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THE IMPACT OF LEACHATE FROM CLEAN COAL TECHNOLOGY WