog has 10 days to correct these violations. Please provide proof of correction.



Aug 19 04  
inspection.jpg



DCP02198.JPG



DCP02203.JPG



DCP02201.JPG

Sincerely:

Wayne Price  
New Mexico Oil Conservation Division  
1220 S. Saint Francis Drive  
Santa Fe, NM 87505  
505-476-3487  
fax: 505-476-3462  
E-mail: WPRICE@state.nm.us

**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit JJ**

# Environmental Facility Inspection

Facility Name	SALTY DOG -ARKANSAS JUNCTION	Time Out	13:00	Time In	13:30	Hrs	
Inspector	Wayne Price	DI Mod	8/23/2004	Purpose	Request/Complaint		
Inspection Date	08/19/2004	Inspect No.	alWFP0423659335	Type	Field Inspection		

## Violations/Documentation

List Violations or Indicate Compliance	Specific Violation
	Contamination observed on ground surface
	Pits need repair/modification to meet guidelines.

## Additional Violation Notes

Two violations were noted during inspection for discharge permit renewal.

Documentation Acquired:     Samples     Statements     Sketch     Video     Photos

## Compliance Items (Checked Items Denote Non-Compliance)

Write Compliance Based on this Inspection

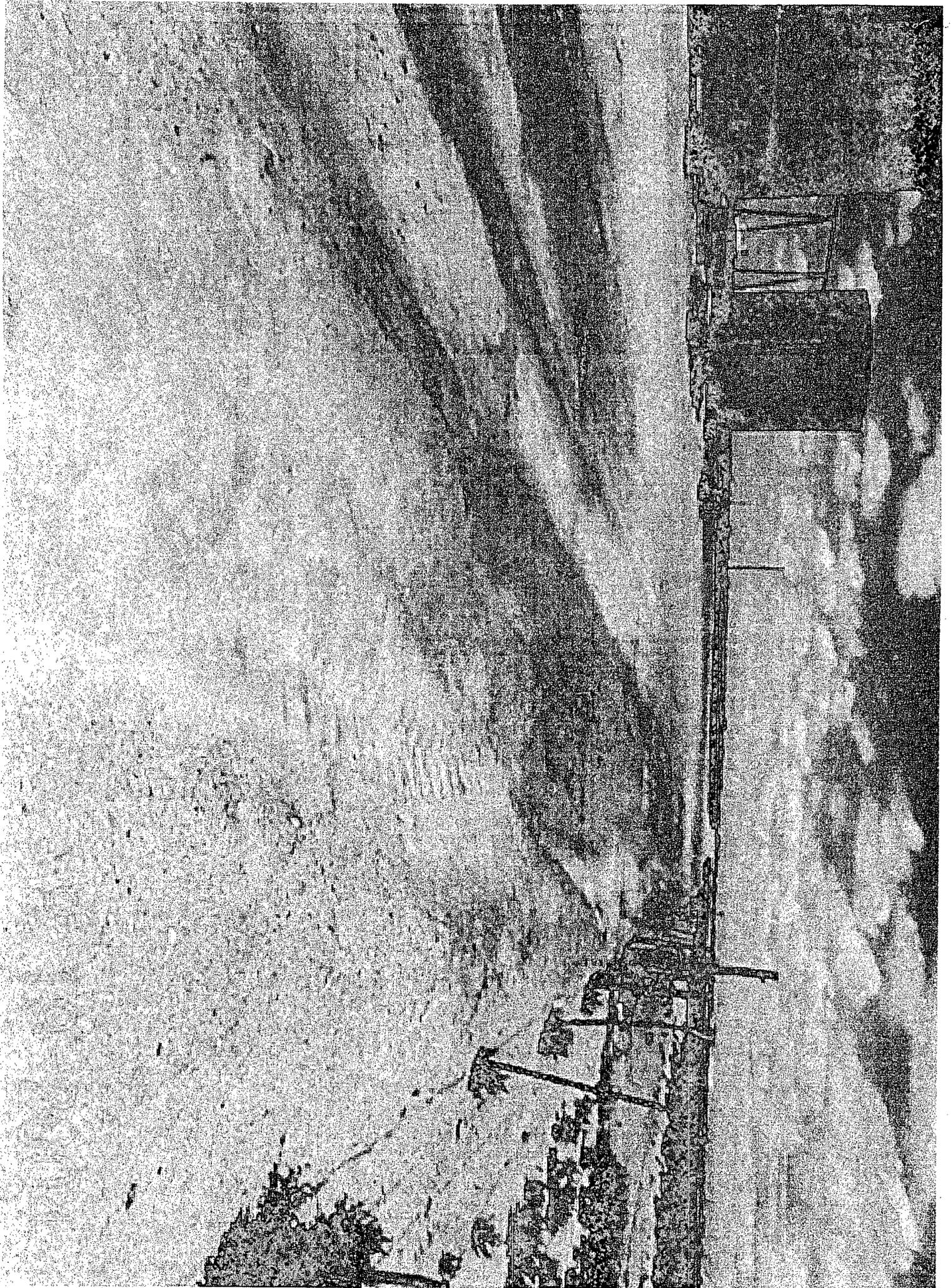
- Drums     Process     AG Tanks     AG Saddle Tk     Labeling     Tanks/Sumps     Permits
- UG Lines     WD Practice     Class V     Housekeepin     Spill Rpt     Potential ENV     Wtr Wells

Describe Remedial Action Required

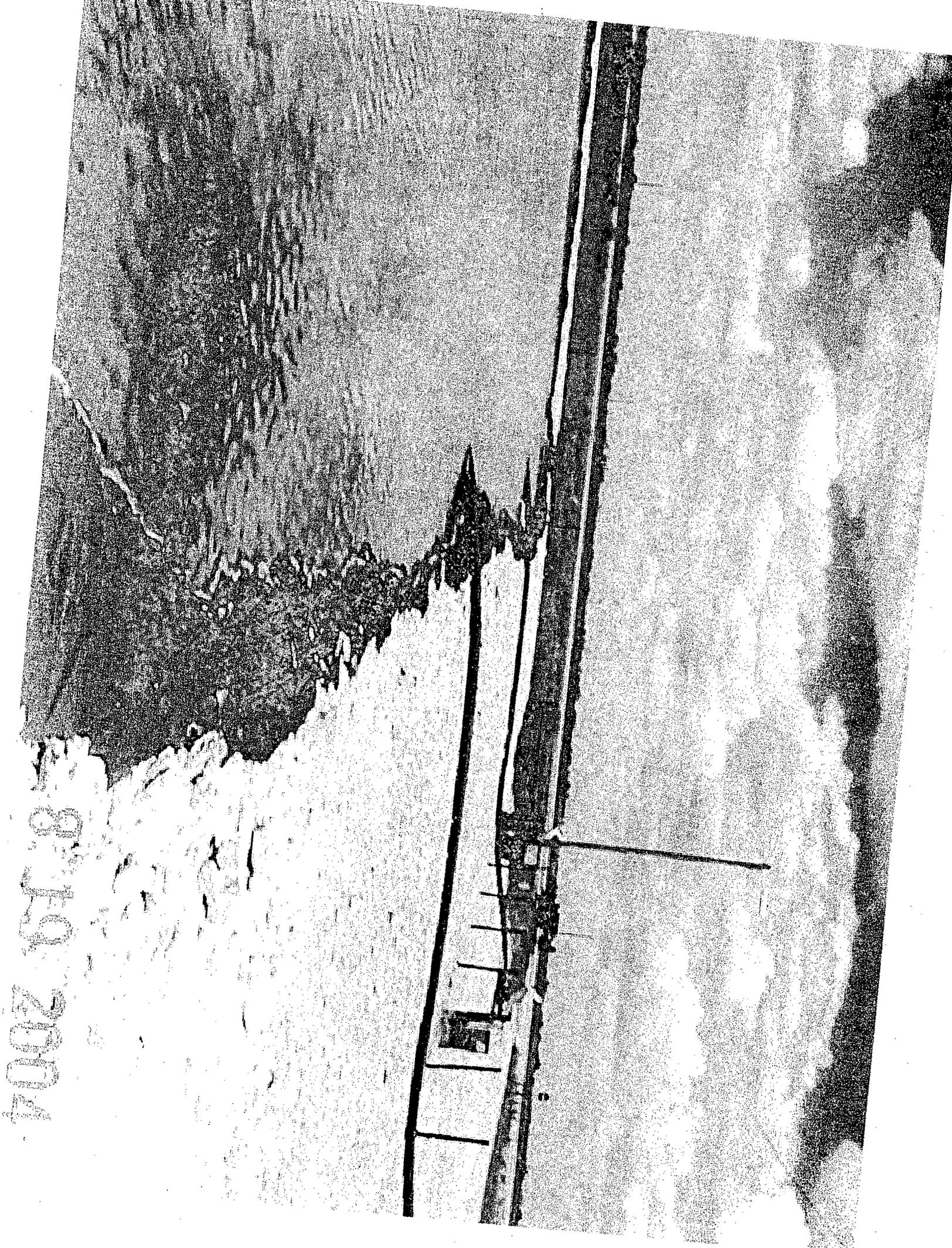
1. Salt contamination observed on ground east of brine pond area. Violation of Permit. Salty Dog shall remove all visible salt contamination. 2. Brine Pond exceeds allowable freeboard. Violation of permit. Operator shall reduce level immediately.

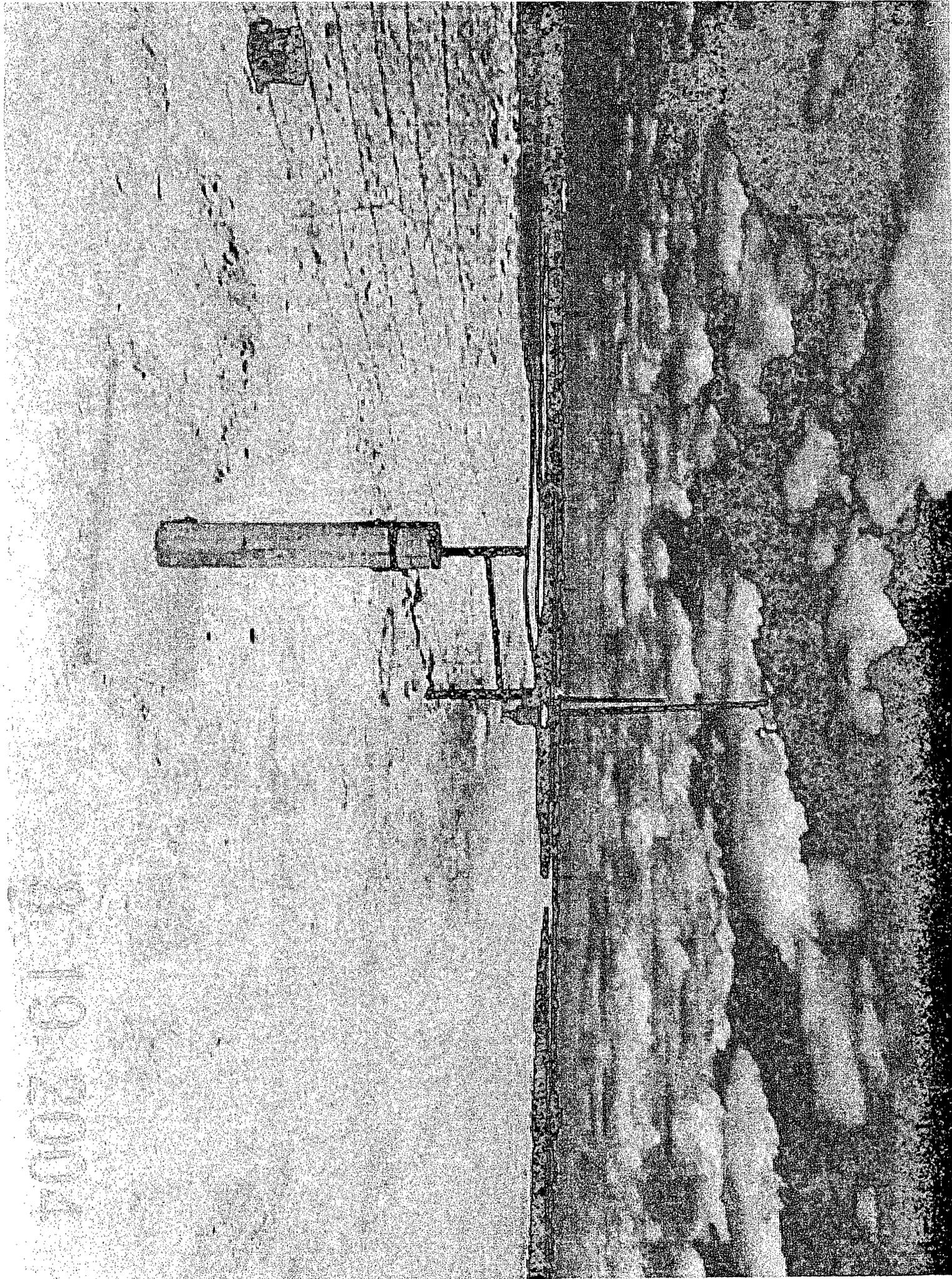
Use [SHIFT] + [F2] to Expand any Notes or Comment Field

**WQCC-ACO#2**  
**Salty Dog, Inc.**  
**OCD Exhibit KK**



8:19:2004





August 27, 2004

NMOCD Environmental  
ATTN: Wayne Price  
Box 6429  
1220 S. Saint Francis Drive  
Santa Fe, NM 87504

RE: Salty Dog Brine BW-008

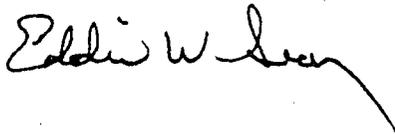
Mr. Price:

Pursuant to your request Salty Dog has completed additional work at its brine facility.

We completed three monitor wells and three soil borings, find within information as found.

If you have any questions or need additional information, please call.

Sincerely,



Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

**WQCC-ACO#2**  
**Salty Dog, Inc**  
**OCD Exhibit LL**

## **TABLE OF CONTENTS**

**PMW #1 - PIT MONITOR WELL**

**MW #4 - SE of Brine Well**

**MW#5 - E of Well #3**

**LSB 1, 2, 3 - Soil Boring at Land Area**

**Maps & Diagrams**

**Pit at Well**

**Spill**

**Conclusions and Recommendations**

## SALTY DOG

Work began on 8/11/04 after we finally acquired the services of a rig. Phoenix Environmental of Hobbs conducted the drilling of the MWs and completions.

We began with PMW #1, which is the monitor well located 25 ft. southeast of the brine pit. Samples were taken every five feet and tested for chloride. We hit wet soil at approximately 63 ft. and TD well at 78 ft.

Find attached monitor well diagram and completion along with log and photos.

### WELL TEST.

Using a generator and submergible pump, the well was pumped and tested.

Top of H<sub>2</sub>O - 67.05 ft.

TD from top of casing 79.6 ft.

Well was pumped at a rate of 1.5 gpm until water cleared up, then three casing volumes were pumped out before sampling, a total of 31 gallons. The sample was collected for testing, the conductivity at end of test was 16,000 ppm.

Find analytical for soil test and water analysis attached.

Well protection and locks were installed.

ZIA SALTY DOG  
BW-008

RECEIVED

SEP 03 2004  
Oil Conservation Division  
Environmental Bureau

INVESTIGATION

AUGUST 2004

BW - 8

# MONITORING REPORTS

DATE:

2004

August 27, 2004

NMOCD Environmental  
ATTN: Wayne Price  
Box 6429  
1220 S. Saint Francis Drive  
Santa Fe, NM 87504

RE: Salty Dog Brine BW-008

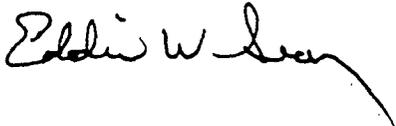
Mr. Price:

Pursuant to your request Salty Dog has completed additional work at its brine facility.

We completed three monitor wells and three soil borings, find within information as found.

If you have any questions or need additional information, please call.

Sincerely,

A handwritten signature in cursive script that reads "Eddie W. Seay". The signature is written in dark ink and is positioned above the typed name and contact information.

Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

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**PMW #1 - PIT MONITOR WELL**

**MW #4 - SE of Brine Well**

**MW#5 - E of Well #3**

**LSB 1, 2, 3 - Soil Boring at Land Area**

**Maps & Diagrams**

**Pit at Well**

**Spill**

**Conclusions and Recommendations**

## SALTY DOG

Work began on 8/11/04 after we finally acquired the services of a rig. Phoenix Environmental of Hobbs conducted the drilling of the MWs and completions.

We began with PMW #1, which is the monitor well located 25 ft. southeast of the brine pit. Samples were taken every five feet and tested for chloride. We hit wet soil at approximately 63 ft. and TD well at 78 ft.

Find attached monitor well diagram and completion along with log and photos.

### WELL TEST.

Using a generator and submergible pump, the well was pumped and tested.

Top of H<sub>2</sub>O - 67.05 ft.

TD from top of casing 79.6 ft.

Well was pumped at a rate of 1.5 gpm until water cleared up, then three casing volumes were pumped out before sampling, a total of 31 gallons. The sample was collected for testing, the conductivity at end of test was 16,000 ppm.

Find analytical for soil test and water analysis attached.

Well protection and locks were installed.

Company Drilled for:

SALTY DOG INC.

Location: SEC. 5, T19S, R36E

675 32° 41' 43" N  
103° 22' 17" W

ELU 3801 ASL

Job Number:

Installation Date:

8-11-04

Monitor Well Number:

PMW-1

Depth: 78'

Bore Size: 4 3/4"

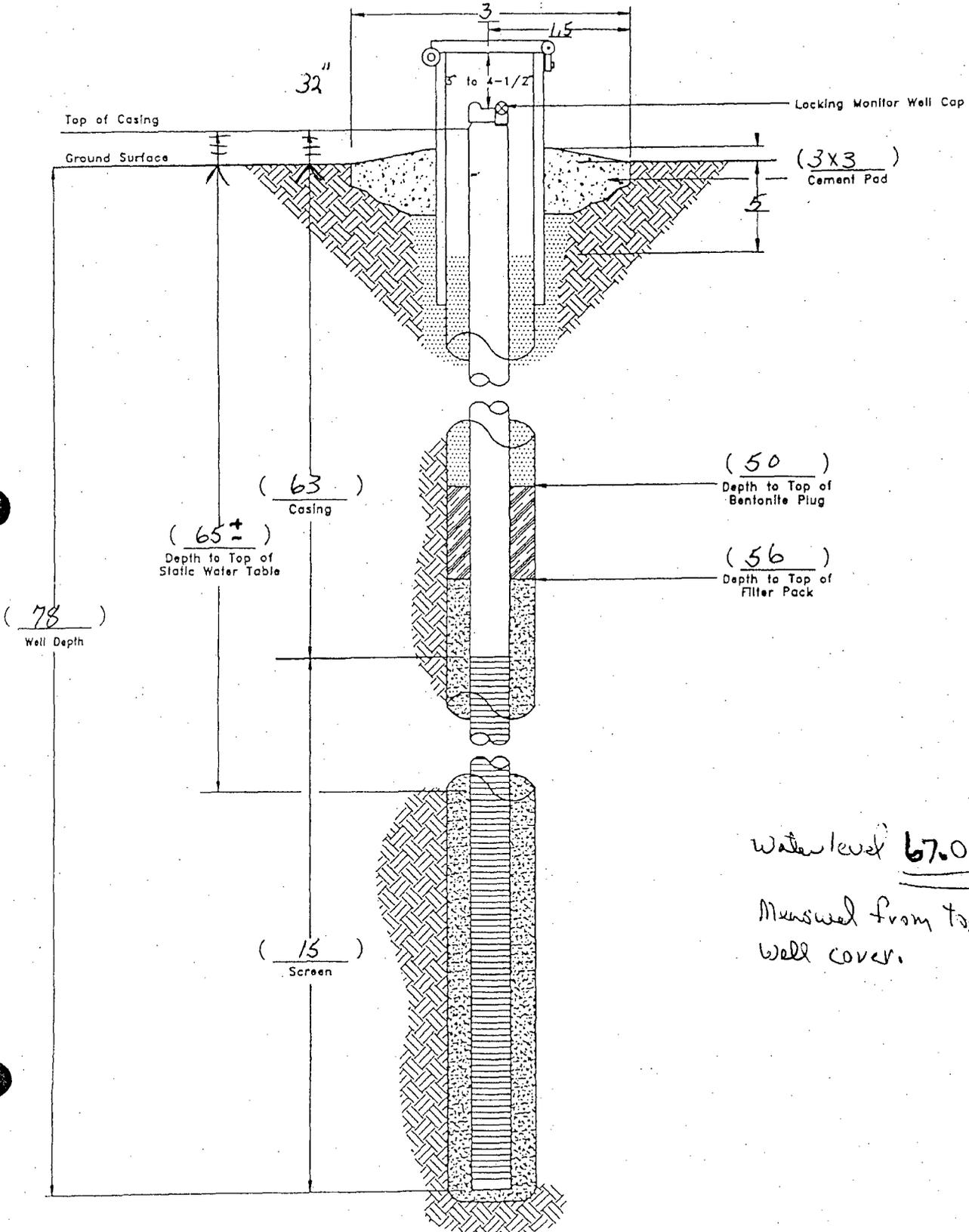
Casing Size: 2" SCH 40 PVC

Casing Elevation:

Screen Size: 2" - .010

Top of Water Elevation: 65' BGS

# Monument Type Monitor Well Diagram



Company Drilled for:

SAITY DOG INC.

# Drilling Log

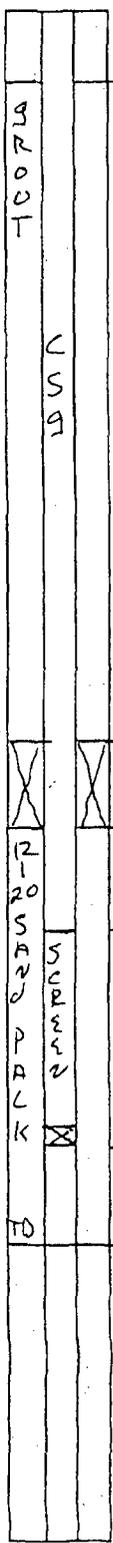
Location: SEC. 5, T19S R36E  
 65 32° 41' 43" N  
 103° 22' 17" W 2LU 3801 ASL

Well/Bore Number: P.M.W.-1 Date Drilled: 8-11-04 Driller: ALLEN HODGE Logged By: A. Hodge

Drilling Method: AIR ROTARY Depth of Boring: 85' BGS Depth of Well: 78' Length of Casing: 63' Length of Screen: 15'

Bore Diameter: 4 3/4 Casing Diameter: 2" SCH 40 Screen Diameter: 2" SCH 40 Slot Size: .010 Well Material: SCH 40 PVC

Depth	Geology	Sample Type	SPM	Remarks	Well Design	Depth
0	CALICHE PAD			CEMENT TO SURFACE		0
	BROWN TOP SOIL					
5	WHITE TO PINK CALICHE			BENTONITE GROUT		5
10						10
15						15
20						20
25	RED TO BROWN QUARTZITE (HARD)					25
30	TAN SAND					30
35						35
40	BROWN SANDSTONE					40
45	RED TO TAN SAND WITH BROWN SANDSTONE STRINGS					45
50						50
55	RED SAND			BENTONITE PLUS		55
60						60
65	TOP OF WATER					65
	RED WATER SAND					
70						70
75						75
80						80
85	TD @ 85'					85
90						90
95						95
100						100
105						105





PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR  
EDDIE SEAY CONSULTING  
ATTN: EDDIE SEAY  
601 W. ILLINOIS  
HOBBS, NM 88242  
FAX TO: (505) 392-6949

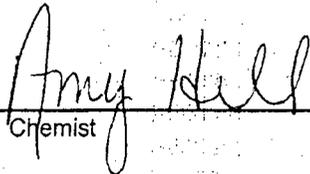
Receiving Date: 08/12/04  
Reporting Date: 08/13/04  
Project Owner: P. BERSTEIN  
Project Name: ZIA SALTY DOG  
Project Location: 12 MI. W. OF HOBBS, NM

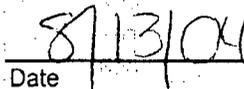
Analysis Date: 08/13/04  
Sampling Date: 08/11-08/12/04  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: GP  
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/Kg)
H9003-1	PMW #1 0-5'	4639
H9003-2	PMW #1 5-10'	5998
H9003-3	PMW #1 10-15'	1919
H9003-4	PMW #1 15-20'	736
H9003-5	PMW #1 20-25'	1408
H9003-6	PMW #1 25-30'	800
H9003-7	PMW #1 30-35'	1104
H9003-8	PMW #1 35-40'	1168
H9003-9	PMW #1 40-45'	2399
H9003-10	PMW #1 45-50'	192
H9003-11	PMW #1 50-55'	128
H9003-12	PMW #1 55-60'	192
	Quality Control	1040
	True Value QC	1000
	% Recovery	104
	Relative Percent Difference	4.0

METHOD: Standard Methods 4500-Cl<sup>-</sup>B

Note: Analyses performed on 1:4 w:v aqueous extracts.

  
Chemist

  
Date

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# ARDINAL LABORATORIES

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ANALYTICAL RESULTS FOR  
EDDIE SEAY CONSULTING  
ATTN: EDDIE SEAY  
601 W. ILLINOIS  
HOBBS, NM 88242  
FAX TO:

Receiving Date: 08/20/04  
Reporting Date: 08/23/04  
Project Number: P. BERSTEIN  
Project Name: ZIA SALTY DOG  
Project Location: W. HOBBS, NM

Sampling Date: 08/20/04  
Sample Type: GROUNDWATER  
Sample Condition: COOL & INTACT  
Sample Received By: AH  
Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity ( $\mu$ S/cm)	T-Alkalinity (mgCaCO <sub>3</sub> /L)
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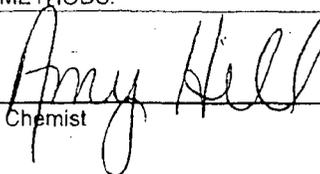
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H9047-1	PMW #1	3376	479	101	12.2	19146	155
H9047-2	ZMW #4	4162	233	44	58.0	18636	101
H9047-3	ZMW #5	207	83	13	3.87	1727	176
H9047-4	SQUIRES OFFICE WELL	21	57	13	2.24	599	147
Quality Control		NR	40	52	4.87	1322	NR
True Value QC		NR	50	50	5.00	1413	NR
% Recovery		NR	80	104	97.4	93.6	NR
Relative Percent Difference		NR	2.0	6.0	5.8	0.7	NR

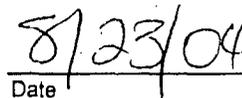
METHODS: SM3500-Ca-D 3500-Mg E 8049 120.1 310.1

Cl <sup>-</sup> (mg/L)	SO <sub>4</sub> (mg/L)	CO <sub>3</sub> (mg/L)	HCO <sub>3</sub> (mg/L)	pH (s.u.)	TDS (mg/L)
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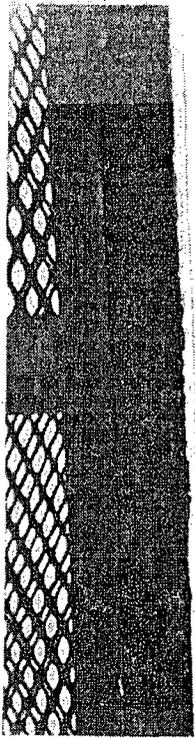
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H9047-1	PMW #1	6198	79	0	190	6.94	10444
H9047-2	ZMW #4	6598	473	0	123	7.24	11716
H9047-3	ZMW #5	324	80	0	215	7.64	957
H9047-4	SQUIRES OFFICE WELL	48	30	0	179	8.00	354
Quality Control		1040	50.67	NR	976	7.05	NR
True Value QC		1000	50.00	NR	1000	7.00	NR
% Recovery		104	101	NR	97.6	101	NR
Relative Percent Difference		4.0	4.9	NR	2.2	0.1	1.4

METHODS: SM4500-Cl-B 375.4 310.1 310.1 150.1 160.1

  
Chemist

  
Date

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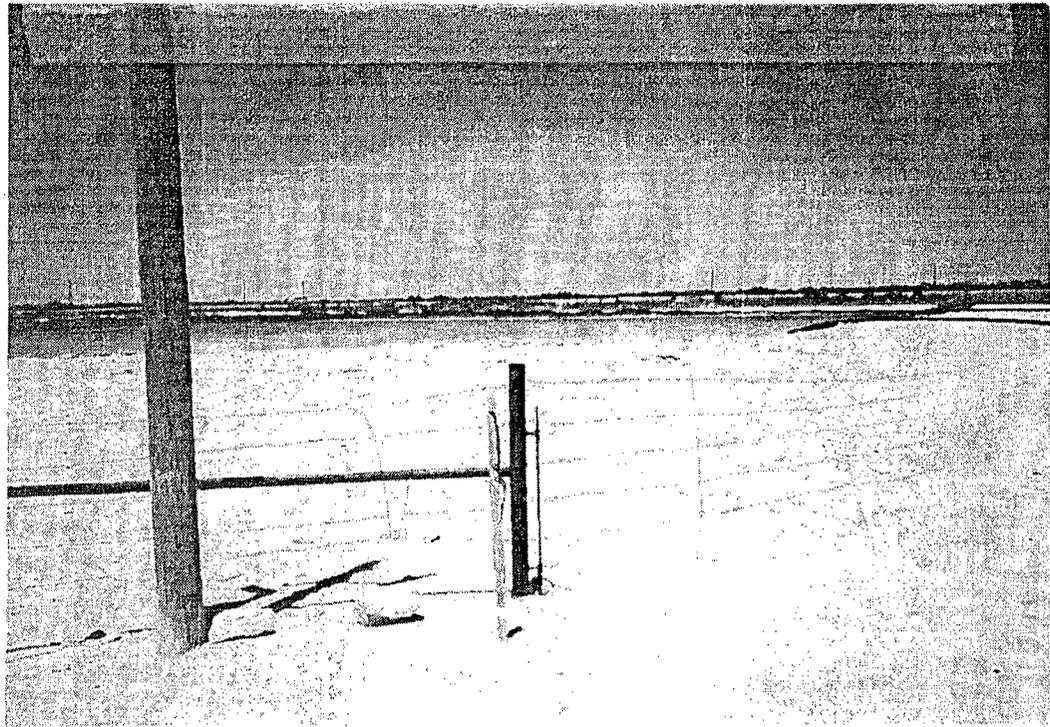
# SALTY DOG WATER STATION

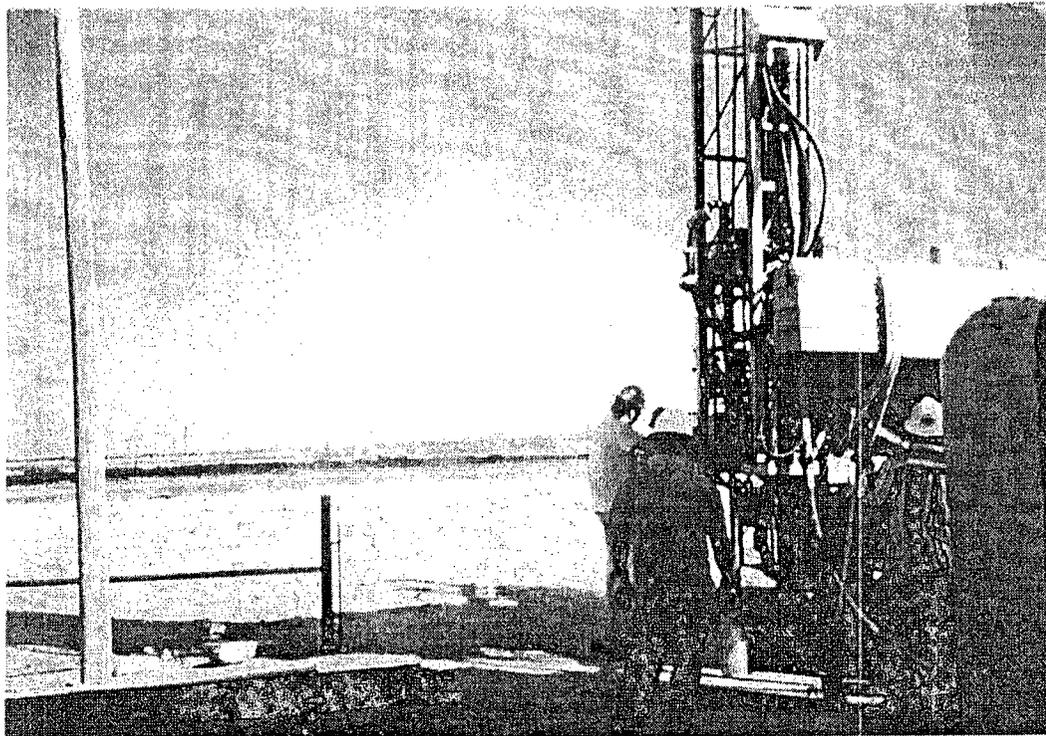
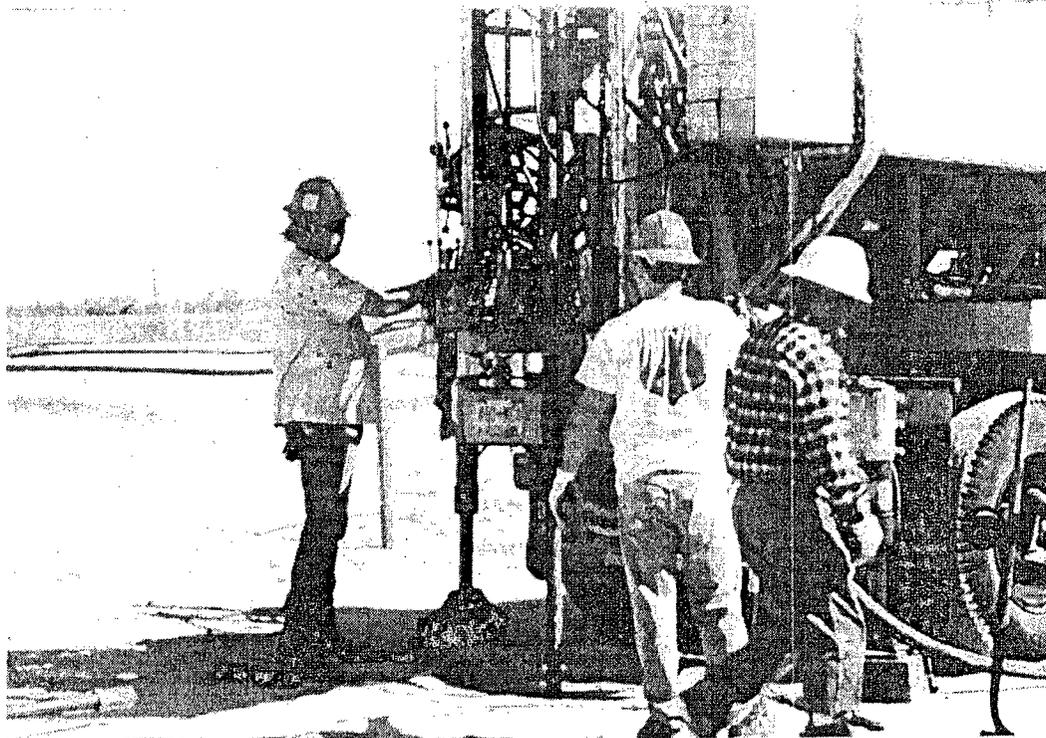
In Case Of Emergency Or Information

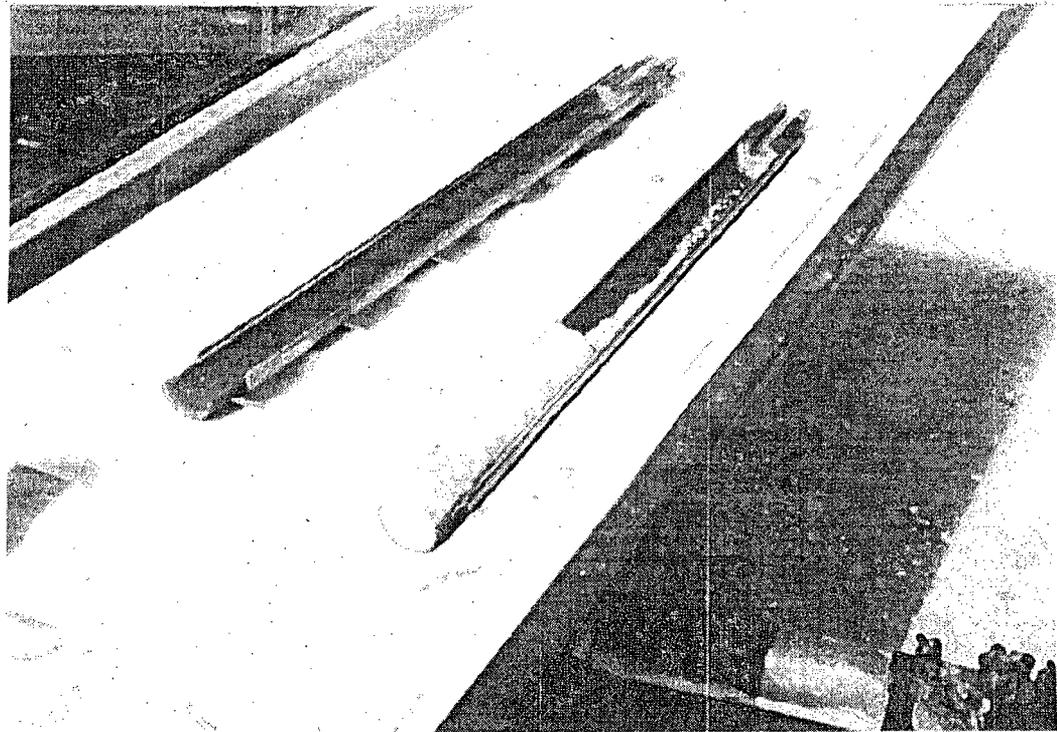
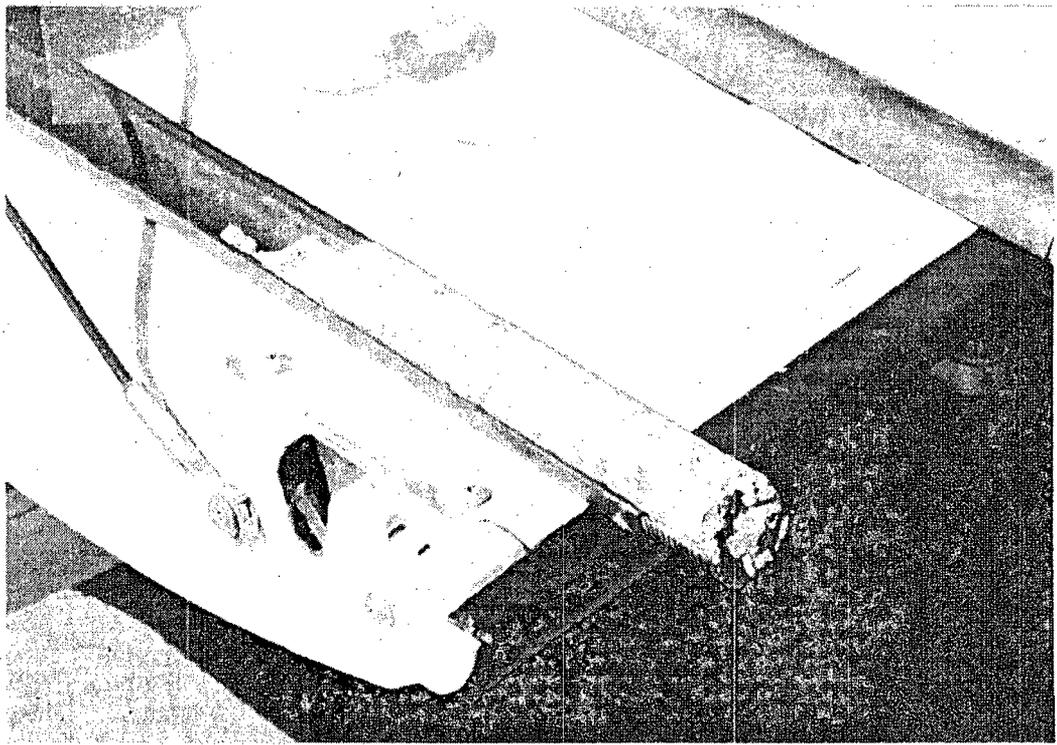
(505)393-8352

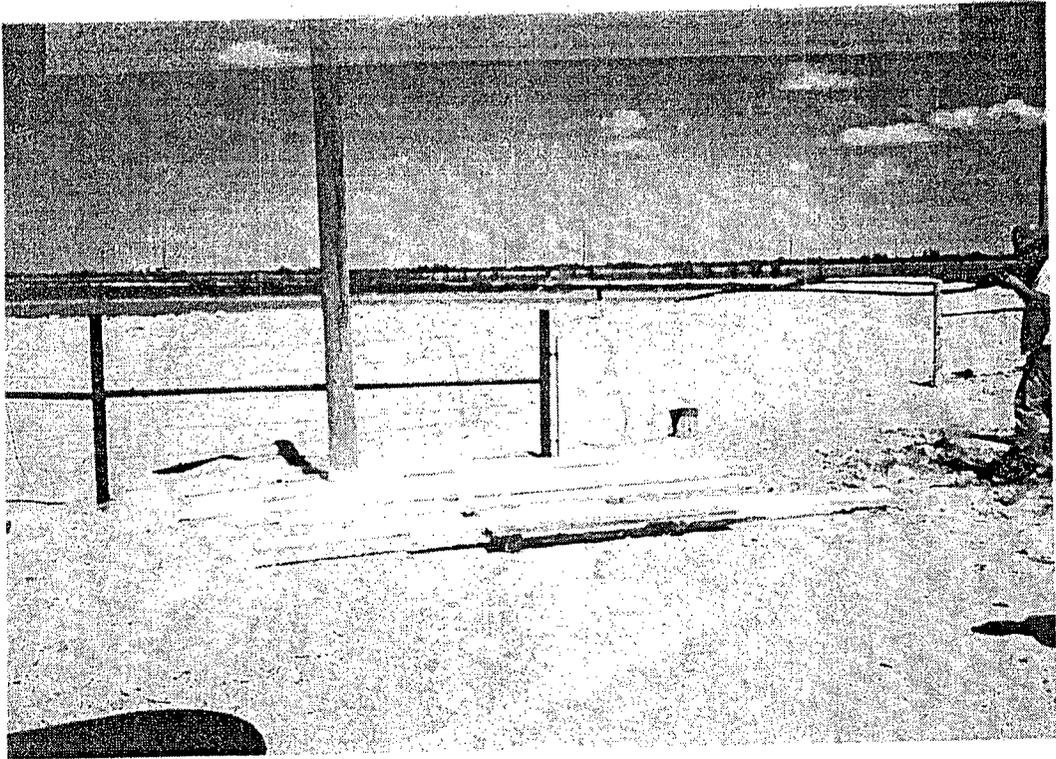
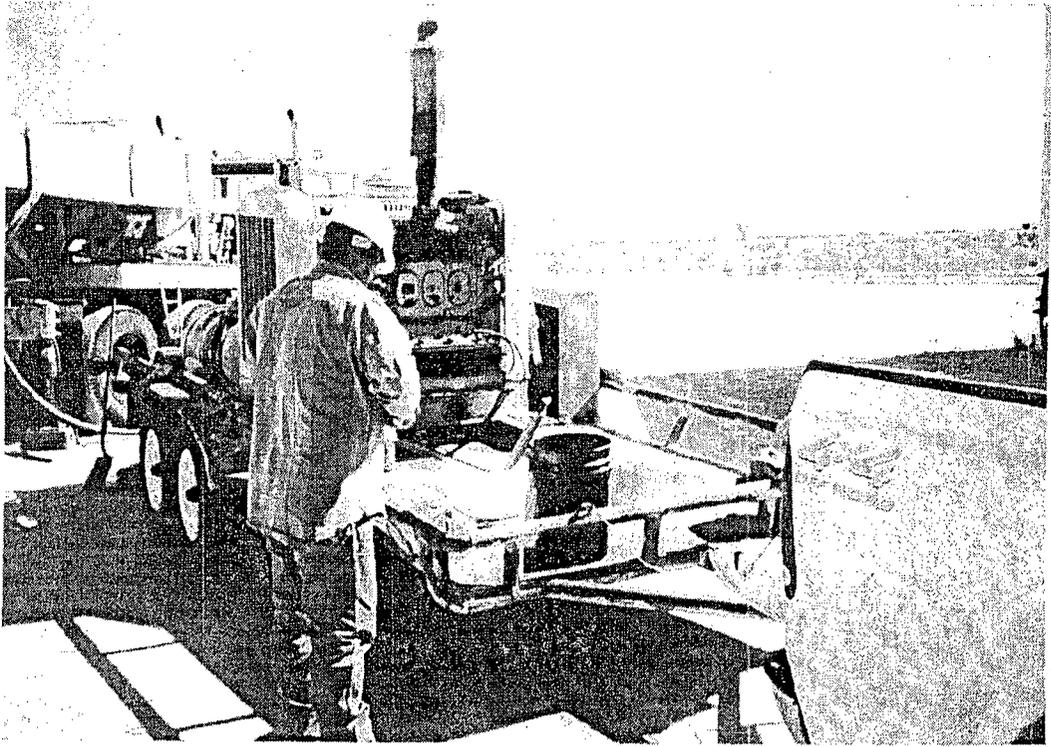


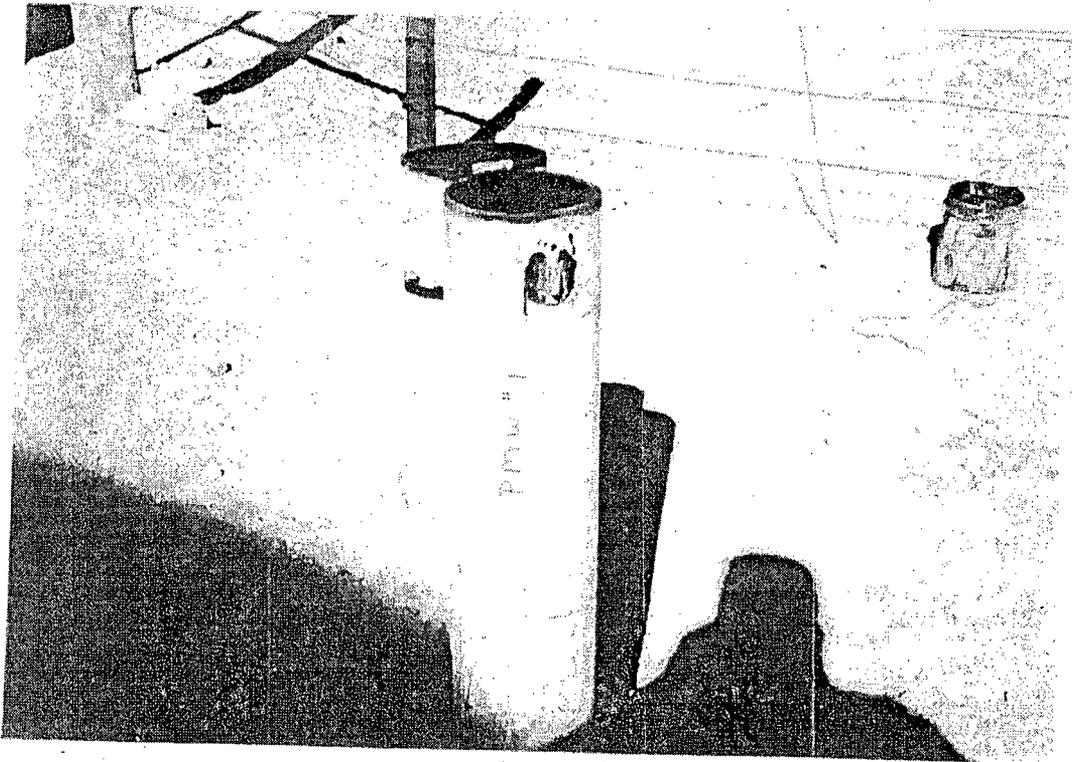
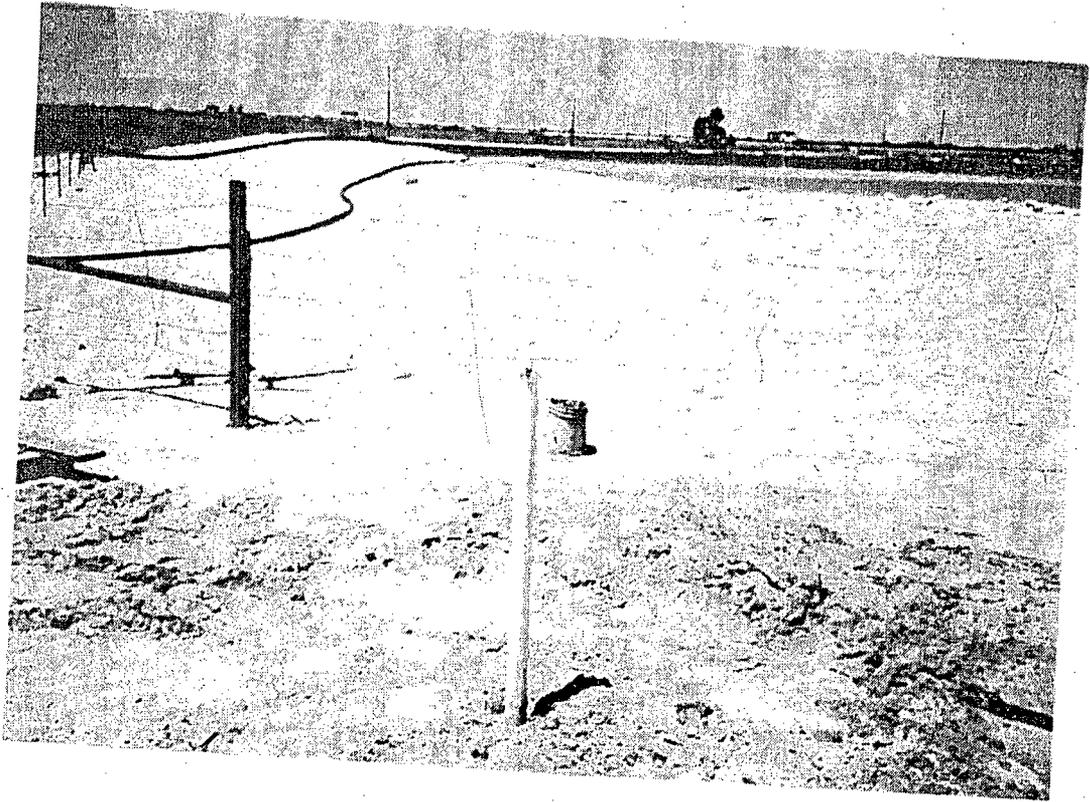
# 1 E3P

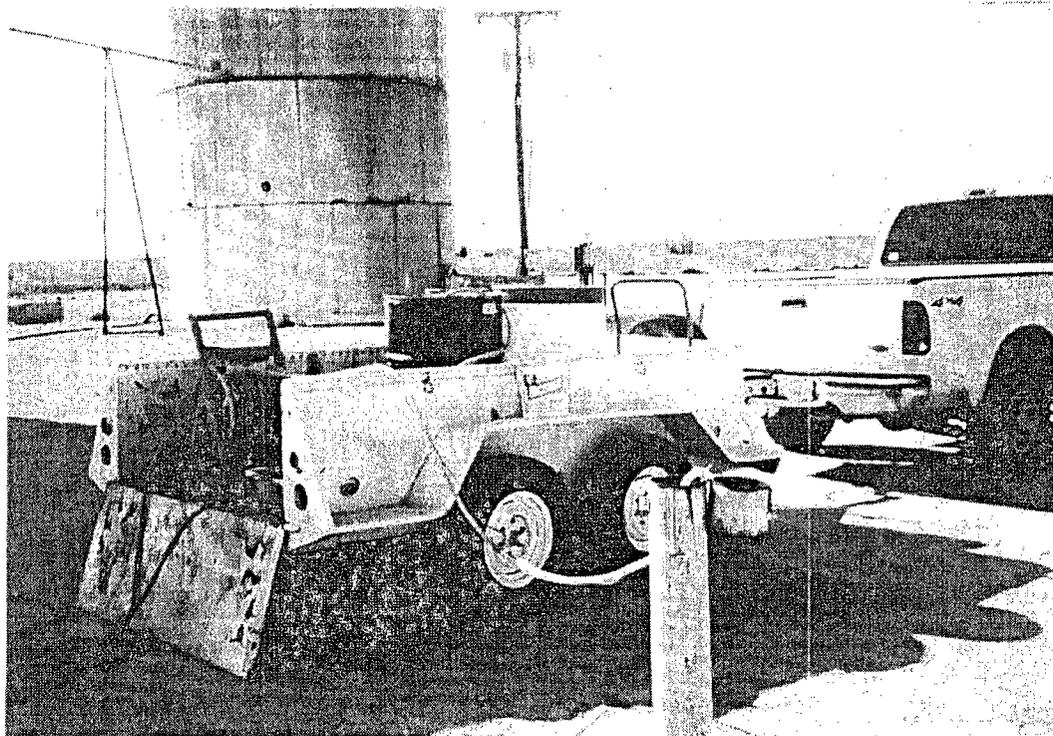
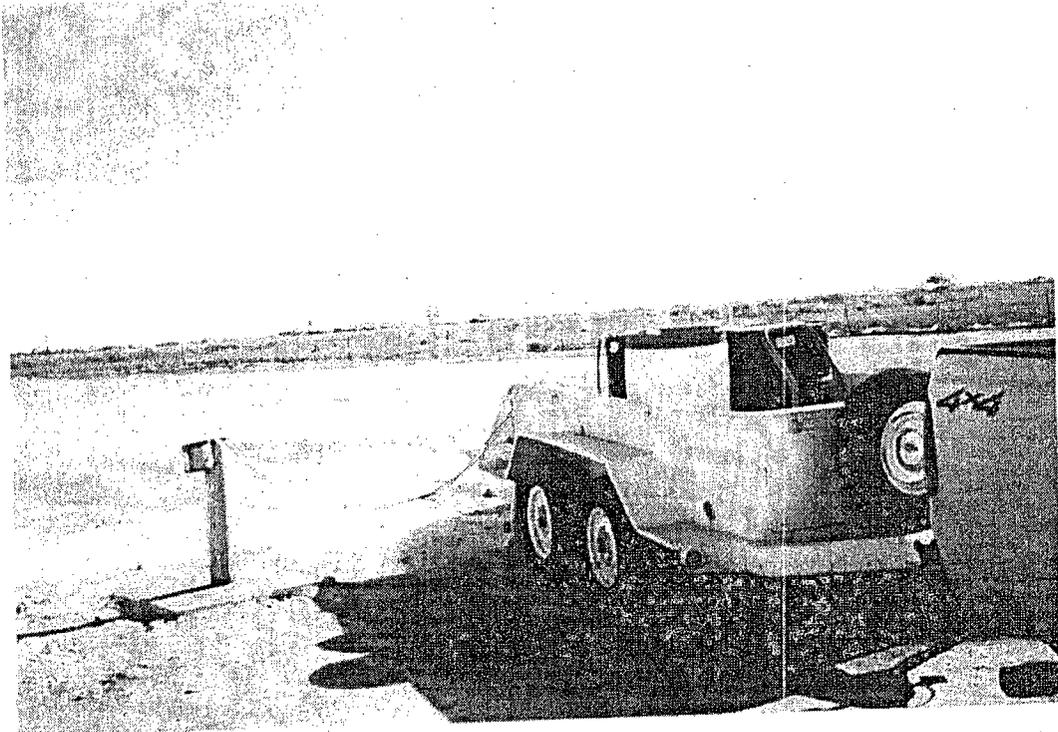












## SALTY DOG

Began drilling on MW #4 on 8/12/04. Drilled to 30', and bearing went out of rotary table on rig, shut down for repairs.

Start drilling on 8/16/04. Monitor well #4 is located 200' SE of MW#3. Wet sand and water were encountered at approximately 60', redbed was at 143' and TD was 145'. Hole was circulated, cleaned and completed. During completion problems with casing setting occurred and the well was completed at 131'. (OCD was notified)

Find within log and monitor well completion.

### WELL TEST:

Water level 61.5' - Top of casing.

TD 131'

Started pumping well at 1.5 gpm. Pumped until well cleaned up, then pumped three casing volumes, total of 74 gallons was pumped. The conductivity at end of test was 15,000 ppm. Sample was taken.

Find within analytical.

Well covers and locks were installed.

Company Drilled for:

SALTY DOG INC.

# Monument Type Monitor Well Diagram

Location: SEC 5 T19S R36E  
32° 41' 13" N  
03° 22' 20" W ELEV. 3814 ASL

Job Number:

Installation Date: 8-20-04

Monitor Well Number: MW-4

Depth: 131'

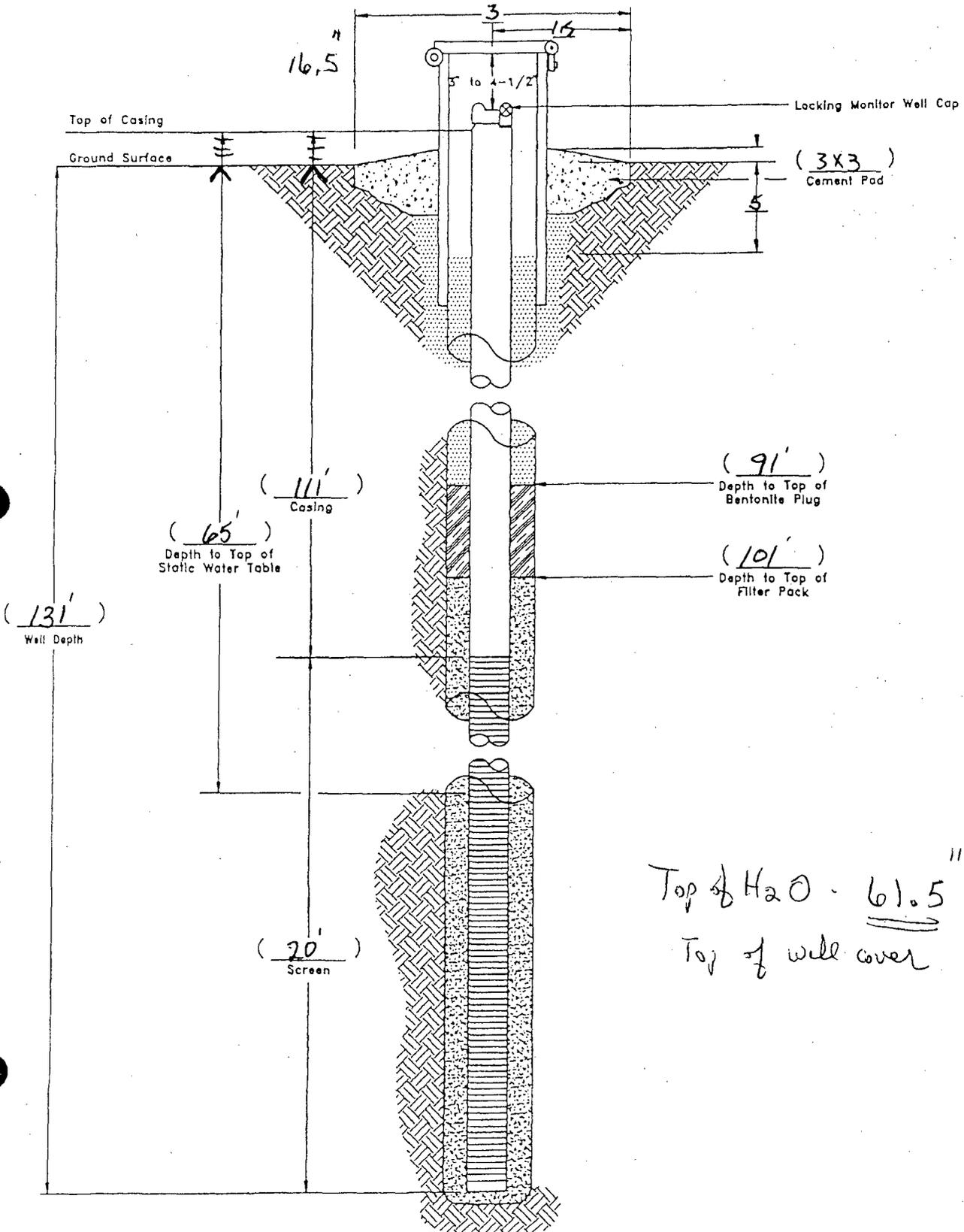
Bore Size: 4 3/4"

Casing Size: 2"

Casing Elevation:

Screen Size: 2" #10

Top of Water Elevation: 65'



Company Drilled for:  
**SALTY DOG INC.**

# Drilling Log

Location: **SEC 5 T19S R36E**  
**GPS 32° 41' 13" N**  
**103° 22' 20" W ELEV. 3814 ASL**

Well/Bore Number: **MW-4** Date Drilled: **8-20-04** Driller: **ALLEN HODGE** Logged By: **A. Hodge**

Drilling Method: **AIR ROTARY** Depth of Boring: **145' BGS** Depth of Well: **132'** Length of Casing: **111'** Length of Screen: **20'**  
 Bore Diameter: **4 3/4"** Casing Diameter: **2"** Screen Diameter: **2"** Slot Size: **0010** Well Material: **SCH 40 PUC**

Depth	Geology	Sample Type	DVA (RPM)	Remarks	Well Design	Depth
0	BROWN TOP SOIL			CEMENT TO SURFACE		0
5	WHITE CALICHE			BENTONITE GROUT	C S S	5
10	WHITE TO PINK CALICHE					10
15						15
20	RED TO BROWN QUARTZITE (HARD)			G R O U T		20
25						25
30	TAN SAND					30
35						35
40	RED TO BROWN SANDSTONE					40
45	RED SAND WITH SANDSTONE STRINGERS			45		
50				50		
55				55		
60				60		
65	TOP OF WATER			65		
70	RED WATER SAND			70		
75				75		
80				80		
85				85		
90				90		
95				BENTONITE PLUS	95	
100				TOP OF SAND PACK	100	
105					105	

Company Drilled for: <b>SALTY DOG INC.</b>		<b>Drilling Log</b>			
Location: <b>SEC 5, T19S R36E</b> <b>6DS 32° 41' 13" N</b> <b>03° 27' 20" W ELEV. 3814 ASL</b>		Well/Bore Number: <b>MW-4</b>	Date Drilled: <b>8-20-04</b>	Driller: <b>ALLAN HODGE</b>	Logged By: <b>A. Hodge</b>
Drilling Method: <b>AIR ROTARY</b>	Depth of Boring: <b>145' BGS</b>	Depth of Well: <b>131'</b>	Length of Casing: <b>111'</b>	Length of Screen: <b>20'</b>	
Bore Diameter: <b>4 3/4</b>	Casing Diameter: <b>2"</b>	Screen Diameter: <b>2"</b>	Slot Size: <b>.010</b>	Well Material: <b>SCH 40 PUC</b>	

Depth	Geology	Sample Type	DVA (PPM)	Remarks	Well Design	Depth
100	RED WATER SAND WITH STRINGERS OF BROWN CLAY			BENTONITE PLUS	<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">20 SAND PACK</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">SCREEN</div> </div>	100
105				TOP OF SAND PACK		105
110						110
115						115
120					120	
125					125	
130					130	
135					135	
140					140	
145	RED BED				TD	145
50	WELL TD					50
55						55
60						60
65						65
70						70
75						75
80						80
85						85
90						90
95						95
100						100
105						105



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ANALYTICAL RESULTS FOR  
 EDDIE SEAY CONSULTING  
 ATTN: EDDIE SEAY  
 601 W. ILLINOIS  
 HOBBS, NM 88242  
 FAX TO:

Receiving Date: 08/20/04  
 Reporting Date: 08/23/04  
 Project Number: P. BERSTEIN  
 Project Name: ZIA SALTY DOG  
 Project Location: W. HOBBS, NM

Sampling Date: 08/20/04  
 Sample Type: GROUNDWATER  
 Sample Condition: COOL & INTACT  
 Sample Received By: AH  
 Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity ( $\mu$ S/cm)	T-Alkalinity (mgCaCO <sub>3</sub> /L)
ANALYSIS DATE:		08/23/04	08/23/04	08/23/04	08/23/04	08/23/04	08/23/04
H9047-1	PMW #1	3376	479	101	12.2	19146	155
H9047-2	ZMW #4	4162	233	44	58.0	18636	101
H9047-3	ZMW #5	207	83	13	3.87	1727	176
H9047-4	SQUIRES OFFICE WELL	21	57	13	2.24	599	147
Quality Control		NR	40	52	4.87	1322	NR
True Value QC		NR	50	50	5.00	1413	NR
% Recovery		NR	80	104	97.4	93.6	NR
Relative Percent Difference		NR	2.0	6.0	5.8	0.7	NR

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
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	Cl <sup>-</sup> (mg/L)	SO <sub>4</sub> (mg/L)	CO <sub>3</sub> (mg/L)	HCO <sub>3</sub> (mg/L)	pH (s.u.)	TDS (mg/L)	
ANALYSIS DATE:		08/23/04	08/23/04	08/23/04	08/23/04	08/24/04	
H9047-1	PMW #1	6198	79	0	190	6.94	10444
H9047-2	ZMW #4	6598	473	0	123	7.24	11716
H9047-3	ZMW #5	324	80	0	215	7.64	957
H9047-4	SQUIRES OFFICE WELL	48	30	0	179	8.00	354
Quality Control		1040	50.67	NR	976	7.05	NR
True Value QC		1000	50.00	NR	1000	7.00	NR
% Recovery		104	101	NR	97.6	101	NR
Relative Percent Difference		4.0	4.9	NR	2.2	0.1	1.4

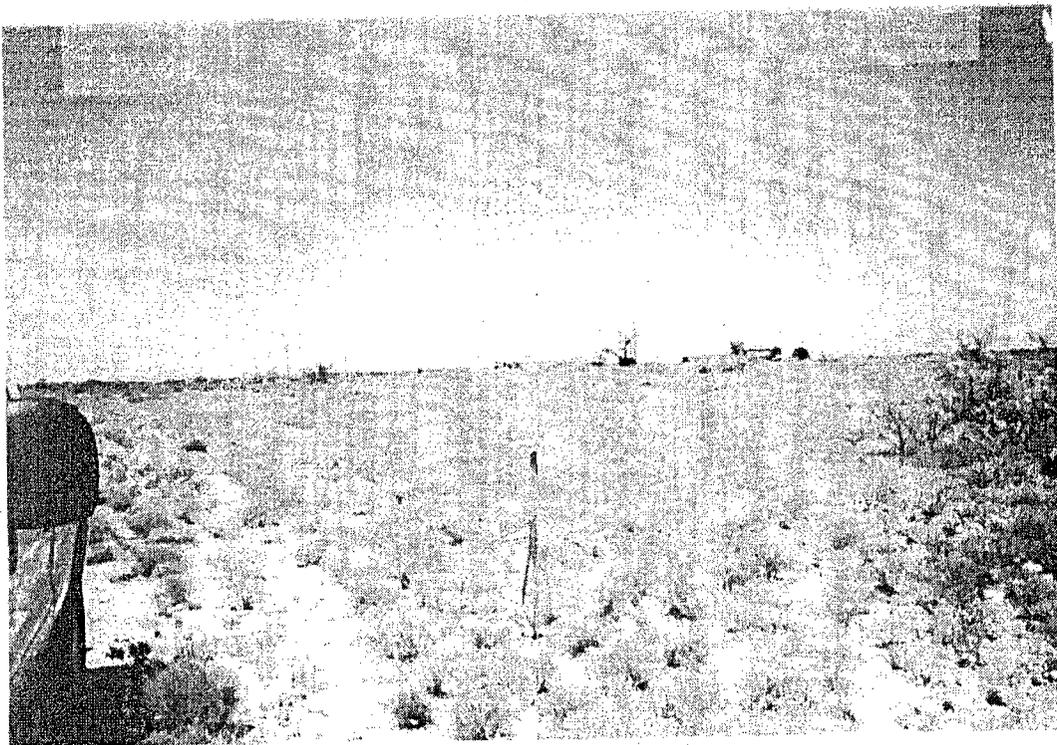
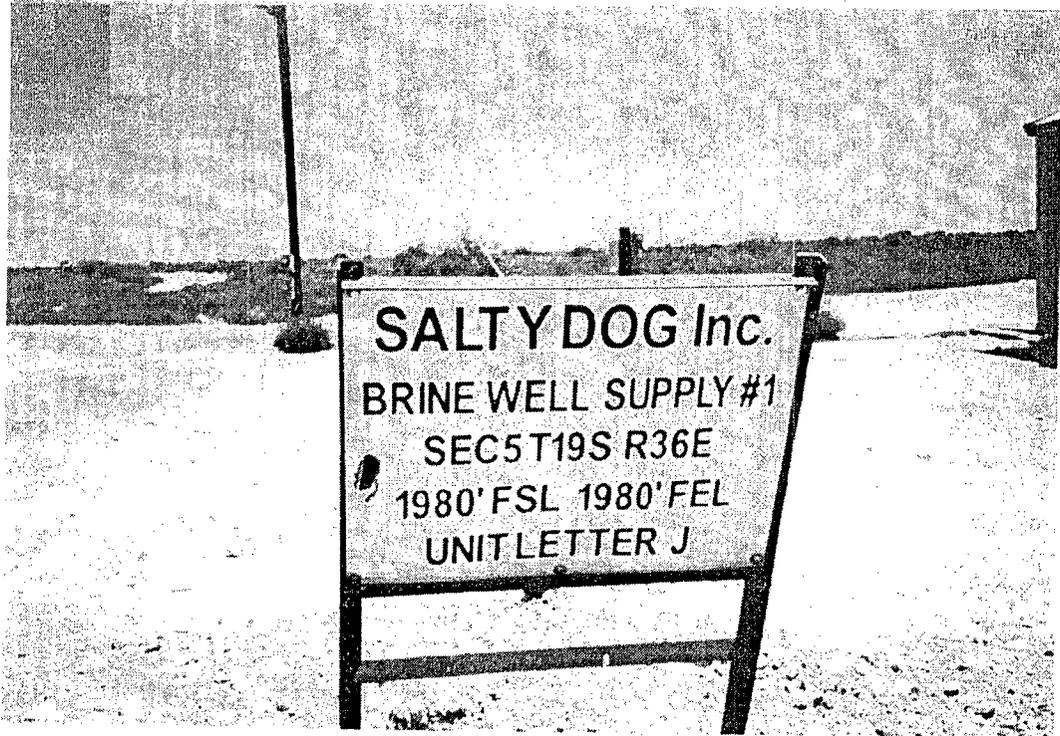
METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
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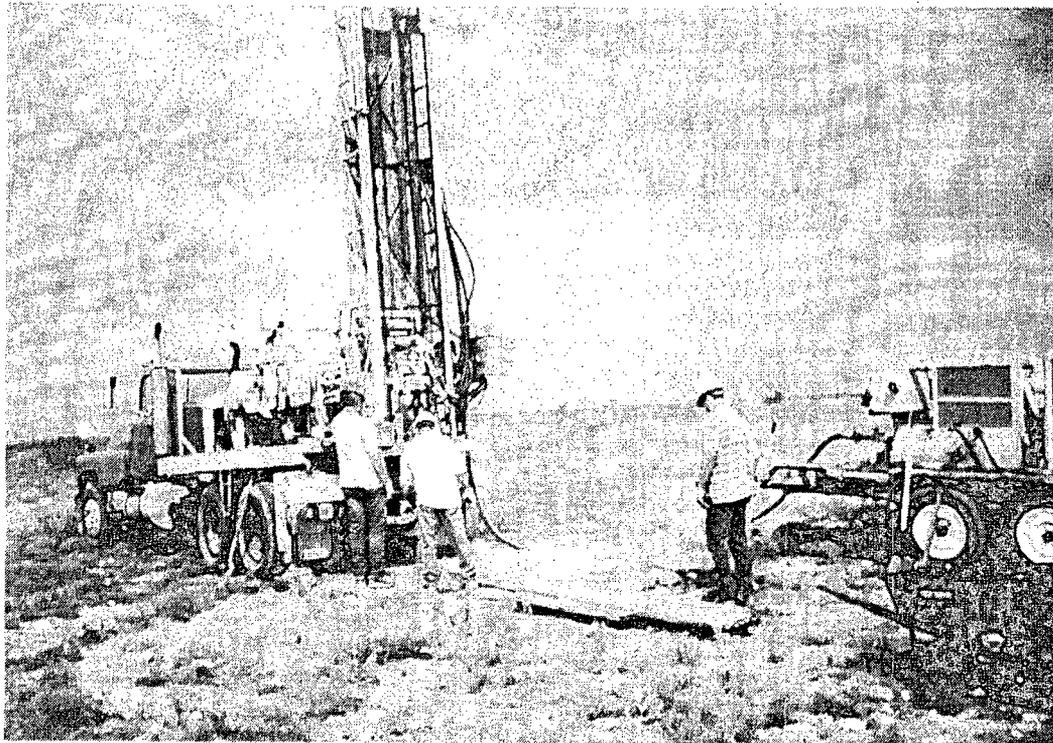
*Amy Hill*  
 Chemist

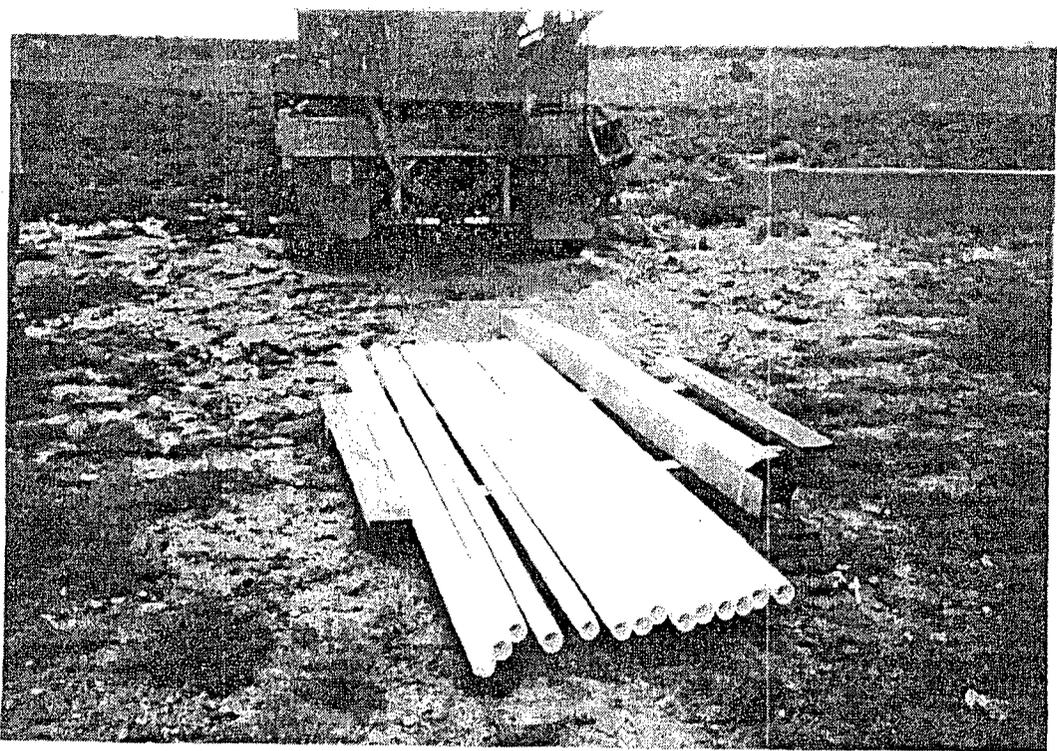
8/23/04  
 Date

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m  
w  
#  
4







PureGold

PureGold

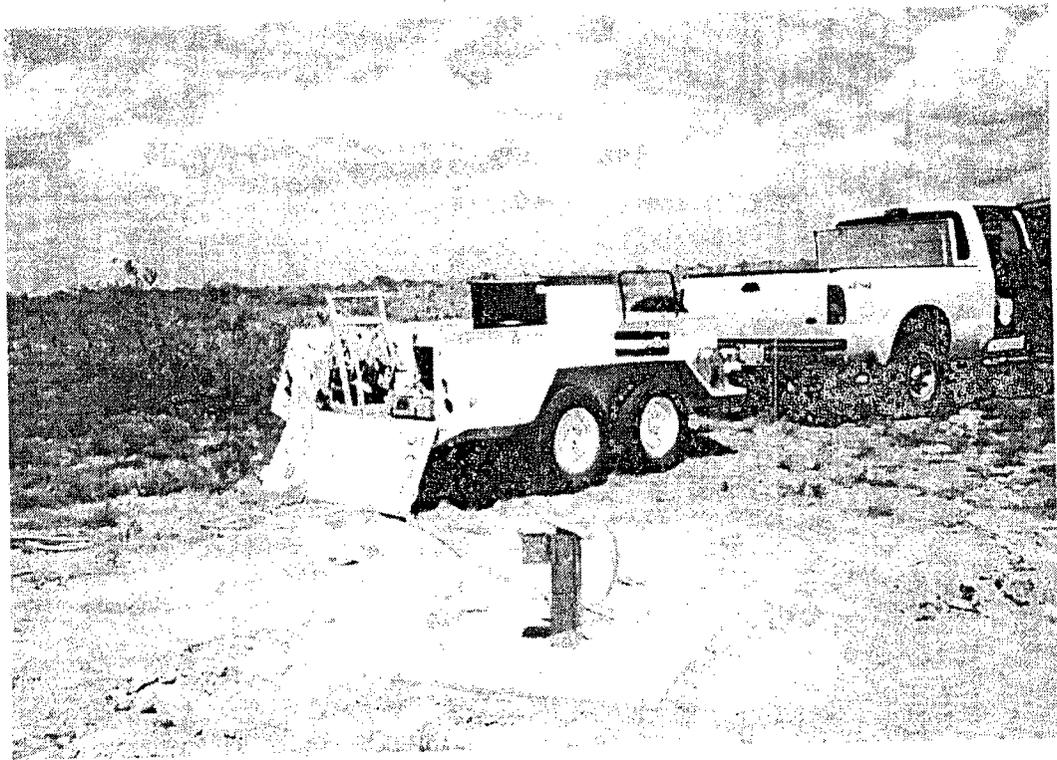
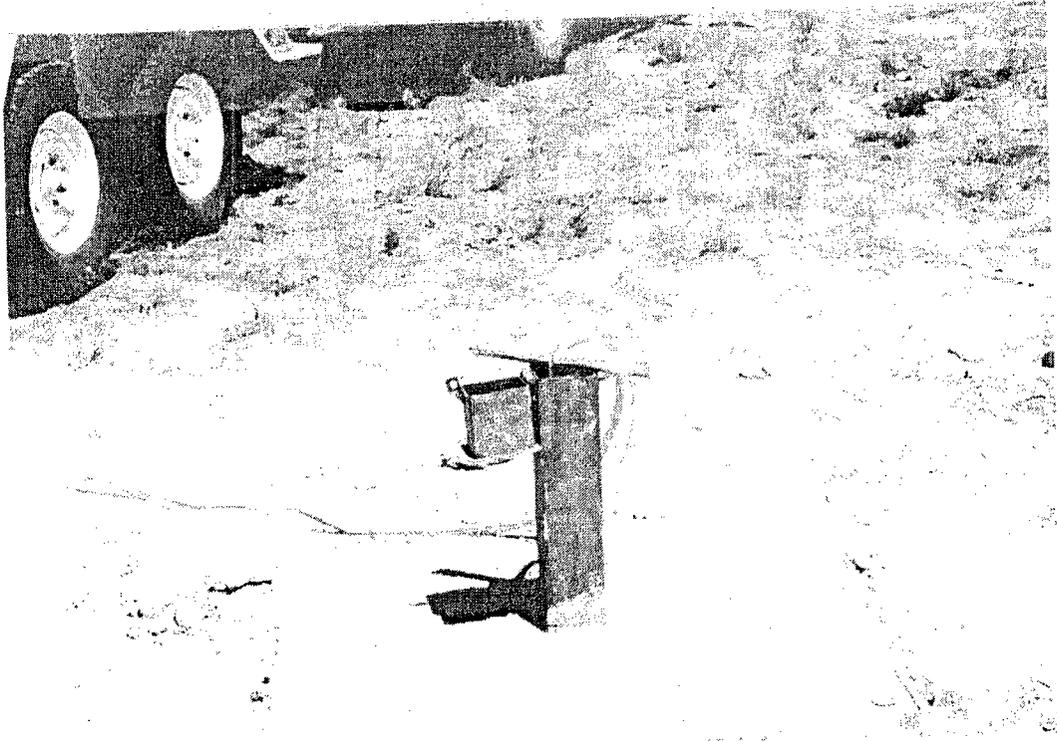
**Certificate of Analysis**

Official Geotechnical Investigation Company certifies that PureGold Asphalt Chips are produced from certified sources free of asbestos and lead. All other materials are tested and certified to meet or exceed the following test results. PureGold® is a registered trademark of PureGold®.

Test	Result
Asbestos (by EPA Method 9100)	Not Detected
Lead (by EPA Method 3042)	Not Detected
Other Heavy Metals (by EPA Method 8210)	Not Detected

30lb./22.05 kg





## SALTY DOG

Began drilling MW #5 8/17/04. Monitor well #5 is located 400' East of MW #3.

Started drilling, hit wet sand at approximately 60 ft., encountered redbed at 143' and TD at 144'. Hole was circulated clean and completed as a monitor well. Since MW #4 was completed at 131', I made a decision to complete MW #5 at a similar depth as we would have something to compare with. Well was completed at 132'.

Find within log, completion diagram and photos.

### WELL TEST.

Water level 62'.3" top of casing.

TD 132'.

Began pumping well at 1.5 gpm. Pumped until water cleared, then pumped three casing volumes before sampling. A total of 68 gallons was extracted from well. The conductivity at end of test was 1300 ppm.

Find within analytical.

Well covers and locks were installed.

Company Drilled for:

SALTY DOG INC.

Location: SEC 5 T19S R36E

32° 41' 14" N  
103° 22' 17" W

ELV 3815 ASL

Job Number:

Installation Date:

8-21-04

Monitor Well Number:

MW-5

Depth: 132'

Bore Size: 4 3/4"

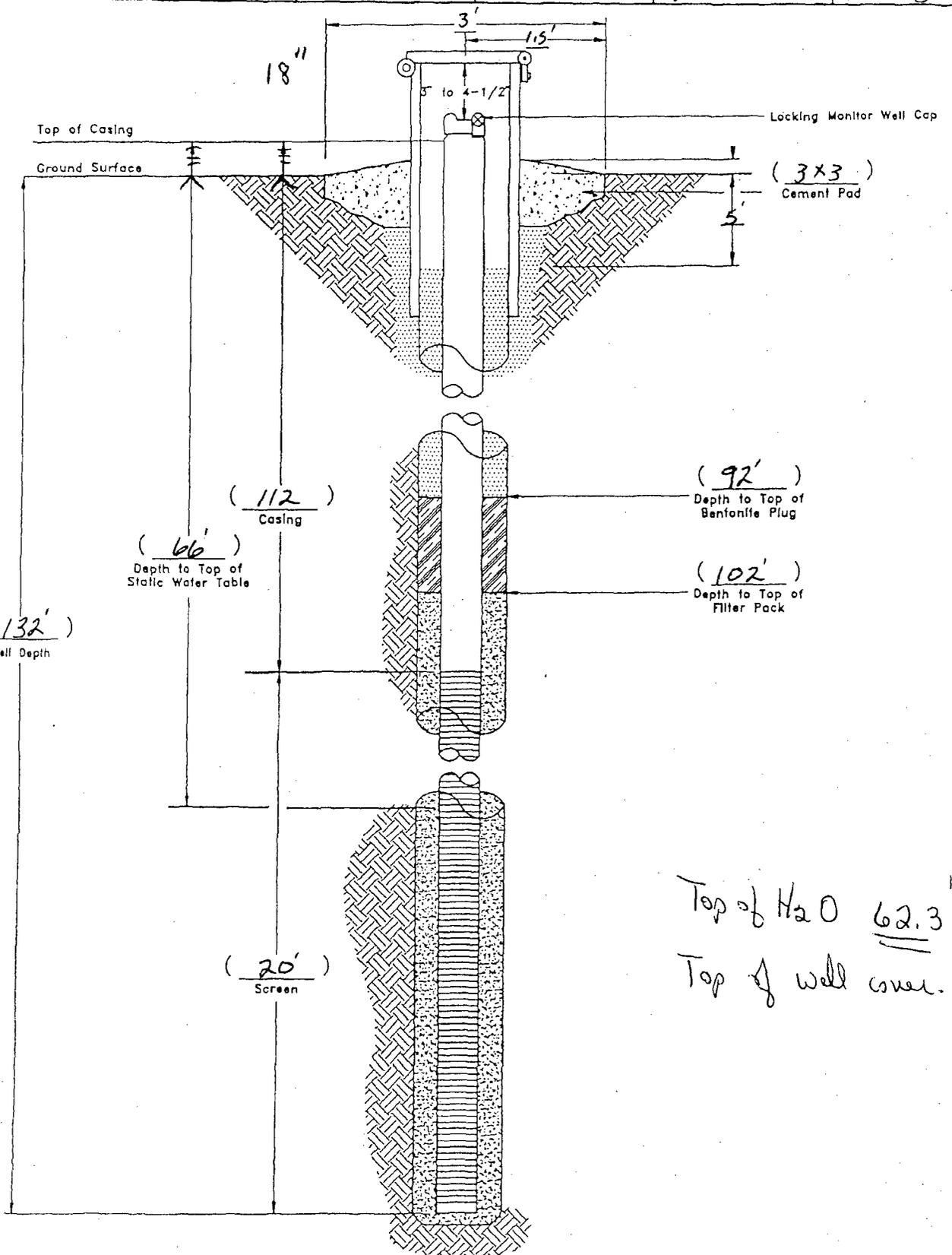
Casing Size: 2"

Casing Elevation:

Screen Size: 2" - 10/16"

Top of Water Elevation: 66 BSS

# Monument Type Monitor Well Diagram



Top of H<sub>2</sub>O 62.3"  
 Top of well cover.

Company Drilled for:  
**SALTY DOG INC.**  
 Location: **525 TMS R362**  
**GPS 32° 41' 14" N**  
**103° 22' 17" W** **ELV. 3815 ASL**  
 Drilling Method: **AIR ROTARY**  
 Bore Diameter: **4 3/4**

**Drilling Log**

Well/Bore Number: **MW-5** Date Drilled: **8-21-04** Driller: **ALLEN HODGE** Logged By: **A. Hodge**  
 Depth of Boring: **145'** Depth of Well: **132'** Length of Casing: **112'** Length of Screen: **20'**  
 Casing Diameter: **2"** Screen Diameter: **2"** Slot Size: **.010** Well Material: **SCH 40 PVC**

Depth	Geology	Sample Type	DVA PP	Remarks	Well Design	Depth
0	BROWN TOP SOIL			CEMENT TO SURFACE		0
5	WHITE TO PINK CALICHE			BENTONITE BRUIT	C S S B R O U T	5
10			10			
15			15			
20			20			
25	RED TO BROWN QUARTZITE (HARD)					25
30	TAN SAND					30
35						35
45	RED TO BROWN SANDSTONE					45
50	RED SAND WITH SANDSTONE STRINGERS					50
55						55
60						60
65	TOP OF WATER					65
70	RED WATER SAND					70
75						75
80						80
85						85
90						90
95				BENTONITE PLUG		95
100						100
105				TOP OF SAND PACK		105

Company Drilled for:

SALTY DOG INC.

# Drilling Log

Location: SECS T195 R36E

GPS: 32° 41' 14" N  
03° 22' 17" W ELEV. 3815 ASL

Well/Bore Number: MW-5

Date Drilled: 8-21-04

Driller: ALLEN HODGE

Logged By: A. Hodge

Drilling Method: AIR ROTARY

Depth of Boring: 145'

Depth of Well: 132'

Length of Casing: 112'

Length of Screen: 20'

Bore Diameter: 4 3/4"

Casing Diameter: 2"

Screen Diameter: 2"

Slot Size: .010

Well Material: SCH 40 PVC

Depth	Lithology	Sample Type	DVA (PPM)	Remarks	Well Design	Depth
100	RED WATER SAND WITH STRINGERS OF RED TO BROWN CLAY			BENTONITE PLUS	<div style="display: flex; justify-content: space-around;"> <div style="writing-mode: vertical-rl; text-orientation: mixed;">12 SAND PACK</div> <div style="writing-mode: vertical-rl; text-orientation: mixed;">20 SCREEN</div> </div>	100
105						
110						
115						
120						
125						
130						
135						
140						
145						
150						
155						
160						
165						
145	RED BED WELL TD				TD	145
150						
155						
160						
165						
170						
175						
180						
185						
190						
195						
200						
205						



PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR  
 EDDIE SEAY CONSULTING  
 ATTN: EDDIE SEAY  
 601 W. ILLINOIS  
 HOBBS, NM 88242  
 FAX TO:

Receiving Date: 08/20/04  
 Reporting Date: 08/23/04  
 Project Number: P. BERSTEIN  
 Project Name: ZIA SALTY DOG  
 Project Location: W. HOBBS, NM

Sampling Date: 08/20/04  
 Sample Type: GROUNDWATER  
 Sample Condition: COOL & INTACT  
 Sample Received By: AH  
 Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (uS/cm)	T-Alkalinity (mgCaCO <sub>3</sub> /L)
ANALYSIS DATE:		08/23/04	08/23/04	08/23/04	08/23/04	08/23/04	08/23/04
H9047-1	PMW #1	3376	479	101	12.2	19146	155
H9047-2	ZMW #4	4162	233	44	58.0	18636	101
H9047-3	ZMW #5	207	83	13	3.87	1727	176
H9047-4	SQUIRES OFFICE WELL	21	57	13	2.24	599	147
Quality Control		NR	40	52	4.87	1322	NR
True Value QC		NR	50	50	5.00	1413	NR
% Recovery		NR	80	104	97.4	93.6	NR
Relative Percent Difference		NR	2.0	6.0	5.8	0.7	NR

METHODS:	SM3500-Ca-D	3500-Mg E	8049	120.1	310.1
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	Cl <sup>-</sup> (mg/L)	SO <sub>4</sub> (mg/L)	CO <sub>3</sub> (mg/L)	HCO <sub>3</sub> (mg/L)	pH (s.u.)	TDS (mg/L)
ANALYSIS DATE:		08/23/04	08/23/04	08/23/04	08/23/04	08/24/04
H9047-1	PMW #1	6198	79	0	190	6.94
H9047-2	ZMW #4	6598	473	0	123	7.24
H9047-3	ZMW #5	324	80	0	215	7.64
H9047-4	SQUIRES OFFICE WELL	48	30	0	179	8.00
Quality Control		1040	50.67	NR	976	7.05
True Value QC		1000	50.00	NR	1000	7.00
% Recovery		104	101	NR	97.6	101
Relative Percent Difference		4.0	4.9	NR	2.2	0.1

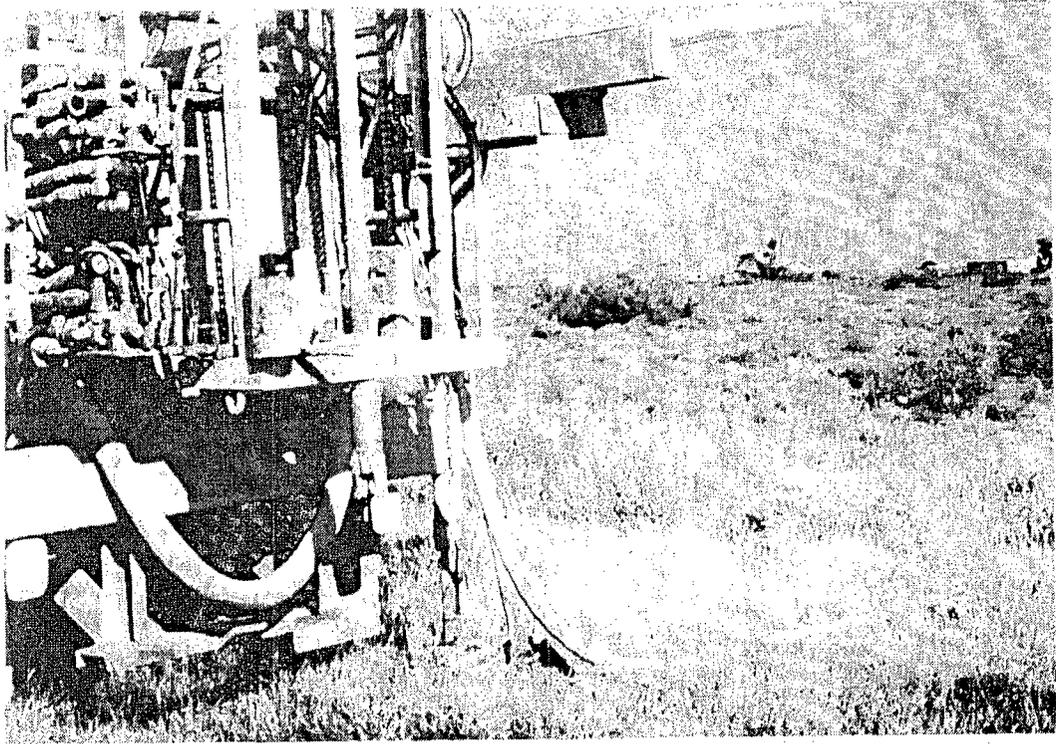
METHODS:	SM4500-Cl-B	375.4	310.1	310.1	150.1	160.1
----------	-------------	-------	-------	-------	-------	-------

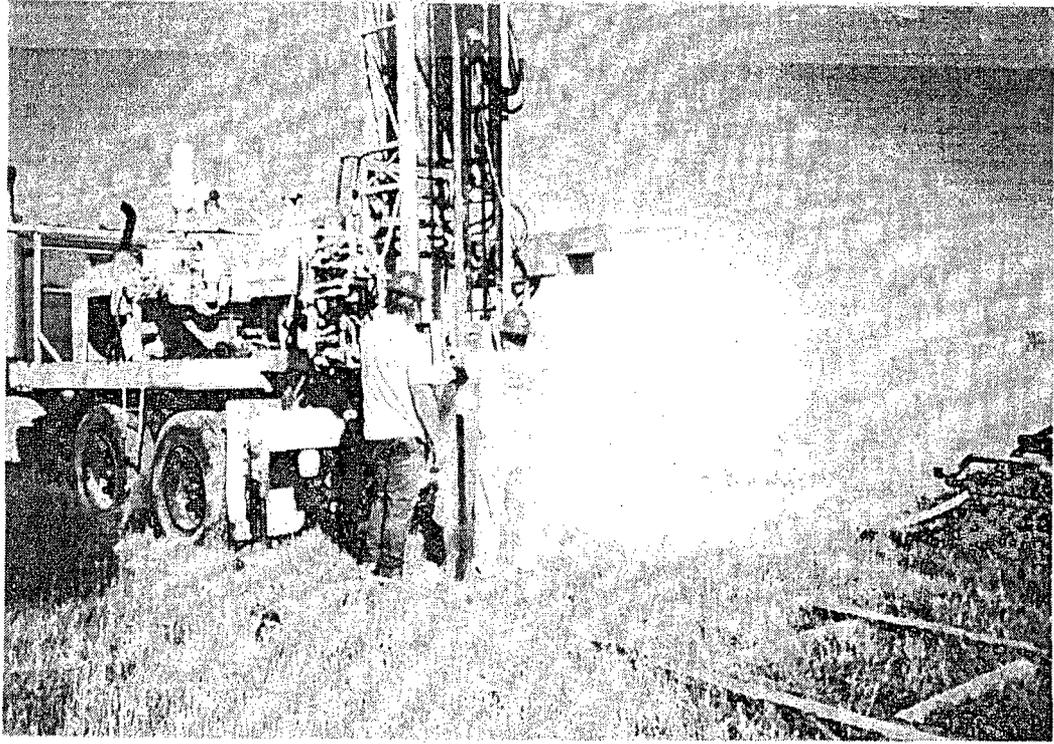
*Amy Hill*  
 Chemist

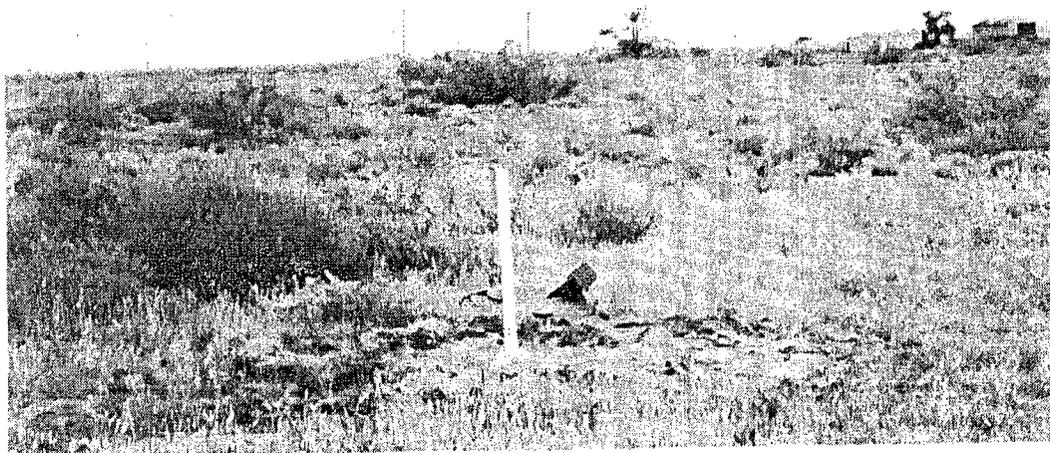
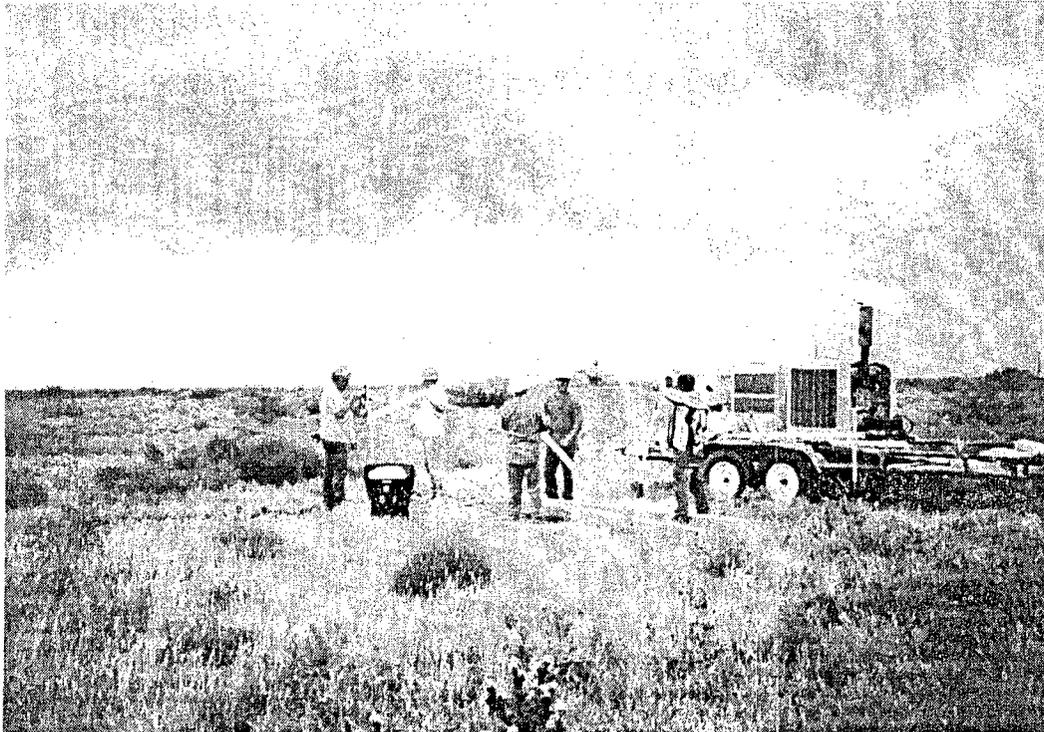
8/23/04  
 Date

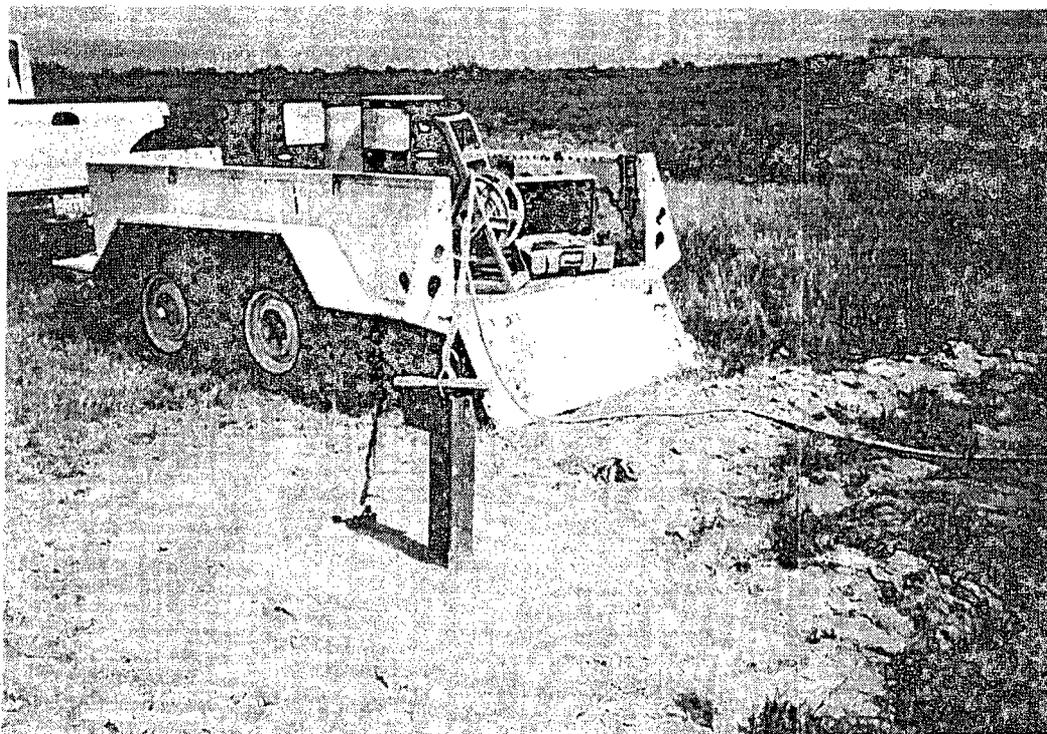
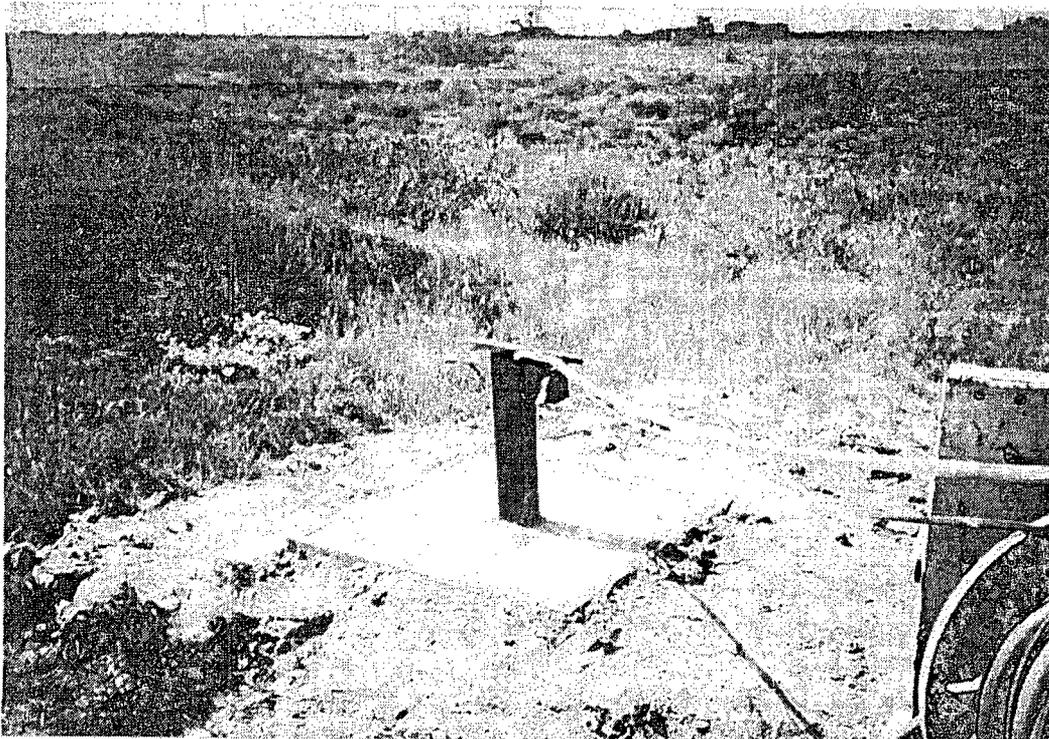
PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

m  
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#  
5









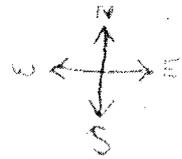
## SALTY DOG

Our next task was to delineate and test the loading area and try and determine extent of salt contamination.

Using a rotary rig and split spoon sampler, samples were gathered every five feet on three soil borings. LSB #1 was located in the middle of the loading area, LSB #2 was fifty feet East of LSB #1, and LSB #3 was North of loading area and LSB #1. We used the casing from PMW #1 for a fourth boring. PMW #1 is located South of the loading area. (see diagram)

Our intent was to take samples every five feet in the boring and test for chloride. A hard sandstone layer was encountered at approximately 22' and the spoon would not penetrate. All samples were taken at 20'. (find within analysis and logs of borings)

All holes were plugged with bentonite.



L2-150

Fence

LSB #3

LSB #1

LSB #2

PMW #1

Fresh Water

Fresh Water

Brine

Fence



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

ANALYTICAL RESULTS FOR  
EDDIE SEAY CONSULTING  
ATTN: EDDIE SEAY  
601 W. ILLINOIS  
HOBBS, NM 88242  
FAX TO:

Receiving Date: 08/20/04  
Reporting Date: 08/24/04  
Project Owner: P. BERNSTEIN  
Project Name: ZIA SALTY DOG  
Project Location: W. HOBBS, NM

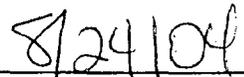
Analysis Date: 08/21/04  
Sampling Date: 08/20/04  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: AH  
Analyzed By: GP

LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/Kg)
H9048-1	LSB #1 5'	15995
H9048-2	LSB #1 10'	16795
H9048-3	LSB #1 15'	8397
H9048-4	LSB #1 20'	8397
H9048-5	LSB #2 5'	80
H9048-6	LSB #2 10'	160
H9048-7	LSB #2 15'	272
H9048-8	LSB #2 20'	128
H9048-9	LSB #3 5'	192
H9048-10	LSB #3 10'	2199
H9048-11	LSB #3 15'	384
H9048-12	LSB #3 20'	336
Quality Control		1010
True Value QC		1000
% Recovery		101
Relative Percent Difference		6.8

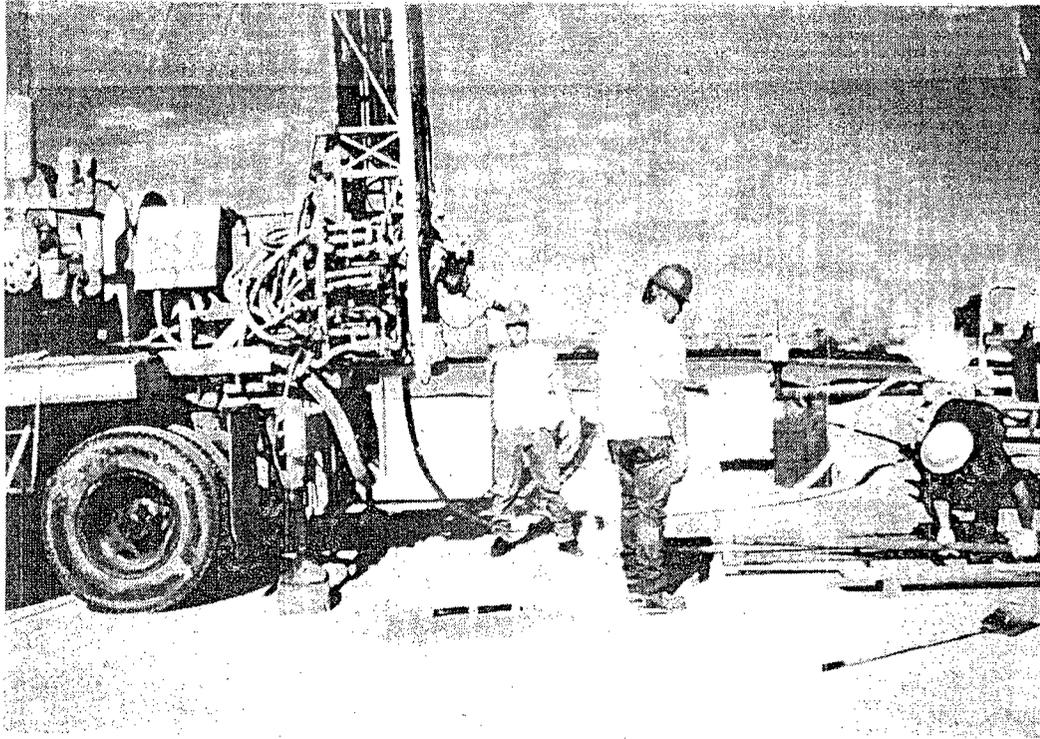
METHOD: Standard Methods 4500-Cl<sup>-</sup>B

Note: Analyses performed on 1:4 w:v aqueous extracts.

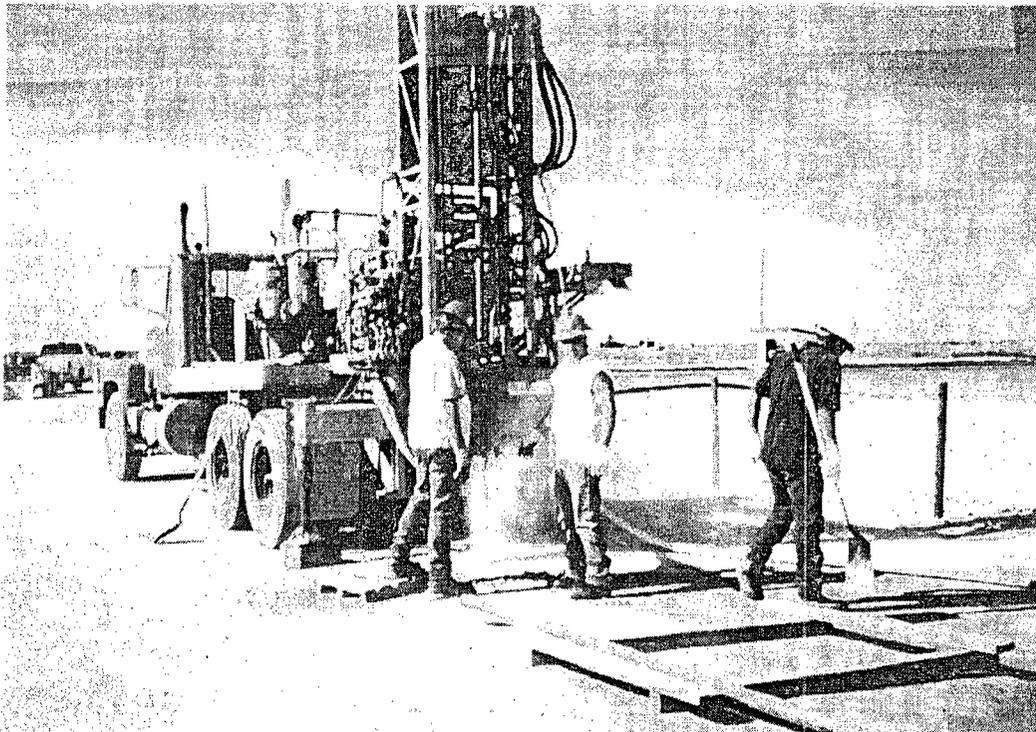
  
\_\_\_\_\_  
Chemist

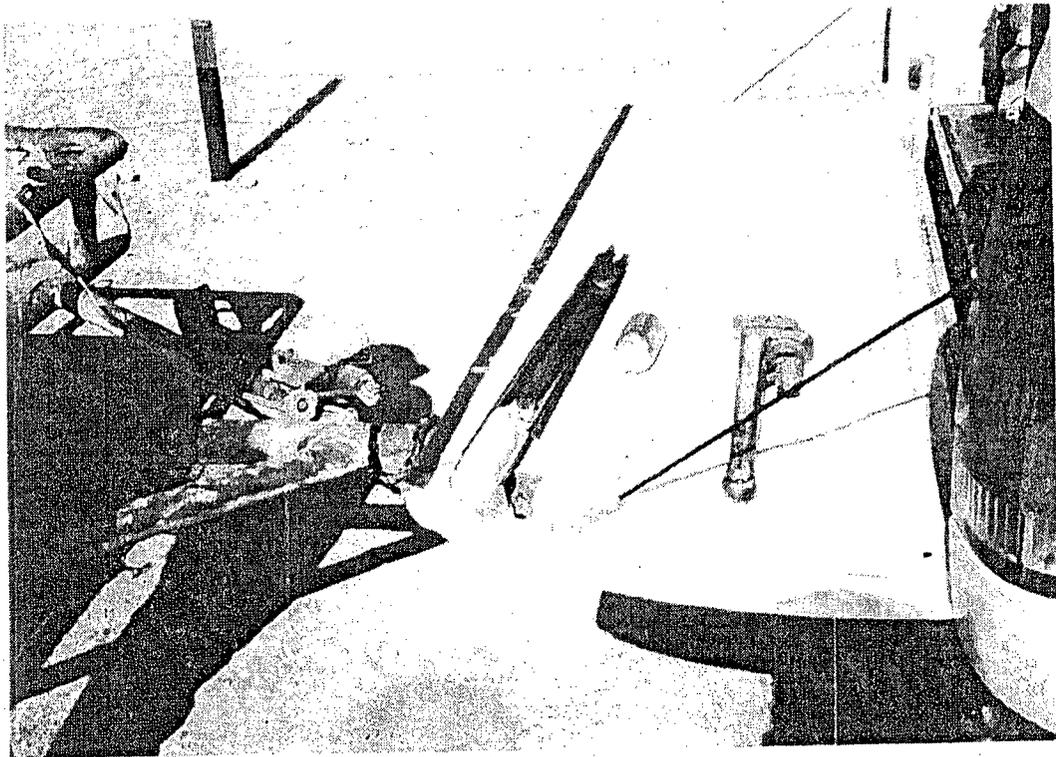
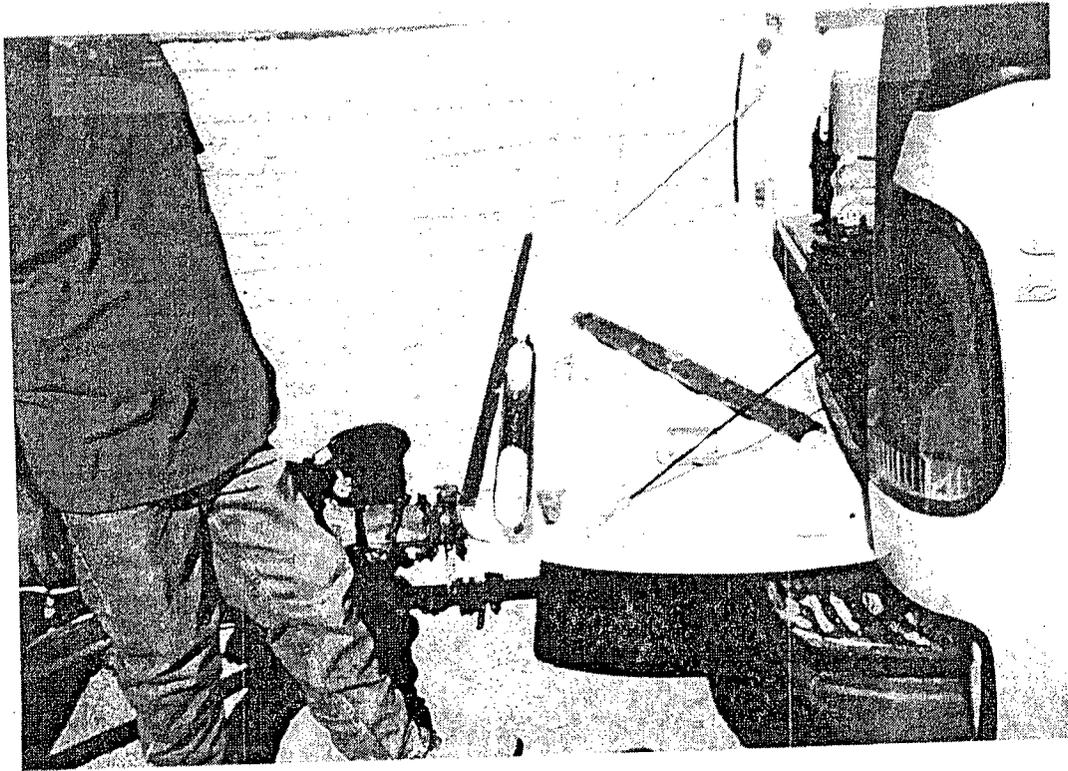
  
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Date

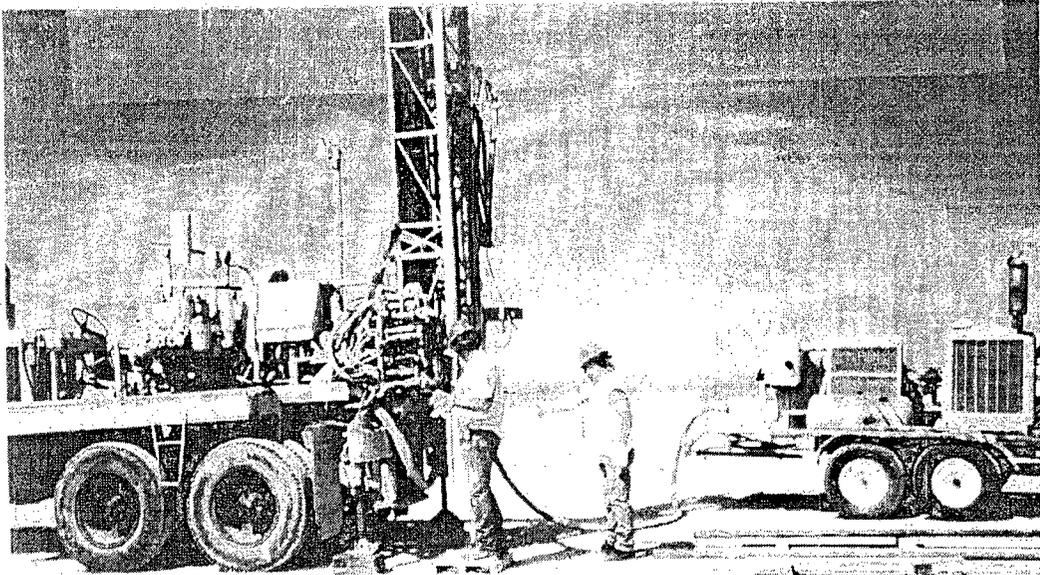
PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. Cardinal shall be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



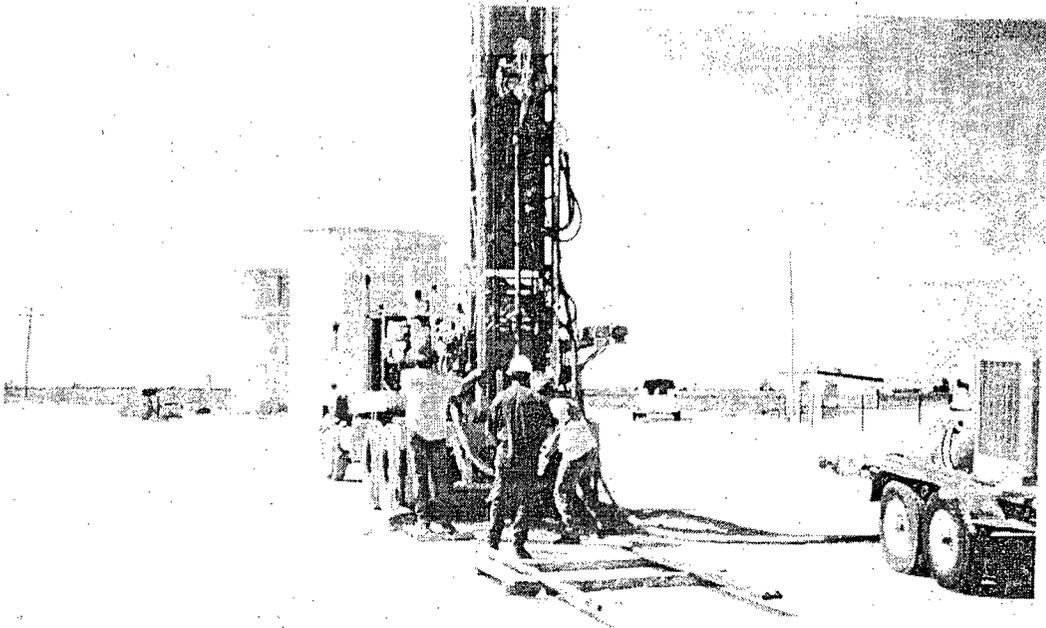
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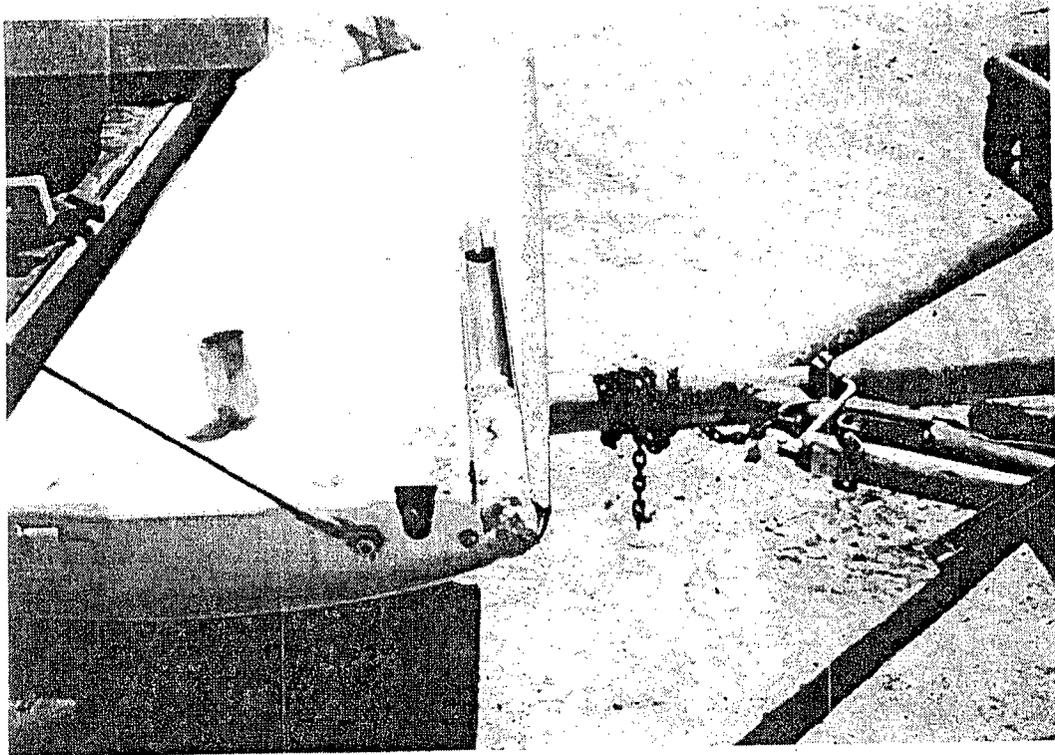
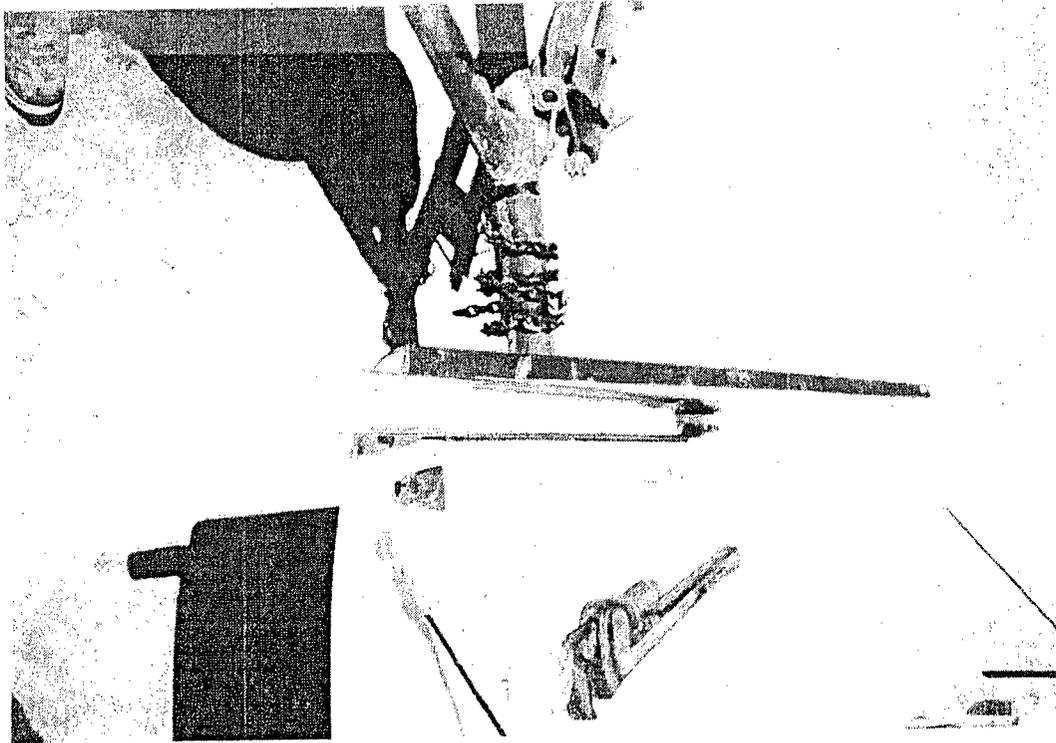


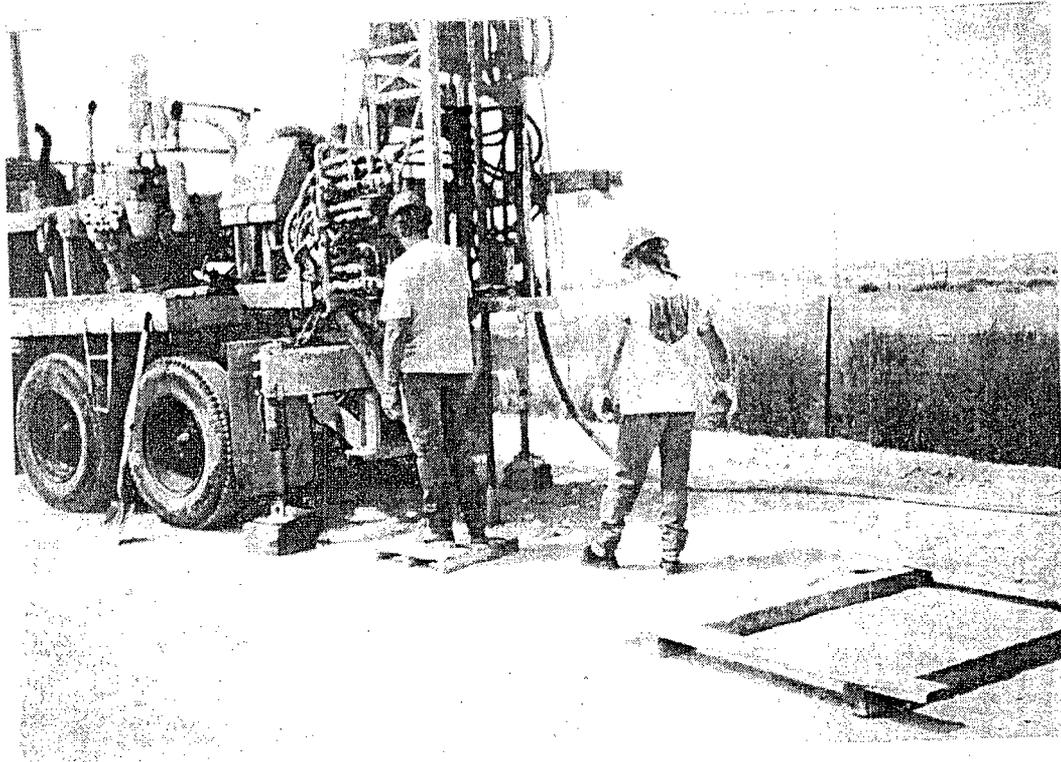




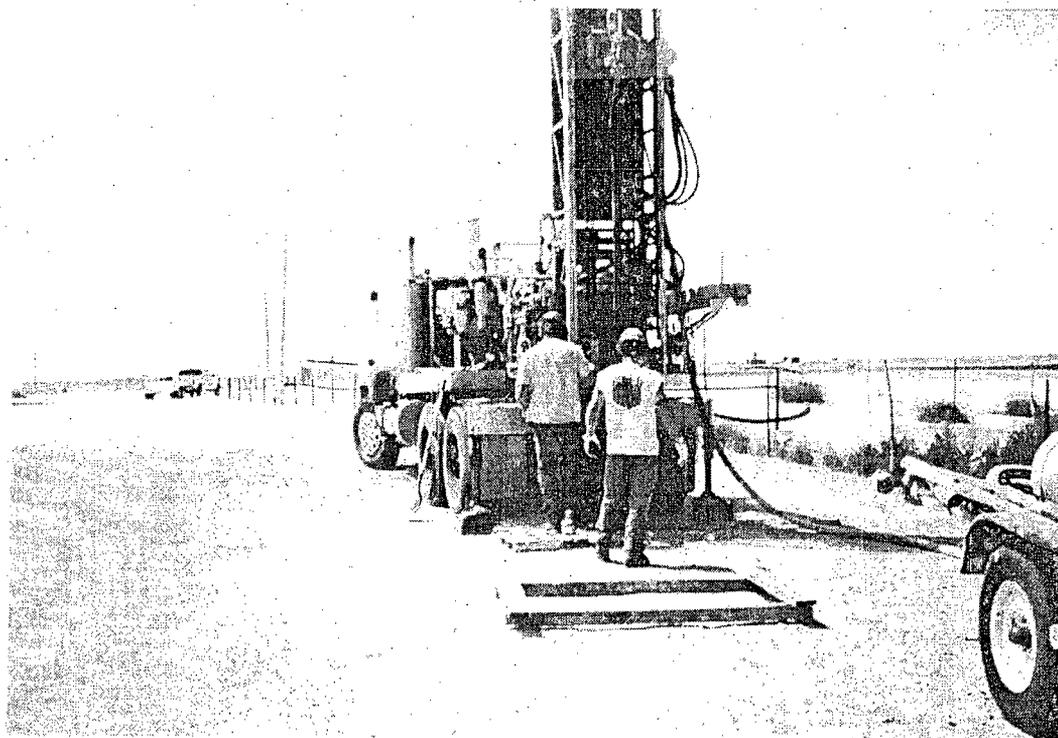
L  
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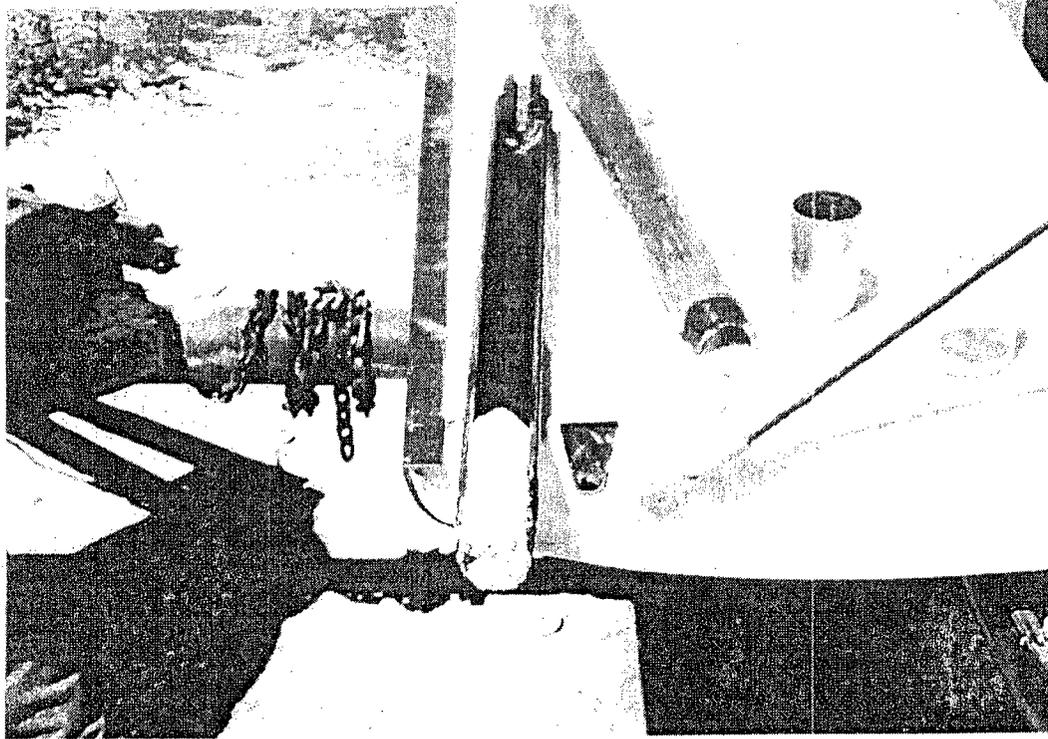






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3





## **PIT**

The workover pit located next to the brine well was cleaned out and backfilled with permission from OCD. I have no written documentation of the pit closure, only through conversations with Zia and ETGI that the pit was closed and authorized by OCD.

## **SPILL**

The spill in question occurred 8/22/04.

Terry Wallace with Zia, filed a C-141 with OCD. Fluid was picked up and area cleaned. (copy of C-141)

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised October 10, 2003

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

Release Notification and Corrective Action

OPERATOR

Initial Report  Final Report

Name of Company	<i>Salty Dog</i>	Contact	<i>Terry Wallace</i>
Address	<i>P.O. Box 513 Hobbs Nm 88241</i>	Telephone No.	<i>505-393-8352</i>
Facility Name	<i>Salty Dog Brine Station</i>	Facility Type	<i>Brine Water Station</i>
Surface Owner	Mineral Owner	Lease No.	

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
<i>J</i>	<i>5</i>	<i>19S</i>	<i>36E</i>	<i>1980</i>	<i>South</i>	<i>1980</i>	<i>East</i>	<i>Loa</i>

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

NATURE OF RELEASE

Type of Release	<i>Brine Water</i>	Volume of Release	<i>20 Bbls</i>	Volume Recovered	<i>15 Bbls</i>
Source of Release	<i>Truck ran over</i>	Date and Hour of Occurrence	<i>7/23/04</i>	Date and Hour of Discovery	<i>7/23/04 7:00A</i>
Was Immediate Notice Given?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not Required				
By Whom?	Date and Hour				
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
If a Watercourse was Impacted, Describe Fully.*					

Describe Cause of Problem and Remedial Action Taken.\*

*It appears that a truck was loading and ran his trailer over or a belly line busted.*

Describe Area Affected and Cleanup Action Taken.\*

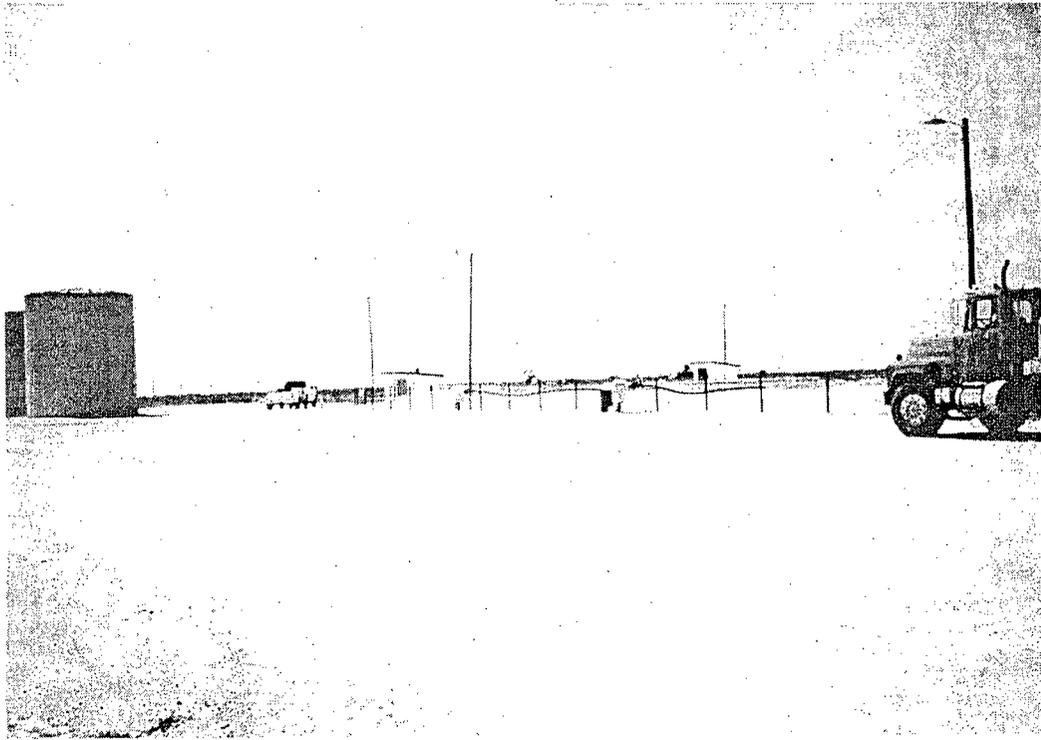
*Water was on the pad and by the fence line on the South side of location. A Vacuum truck was called to clean up mess. He hauled approximately 15 bbls to an approved Saltwater Disposal*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

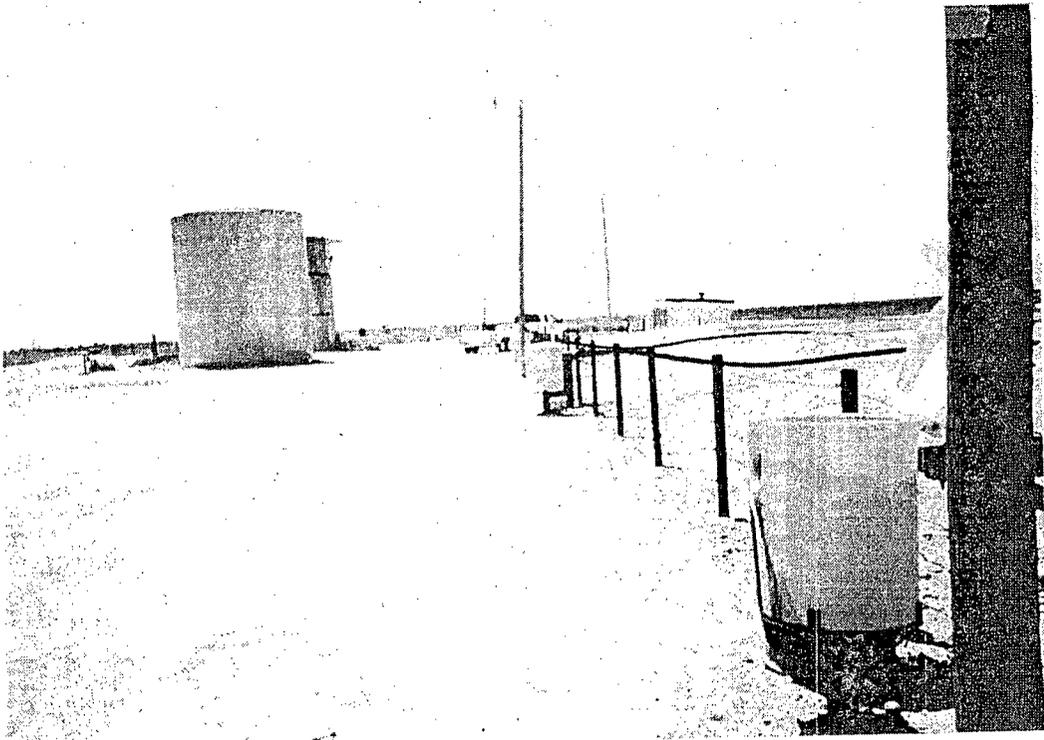
OIL CONSERVATION DIVISION

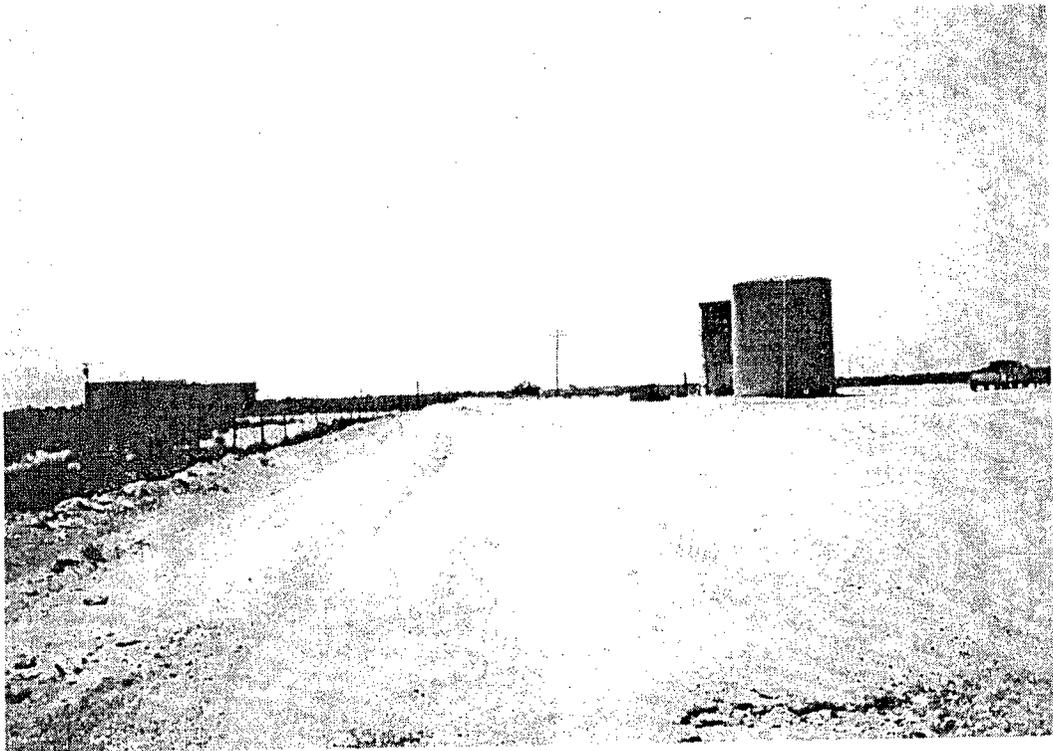
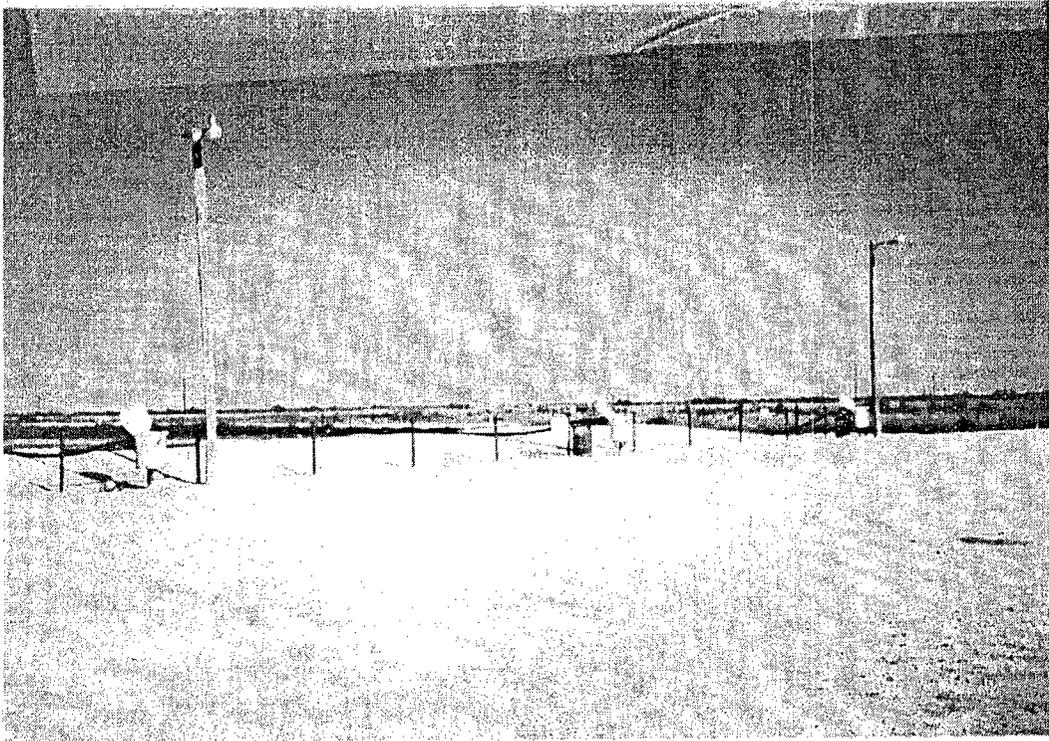
Signature:	<i>Terry Wallace</i>	Approved by District Supervisor:		<i>Chris Williams</i>	
Printed Name:	<i>Terry Wallace</i>	Approval Date:	<i>7/26/04</i>	Expiration Date:	-
Title:	<i>Manager</i>	Conditions of Approval:		Attached <input type="checkbox"/>	
E-mail Address:		Date:	<i>7/23/04</i>	Phone:	<i>393-8352</i>

\* Attach Additional Sheets If Necessary



JOHN STONE  
DARTS 0107





## CONCLUSION AND RECOMMENDATIONS

### PMW #1.

From the soil samples, it appears that there is contamination at the surface, probably from spillage at loading area. I do not think the pit is leaking or we would have much higher chloride in the soil and the water.

The water sample has elevated chloride. By continuing to pump the water well, it keeps the salt from moving and is holding the contamination within this area. We sampled Squire's office well, which is approximately 300' SE of the brine facility, the water is excellent.

It is my belief that if we cleanup the surface area and continue to pump the fresh water well, it will clean up in time.

### MW #4 and MW #5.

The new monitor wells area puzzle to me, given the chloride content of recent test on MW #3.

I would like to wait approximately 60 days, and go out and repump and develop all wells again and sample. After we get results, make recommendation for further drilling and/or extraction wells.

### LOADING AREA.

It appears we are getting contamination at the loading area. I need to visit with Zia people and make recommendation to clean soil and install a liner to prevent the migration of salt.

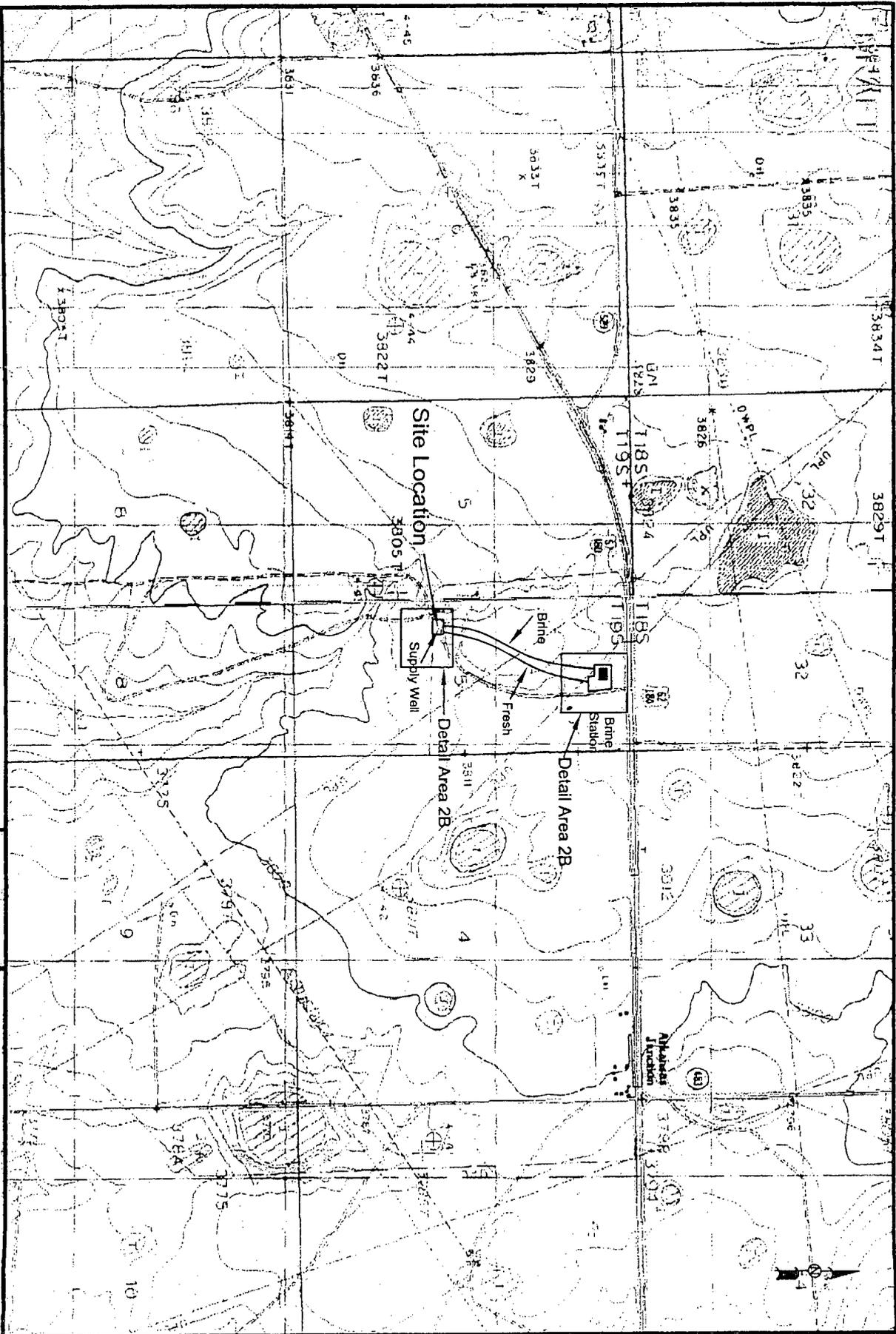


Figure 1  
 Site Location Map  
 Sally Dog Birnie Station  
 Leas County, NM.

DRAFT

SNYDER RANCH BUILDINGS



PLAYA

CHALKY CREEK



SALTY DOG BRINE SUPPLY WELL

RW-1

MW-1

RW-2

SB-1

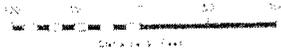
CATTLE PASTURE

MW-2

MW-3

MW-5

MW-4

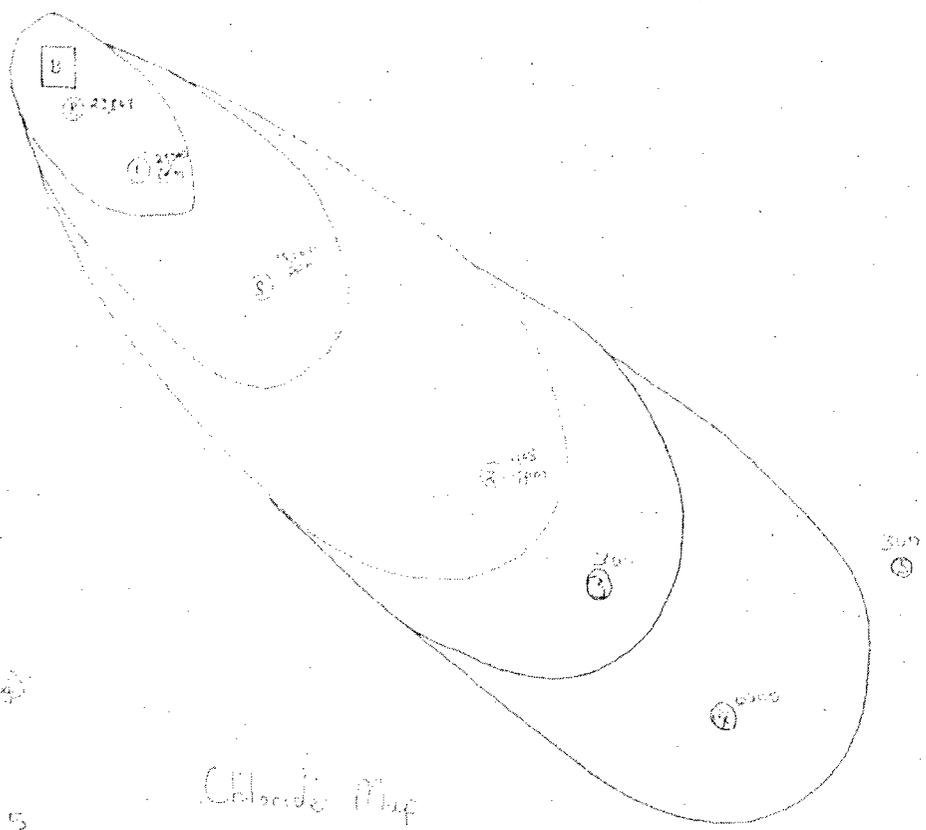


<ul style="list-style-type: none"><li>○ Groundwater Monitor Well</li><li>○ Groundwater Recovery Well</li><li>○ Water Well</li><li>□ Salt Brine</li><li>○ Observation Well</li></ul>	<p>Figure 25 Supply Well Area Detail Salty Dog Brine Station Lee County, TX</p>
---	---





- 1 Brine well (Salt, Dog)
- 2 Boundary well
- 3 Monitor well #1
- 4 Test Well
- 5 Monitor well #2
- 6 Under rocks



- 1 Basin well (Sally Tieg)
- 2 Recovery well
- 3 Monitor well #1
- 4 Test Boring
- 5 Monitor well #2, 3, 4, 5
- 6 Flow Well

Chloride Map



PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR  
 EDDIE SEAY CONSULTING  
 ATTN: EDDIE SEAY  
 601 W. ILLINOIS  
 HOBBS, NM 88242  
 FAX TO:

Receiving Date: 08/20/04  
 Reporting Date: 08/23/04  
 Project Number: P. BERSTEIN  
 Project Name: ZIA SALTY DOG  
 Project Location: W. HOBBS, NM

Sampling Date: 08/20/04  
 Sample Type: GROUNDWATER  
 Sample Condition: COOL & INTACT  
 Sample Received By: AH  
 Analyzed By: AH

LAB NUMBER	SAMPLE ID	Na (mg/L)	Ca (mg/L)	Mg (mg/L)	K (mg/L)	Conductivity (uS/cm)	T-Alkalinity (mgCaCO <sub>3</sub> /L)
------------	-----------	--------------	--------------	--------------	-------------	-------------------------	--

ANALYSIS DATE:		08/23/04	08/23/04	08/23/04	08/23/04	08/23/04	08/23/04
H9047-1	PMW #1	3376	479	101	12.2	19146	155
H9047-2	ZMW #4	4162	233	44	58.0	18636	101
H9047-3	ZMW #5	207	83	13	3.87	1727	176
H9047-4	SQUIRES OFFICE WELL	21	57	13	2.24	599	147
Quality Control		NR	40	52	4.87	1322	NR
True Value QC		NR	50	50	5.00	1413	NR
% Recovery		NR	80	104	97.4	93.6	NR
Relative Percent Difference		NR	2.0	6.0	5.8	0.7	NR

METHODS: SM3500-Ca-D 3500-Mg E 8049 120.1 310.1

Cl <sup>-</sup> (mg/L)	SO <sub>4</sub> (mg/L)	CO <sub>3</sub> (mg/L)	HCO <sub>3</sub> (mg/L)	pH (s.u.)	TDS (mg/L)
---------------------------	---------------------------	---------------------------	----------------------------	--------------	---------------

ANALYSIS DATE:		08/23/04	08/23/04	08/23/04	08/23/04	08/23/04	08/24/04
H9047-1	PMW #1	6198	79	0	190	6.94	10444
H9047-2	ZMW #4	6598	473	0	123	7.24	11716
H9047-3	ZMW #5	324	80	0	215	7.64	957
H9047-4	SQUIRES OFFICE WELL	48	30	0	179	8.00	354
Quality Control		1040	50.67	NR	976	7.05	NR
True Value QC		1000	50.00	NR	1000	7.00	NR
% Recovery		104	101	NR	97.6	101	NR
Relative Percent Difference		4.0	4.9	NR	2.2	0.1	1.4

METHODS: SM4500-Cl-B 375.4 310.1 310.1 150.1 160.1

*Amy Hill*  
 Chemist

*8/23/04*  
 Date

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.





PHONE (325) 673-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

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

ANALYTICAL RESULTS FOR  
 EDDIE SEAY CONSULTING  
 ATTN: EDDIE SEAY  
 601 W. ILLINOIS  
 HOBBS, NM 88242  
 FAX TO: (505) 392-6949

Receiving Date: 08/12/04  
 Reporting Date: 08/13/04  
 Project Owner: P. BERSTEIN  
 Project Name: ZIA SALTY DOG  
 Project Location: 12 MI. W. OF HOBBS, NM

Analysis Date: 08/13/04  
 Sampling Date: 08/11-08/12/04  
 Sample Type: SOIL  
 Sample Condition: COOL & INTACT  
 Sample Received By: GP  
 Analyzed By: AH

LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/Kg)
H9003-1	PMW #1 0-5'	4639
H9003-2	PMW #1 5-10'	5998
H9003-3	PMW #1 10-15'	1919
H9003-4	PMW #1 15-20'	736
H9003-5	PMW #1 20-25'	1408
H9003-6	PMW #1 25-30'	800
H9003-7	PMW #1 30-35'	1104
H9003-8	PMW #1 35-40'	1168
H9003-9	PMW #1 40-45'	2399
H9003-10	PMW #1 45-50'	192
H9003-11	PMW #1 50-55'	128
H9003-12	PMW #1 55-60'	192
Quality Control		1040
True Value QC		1000
% Recovery		104
Relative Percent Difference		4.0

METHOD: Standard Methods      4500-ClB

Note: Analyses performed on 1:4 w:v aqueous extracts.

*Amy Hill*  
 Chemist

8/13/04  
 Date

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(915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1 of 2

Page \_\_\_\_\_ of \_\_\_\_\_

Company Name: Eddie Sam Consulting **BILITO** PO #:

Project Manager: Eddie Sam Company:

Address: 601 W TILMON Attn:

City: Hobbs State: NM Zip: 88242

Phone #: 392-2236 Fax #: 6849

Project #: Salt Dog Project Owner: P. Bawstain

Project Name: Zia Salt Dog State: \_\_\_\_\_ Phone #: \_\_\_\_\_

Project Location: 12 miles W Hobbs Fax #: \_\_\_\_\_ Zip: \_\_\_\_\_

LAB I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	MATRIX						PRES.			DATE	TIME	ANALYSIS REQUEST
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER:	ACID:	ICE / COOL	OTHER:			
A9003-1	PMW #1	0-5'	1										9/11	8:30	Chloride
-2	"	5-10'	1										"	8:40	
-3	"	10-15'	1										"	9:00	
-4	"	15-20'	1										"	9:25	
-5	"	20-25'	1										"	9:35	
-6	"	25-30'	1										"	10:30	
-7	"	30-35'	1										"	11:00	
-8	"	35-40'	1										9/12	9:10	
-9	"	40-45'	1										"	9:30	
-10	"	50-55'	1										"	9:45	

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Terms and Conditions: Interest will be charged at a rate more than 30 days past due at the rate of 2% per annum from the original date of invoice, and all costs of collection, including attorney's fees.

Sampler Relinquished: \_\_\_\_\_ Date: 9/12 Received By: \_\_\_\_\_

Relinquished By: \_\_\_\_\_ Date: 9/12 Received By: \_\_\_\_\_

Delivered By: (Circle One) \_\_\_\_\_

Sample Condition:  Intact  Cool  Yes  No

Checked By: \_\_\_\_\_ (Initials)

REMARKS: PMW #1

† Card cannot accept verbal changes. Please fax written changes to 915-673-7020.



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## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page \_\_\_ of \_\_\_

292

Company Name: Edgie Sam Cardinal  
 Project Manager: Edgie Sam  
 Address: 69 W. Thuman  
 City: Abilene State: TX Zip: 79602  
 Phone #: \_\_\_\_\_  
 Fax #: \_\_\_\_\_  
 Project #: \_\_\_\_\_ Project Owner: P. Bennett  
 Project Name: Sub D 219 Salt Dog State: \_\_\_\_\_ City: \_\_\_\_\_  
 Project Location: W. Thuman Phone #: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Fax #: \_\_\_\_\_

Company: HILTO PO #: \_\_\_\_\_  
 Attn: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone #: \_\_\_\_\_  
 Fax #: \_\_\_\_\_

LAB I.D.	Sample I.D.	(G)RAB OR (C)CMP	# CONTAINERS	MATRIX						PRES.			DATE	TIME	ANALYSIS REQUEST	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID:	ICE / COOL	OTHER :				
-12	PMW # 1 55-6021		1	<input checked="" type="checkbox"/>												
-10	PMW # 1 45-80		1	<input checked="" type="checkbox"/>												

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Terms and Conditions: Interest will be charged on all accounts more than 30 days past due at the rate of 24% per annum from the original date of invoice, and all costs of collections, including attorney's fees.

Sampler Relinquished: \_\_\_\_\_ Date: 8/12 Received By: \_\_\_\_\_  
 Relinquished By: \_\_\_\_\_ Time: 1:15 Received By: \_\_\_\_\_  
 Date: \_\_\_\_\_ Time: \_\_\_\_\_  
 Delivered By: (Circle One) \_\_\_\_\_  
 Sampler - UPS - Bus - Other: \_\_\_\_\_

Sample Condition: \_\_\_\_\_  
 Cool  Intact   
 Yes  No   
 Checked By: \_\_\_\_\_ (Initials)  
 Phone Result:  Yes  No Additional Fax #: \_\_\_\_\_  
 Remarks: \_\_\_\_\_

+ Card cannot accept verbal changes. Please fax written changes to 915-673-7020.



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

ANALYTICAL RESULTS FOR  
EDDIE SEAY CONSULTING  
ATTN: EDDIE SEAY  
601 W. ILLINOIS  
HOBBS, NM 88242  
FAX TO:

Receiving Date: 08/20/04  
Reporting Date: 08/24/04  
Project Owner: P. BERNSTEIN  
Project Name: ZIA SALTY DOG  
Project Location: W. HOBBS, NM

Analysis Date: 08/21/04  
Sampling Date: 08/20/04  
Sample Type: SOIL  
Sample Condition: COOL & INTACT  
Sample Received By: AH  
Analyzed By: GP

LAB NUMBER	SAMPLE ID	Cl <sup>-</sup> (mg/Kg)
H9048-1	LSB #1 5'	15995
H9048-2	LSB #1 10'	16795
H9048-3	LSB #1 15'	8397
H9048-4	LSB #1 20'	8397
H9048-5	LSB #2 5'	80
H9048-6	LSB #2 10'	160
H9048-7	LSB #2 15'	272
H9048-8	LSB #2 20'	128
H9048-9	LSB #3 5'	192
H9048-10	LSB #3 10'	2199
H9048-11	LSB #3 15'	384
H9048-12	LSB #3 20'	336
Quality Control		1010
True Value QC		1000
% Recovery		101
Relative Percent Difference		6.8

METHOD: Standard Methods      4500-Cl<sup>-</sup>B

Note: Analyses performed on 1:4 w:v aqueous extracts.

Amy Hill  
Chemist

8/24/04  
Date

PLEASE NOTE: **Liability and Damages.** Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. No event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.



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 (915) 673-7001 Fax (915) 673-7020 (505) 393-2326 Fax (505) 393-2476

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: <u>Edwards Soils Consulting</u>		Company: <u>BHITO</u>		PO #:		
Project Manager: <u>Edwards Soils Consulting</u>		Company:				
Address: <u>601 W IDIAMS</u>		Attn:				
City: <u>Hobbs</u> State: <u>NM</u> Zip: <u>88242</u>		Address:				
Phone #: <u>392-2234</u>		City:				
Fax #:		State:				
Project #: <u>Zia</u> Project Owner: <u>P. Bourdeau</u>		Phone #:				
Project Location: <u>in Hobbs</u>		Fax #:				
FOR LAB USE ONLY		MATRIX		PRES. SAMPLING		
LAB I.D.	Sample I.D.	GROUNDWATER		DATE		TIME
		WASTEWATER		DATE		
		SOIL	ACID:			
		OIL	ICE / COOL			
		SLUDGE	OTHER:			
		OTHER:	OTHER:			

LAB I.D.	Sample I.D.	(G)RAB	(C)OMP.	# CONTAINERS	DATE	TIME	ANALYSIS REQUEST
H908-1	LSB #1 5'			1	8/20	9:30	Chloride
-2	" 19'			1	9/40	9:40	
-3	" 15'			1	9/50	9:50	
-4	" 20'			1	10/00	10:00	
-5	LSB #2 5'			1	9/20	10:45	
-6	" 10'			1	11/00	11:00	
-7	" 15'			1	11/15	11:15	
-8	" 20'			1	12/30	12:30	

PLEASE NOTE: Utility and Damages, Cardinal liability and client's obligations remain for any claim arising under, based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Terms and Conditions: Payment will be charged on all accounts more than 30 days past due at the rate of 2 1/2% per annum from the original date of invoice, and all costs of collection, including attorney's fees.

Delivered By: (Circle One)  
 Sampler - UPS - Bus - Other:  UPS  Bus  Other

Relinquished By: \_\_\_\_\_ Date: 8/20 Time: 4:15  
 Received By: (Lab Staff) \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Sample Condition:  Cool  Hot  Yes  No

CHECKED BY: \_\_\_\_\_ (Initials)

REMARKS: LSB - looking over soil borings

† Cardinal cannot accept verbal changes. Please fax written changes to 915-673-7020.

August 31, 2004

NMOCD Environmental  
ATTN: Wayne Price  
Box 6429  
1220 S. Saint Francis Drive  
Santa Fe, NM 87504

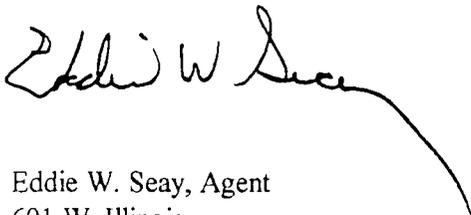
RE: Zia - Salty Dog  
NOV

Mr. Price:

Find within photographs and run ticket of work performed pursuant to your letter and NOV. Zia lowered the level in it's brine pit and cleaned up around drive area and loading area. The soil was hauled to an OCD approved facility. The area looks good and I was told they will keep up with maintenance.

Thank you for your help and if anything else is needed, please call.

Sincerely,



Eddie W. Seay, Agent  
601 W. Illinois  
Hobbs, NM 88242  
(505)392-2236

RECEIVED

SEP 07 2004

OIL CONSERVATION  
DIVISION

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit MM

T & B SERVICES, INC.  
P.O. BOX 1262  
LEVELLAND, TX 79336  
806-894-8425  
FAX 806-894-5635

facsimile transmittal

B6-08

To: Wayne Price Fax: 505-476-3462  
From: Brandon Bird Date: 11-24-04 806-781-6094  
Re: Salty Dog Pages: 2  
CC:

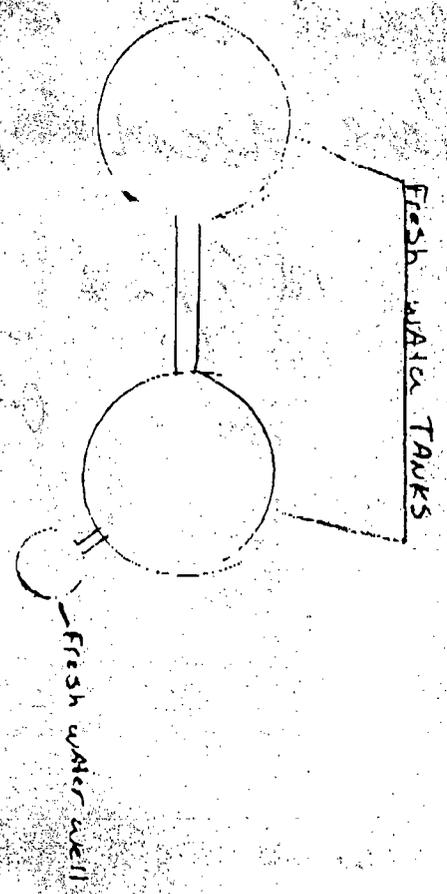
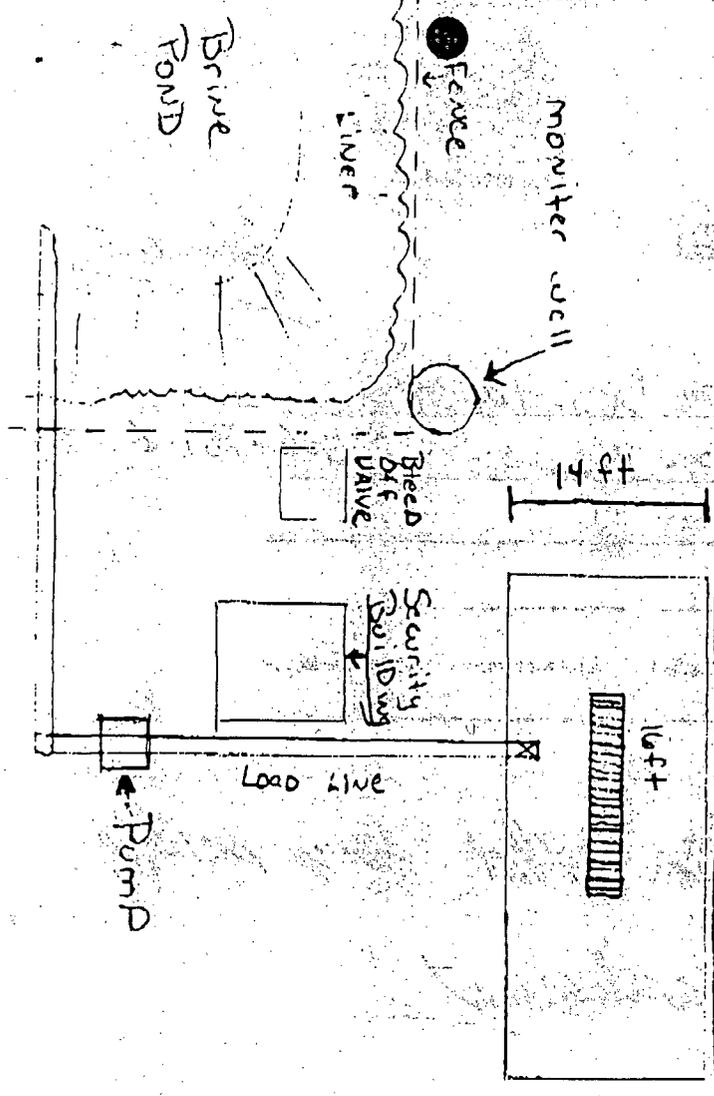
- Urgent     For Review     Please Comment     Please Reply     Please Recycle

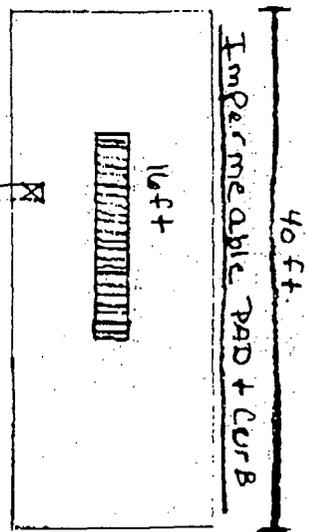
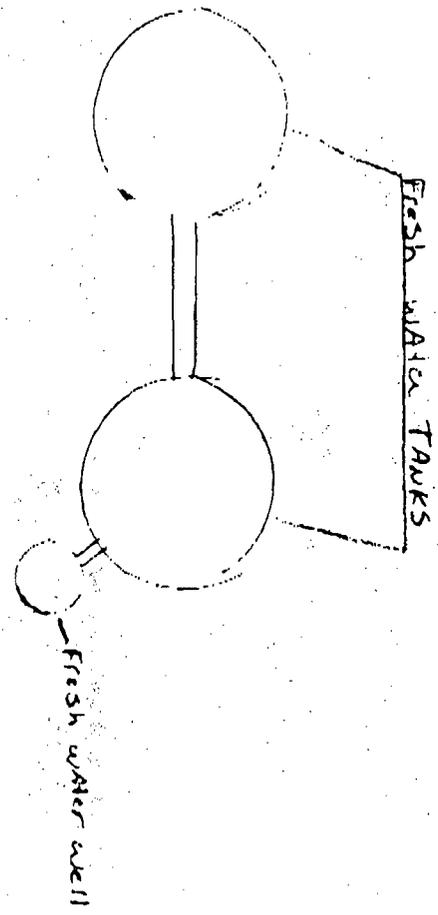
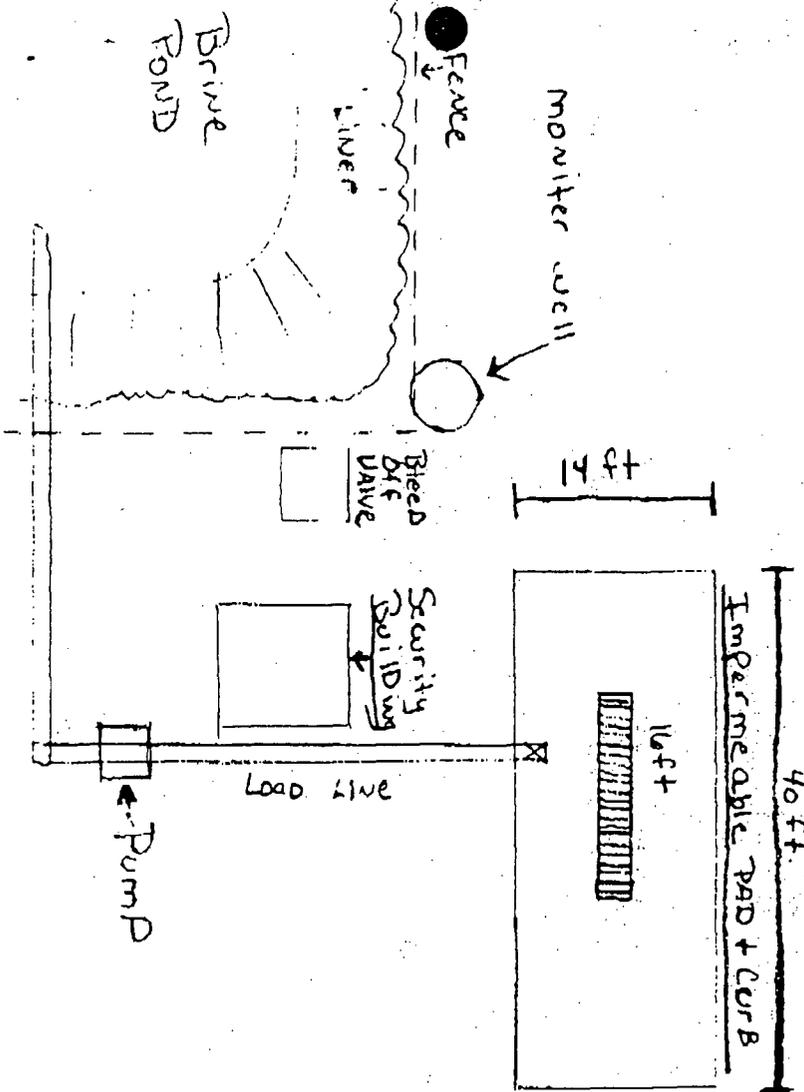
*Approved with condition that ponds must  
have secondary containment!*

*12/1/04*

*[Signature]*

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit NN





N  
↑  
S

B

Recovery well

no #1

Possible location of Recovery well #2

no #2

New Proposed  
no #3

Proposed monitoring well & recovery well

Monitor wells 1-2

Existing recovery well

Existing water well

B  
Bore well

December 7, 2004

Dear Wayne Price,

After our conversation on the phone, on Thursday December 2, we will be implementing a high-density plastic liner below the sump bay at the Salty Dog Brine Station. I am in agreement with you that this is a safe guard against contamination of the soil and water.

Thank you for all of your help in designing the additions to the facility.

Brandon Bird



WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit 00

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Form C-141  
Revised October 10, 2003

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

Release Notification and Corrective Action

OPERATOR

Initial Report  Final Report

Name of Company	Salty Dog, Inc.	Contact	Art Hilliker
Address	P.O. Box 513, Hobbs, Nm	Telephone No.	505/390-6205
Facility Name	Arkansas Jet Brine Station	Facility Type	Brine Water Production Facility
Surface Owner	Snyder Ranch Larry S	Mineral Owner	Snyder Ranch
Lease No.			

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	South Line	Feet from the	East Line	County
J	5	19S	36E	1980	South	1980	East	Hobbs

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

NATURE OF RELEASE

Type of Release	Salty water	Volume of Release	425 +/-	Volume Recovered	421 Bbls
Source of Release	Brine well	Date and Hour of Occurrence	Feb. 10, 05	Date and Hour of Discovery	Feb. 11, 05 AM
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Chris Williams		
By Whom?	Chris Williams + Gary Wink - on loc	Date and Hour	2/11/05 Approx. 10AM		
Was a Watercourse Reached?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	425 Bbls. +/-		

If a Watercourse was Impacted, Describe Fully.\*  
Brine supply pipeline (buried) burst and brine water flowed from casing of well leaking through hole in pipeline up above ground and into dry lake bed, flooding lakebed.

Describe Cause of Problem and Remedial Action Taken.\*  
Cause: hole in brine water supply line to pit by hiway burst, when trying to unplug supply line. Rem. Action: Sent Vacuum Trucks to suck all brine water in low areas out of lake bed + dispose of at public SWD.

Describe Area Affected and Cleanup Action Taken.\*  
Dry low spot (lake bed) was flooded by released brine. Picked up 421 Bbls. brine out of lake bed, haul to SWD. Let flooded area dry. After drying, will consult with landowner, OCD, EPA to disc affected area and add fertilizer + salt neutralizing agents.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

OIL CONSERVATION DIVISION

Signature:	Art Hilliker	Approved by District Supervisor:	Chris Williams
Printed Name:	Art Hilliker	Approval Date:	2/24/05
Title:	Safety / Customer Relations	Expiration Date:	3/15/05
E-mail Address:		Conditions of Approval:	Must submit a remediation plan by 3/15/05
Date:	Feb. 23, 2005	Phone:	393-8352
* Attach Additional Sheets If Necessary		Attached	<input type="checkbox"/>

Well API # 30-025-26307

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit PP

Report Date: February 25, 2005  
050209

Work Order: 5021008  
Yucca/Salty Dog

Page Number: 1 of 1  
Phillips Goldston Well #1/Brine Sta.

Salty Dog

## Summary Report

Paul Shaeley  
OCD-Hobbs  
1625 N. French Dr.  
Hobbs, NM 88240

Report Date: February 25, 2005

Work Order: 5021008

Project Location: Phillips Goldston Well #1/Brine Sta.  
Project Name: Yucca Salty Dog  
Project Number: 050209

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
54354	0502091100	water	2005-02-09	11:00	2005-02-10

Sample: 54354 - 0502091100

Param	Flag	Result	Units	RL
Hydroxide Alkalinity		<1.00	mg/L as CaCO <sub>3</sub>	1.00
Carbonate Alkalinity		<1.00	mg/L as CaCO <sub>3</sub>	1.00
Bicarbonate Alkalinity		166	mg/L as CaCO <sub>3</sub>	4.00
Total Alkalinity		166	mg/L as CaCO <sub>3</sub>	4.00
Dissolved Calcium		1080	mg/L	0.500
Dissolved Potassium		31.8	mg/L	0.500
Dissolved Magnesium		28.2	mg/L	0.500
Dissolved Sodium		4170	mg/L	0.500
Specific Conductance		23100	µMHOS/cm	0.00
Chloride		5550	mg/L	0.500
Fluoride		4.56	mg/L	0.200
Sulfate		2430	mg/L	0.500
Nitrate-N		3.71	mg/L	0.200
pH		7.64	s.u.	0.00
Total Dissolved Solids		15800	mg/L	10.00

RECEIVED  
FEB 25 2005  
HOBBS

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.04	100	98 - 102	2005-02-11

Standard (CCV-1) QC Batch: 15898

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
pH		s.u.	7.00	7.04	100	98 - 102	2005-02-11

Standard (ICV-1) QC Batch: 15942

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	48.4	97	90 - 110	2005-02-16
Dissolved Potassium		mg/L	50.0	50.2	100	90 - 110	2005-02-16
Dissolved Magnesium		mg/L	50.0	48.9	98	90 - 110	2005-02-16
Dissolved Sodium		mg/L	50.0	49.6	99	90 - 110	2005-02-16

Standard (CCV-1) QC Batch: 15942

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Dissolved Calcium		mg/L	50.0	49.4	99	90 - 110	2005-02-16
Dissolved Potassium		mg/L	50.0	49.2	98	90 - 110	2005-02-16
Dissolved Magnesium		mg/L	50.0	49.0	98	90 - 110	2005-02-16
Dissolved Sodium		mg/L	50.0	50.0	100	90 - 110	2005-02-16

Standard (ICV-1) QC Batch: 15978

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	242	97	90 - 110	2005-02-17

Standard (CCV-1) QC Batch: 15978

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Total Alkalinity		mg/L as CaCo3	250	246	98	90 - 110	2005-02-17

Standard (ICV-1) QC Batch: 16161

Report Date: February 25, 2005  
050209

Work Order: 5021008  
Yucca/Salty Dog

Page Number: 9 of 10  
Phillips Goldston Well #1/Brine Sta.

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.3	98	90 - 110	2005-02-22
Sulfate		mg/L	12.5	12.2	98	90 - 110	2005-02-22

Standard (CCV-I) QC Batch: 16161

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Chloride		mg/L	12.5	12.2	98	90 - 110	2005-02-22
Sulfate		mg/L	12.5	12.2	98	90 - 110	2005-02-22

6701 Aberdeen Avenue, Ste 3  
 Lubbock, Texas 79424  
 Tel: (806) 794-1296  
 Fax: (806) 794-1298  
 1 (800) 378-1298

**Trace Analysis, Inc.**

155 McCord Street, Suite 11  
 El Paso, Texas 79932  
 Tel: (915) 305-5440  
 Fax: (915) 305-5444  
 1 (800) 381-3443

CHAN-OFF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID #: 581008

Company Name: New Mexico Oil Conservators, Inc. Project #: 505-393-6161  
 Address: 1625 N. French Dr. Hobbs (Street, City, ZIP) LA 70001 Fax #: 393-0720 X113  
 Contact Person: Paul Sheeley  
 Invoice to: Ed Martin 505-476-3492  
 Project #: 050209 Project Name: Yucca/Sally Dog

Project Location: Phillips Coldeston Well #1 / Brine Site  
 Project #: 050209 Project Name: Yucca/Sally Dog

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX					PRESERVATIVE METHOD					SAMPLING		
				WATER	SOIL	AIR	SLUDGE	KCl	HNO <sub>3</sub>	H <sub>2</sub> SO <sub>4</sub>	NaOH	ICE	NONE	DATE	TIME	
54354	0502091100	19	16oz	X											2/9	1100
55	0502091300	19	4oz	X											2/9	1300

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602

BTX 8021B/602

TPH 418 1/TX1005 8015

PAH 8270C

Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200 ?

TCLP Metals Ag As Ba Cd Cr Pb Se Hg

TCLP Volatiles

TCLP Semi Volatiles

TCLP Pesticides

RCI

GC/MS Vol 8260B/624

GC/MS Semi Vol 8270C/624

PCB's 8082/609

Pesticides 8081A/608

800 TSS pH

X General Chemistry

Turn Around Time if different from standard

Hold

Requested by:	Date:	Time:	Received by:	Date:	Time:
<u>Paul Sheeley</u>	<u>2-9-05</u>	<u>14:30</u>	<u>Paul Sheeley</u>	<u>2-9-05</u>	<u>14:30</u>
<u>Paul Sheeley</u>	<u>2-9-05</u>	<u>15:30</u>	<u>Paul Sheeley</u>	<u>2-9-05</u>	<u>10:10</u>

LAB USE ONLY

Subject: WLN

Handspace: WLN

Temp: 4

Log-In/Review:

REMARKS: 54354 rec in 16 oz cask bottle. Request for analysis in Feb

Check if Special Requisition Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

ORIGINAL COPY



NEW MEXICO ENERGY, MINERALS and  
NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**  
Governor  
**Joanna Prukop**  
Cabinet Secretary

**Mark E. Fesmire, P.E.**  
Director  
Oil Conservation Division

**FAX**

TO:

Wayne

FROM:

Paul

RE:

Salty Dog ~~Not Draft~~ C-141

DATE:

3-28-05

NO. OF PAGES \_\_\_\_\_ INCLUDING COVERSHEET

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-141  
Revised October 10, 2003

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit 2 Copies to appropriate  
District Office in accordance  
with Rule 116 on back  
side of form

Release Notification and Corrective Action

OPERATOR

Initial Report  Final Report

Name of Company	Salty Dog, Inc.	Contact	Art Hilliker
Address	P.O. Box 513 Hobbs, NM	Telephone No.	505/390-6205
Facility Name	Arkansas Jet Brine Station	Facility Type	Brine water Production Facility
Surface Owner	Snyder Ranch Larry S	Mineral Owner	Snyder Ranch
Lease No.			

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	South Line	Feet from the	East Line	County
J	5	19S	36E	1980	South	1980	East	HOBBS

Latitude \_\_\_\_\_ Longitude \_\_\_\_\_

RECEIVED  
Hobbs  
OCD

NATURE OF RELEASE

Type of Release	Salty water	Volume of Release	425 +/-	Volume Recovered	421 Bbls
Source of Release	Brine well	Date and Hour of Occurrence	Feb. 11, 05	Date and Hour of Discovery	Feb. 11, 05 AM
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?	Chris Williams		
By Whom?	Chris Williams + Gary Wink - on loc	Date and Hour	2/11/05 Approx. 10 AM		
Was a Watercourse Reached?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If YES, Volume Impacting the Watercourse.	425 Bbls. +/-		

If a Watercourse was Impacted, Describe Fully.\*  
Brine supply pipeline (buried) burst and brine water flowed from casing of well leaking through hole in pipeline up above ground and into dry lake bed, flooding lake bed.

Describe Cause of Problem and Remedial Action Taken.\*  
Cause: hole in brine water supply line to pit by hiway burst, when trying to unplug supply line. Rem. Action: Sent Vacuum Trucks to suck all brine water in low areas out of lake bed + dispose of at public SWD.

Describe Area Affected and Cleanup Action Taken.\*  
Dry low spot (lake bed) was flooded by released brine. Picked up 421 Bbls brine out of lake bed, haul to SWD. Let flooded area dry. After drying, will consult with landowner, OCD, EPA to disc affected area and add fertilizer + salt neutralizing

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

OIL CONSERVATION DIVISION

Signature:	Art Hilliker	Approved by District Supervisor:	Chris Williams
Printed Name:	Art Hilliker	Approval Date:	2/24/05
Title:	Safety / Customer Relations	Expiration Date:	3/15/05
E-mail Address:		Conditions of Approval:	Must submit a remediation plan by 3/15/05
Date:	Feb. 23, 2005	Phone:	393-8352
* Attach Additional Sheets If Necessary		Attached	<input type="checkbox"/>

Well API # 30-025-26307

TRANSACTION REPORT

F.01

MAR-28-2005 MON 07:50 AM

FOR:

RECEIVE

DATE	START	SENDER	RX TIME	PAGES	TYPE	NOTE	M#	DP
MAR-28	07:49 AM	15053939758	57"	2	RECEIVE	OK		

\*\*\*\*\*

## Price, Wayne

---

From: Johnson, Larry  
Sent: Monday, March 28, 2005 10:53 AM  
To: Price, Wayne  
Cc: Williams, Chris  
Subject: Salty Dog

Looking north toward the truck loading area from just north of the well.



P2280061.JPG



P2280062.JPG



P2280060.JPG



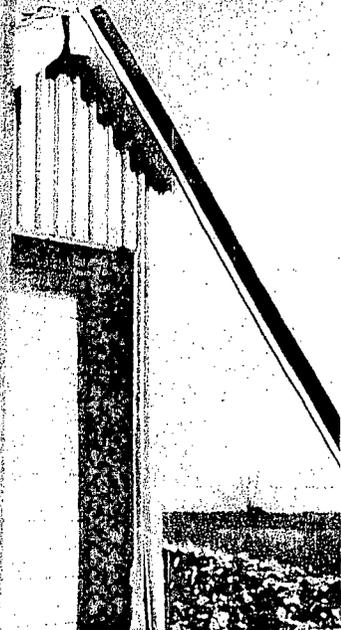
**SALTY DOG Inc.**

**BRINE WELL SUPPLY #1**

**SEC 5 T19S R36E**

**1980' FSL 1980' FEL**

**UNIT LETTER J**







December 7, 2004

Dear Wayne Price,

After our conversation on the phone, on Thursday December 2, we will be implementing a high-density plastic liner below the sump bay at the Salty Dog Brine Station. I am in agreement with you that this is a safe guard against contamination of the soil and water.

Thank you for all of your help in designing the additions to the facility.

Brandon Bird

A handwritten signature in black ink, appearing to read 'B. Bird', written in a cursive style.



# ARDINAL LABORATORIES

PHONE (325) 873-7001 • 2111 BEECHWOOD • ABILENE, TX 79603

PHONE (505) 393-2328 • 101 E. MARLAND • HOBBS, NM 88240

NM 74-2

RECEIVED  
NOV 2 PM 12:30

ANALYTICAL RESULTS FOR  
SALTY DOG INC. *NM-74*  
ATTN: JIM SAYRE  
P.O. BOX 513  
HOBBS, NM 88241  
FAX TO: (575) 393-8353

Receiving Date: 10/26/07  
Reporting Date: 10/26/07  
Project Owner: NOT GIVEN  
Project Name: NOT GIVEN  
Project Location: NOT GIVEN

Analysis Date: 10/26/07  
Sampling Date: 10/26/07  
Sample Type: GROUNDWATER  
Sample Condition: COOL & INTACT  
Sample Received By: SB  
Analyzed By: AB

LAB NUMBER	SAMPLE ID	CF (mg/L)
H13587-1	PIT MONITOR WELL	9,897
H13587-2	FRESH WATER WELL	730
H13587-3	MONITOR WELL #1	104
H13587-4	MONITOR WELL #2	108
H13587-5	MONITOR WELL #3	356
H13587-6	MONITOR WELL #4	1,100
H13587-7	MONITOR WELL #5	100
H13587-8	MONITOR WELL #6	28
Quality Control		500
True Value QC		500
% Recovery		100
Relative Percent Difference		< 0.1
METHOD: Standard Methods		4500-CFB

*Christa Supton*  
Chemist

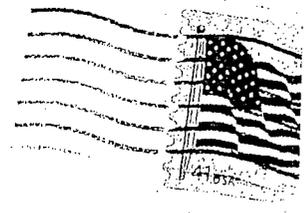
10/26/07  
Date

H13587 SALTY DOG

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit QQ

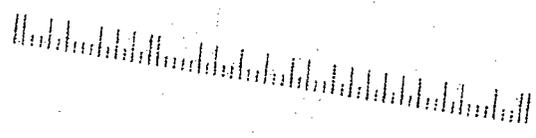
PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analysis. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above-stated reasons or otherwise.

ZIA TRANS  
PO Box 513  
Hobbs N.M.  
88242



Oil Conservation Div  
Attn Glen Von Gotten  
1220 South St. FRANCIS  
SANTA Fe New Mexico  
87505

87505+4223-99 C011



RECEIVED

2008 MAR 6 PM 1 59



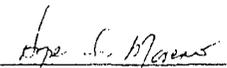
PHONE (575) 393-2326 • 101 E. MARLAND • HOBBS, NM 88240

ANALYTICAL RESULTS FOR  
SALTY DOG  
ATTN: JIM SAYRE  
P.O. BOX 513  
HOBBS, NM 88241  
FAX TO: (575) 393-8353

Receiving Date: 02/27/08  
Reporting Date: 02/27/08  
Project Number: NOT GIVEN  
Project Name: NOT GIVEN  
Project Location: NOT GIVEN

Analysis Date: 02/27/08  
Sampling Date: 02/27/08  
Sample Type: GROUNDWATER  
Sample Condition: INTACT  
Sample Received By: ML  
Analyzed By: HM

LAB NO.	SAMPLE ID	Cl <sup>-</sup> (mg/L)
H14335-1	WATER WELL	630
H14335-2	PIT WELL	9,500
H14335-3	MW-2	120
H14335-4	MW-3	348
H14335-5	MW-4	476
H14335-6	MW-5	1280
H14335-7	MW-6	32
Quality Control		490
True Value QC		500
% Recovery		98
Relative Percent Difference		2.0
METHOD: Standard Methods		4500-ClB

  
Chemist

02-27-08  
Date

WQCC-ACO#2  
Salty Dog, Inc.  
OCD Exhibit RR

H14335 SALTY DOG

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**BW - 8**

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**QUARTERLY  
MONITORING  
REPORTS**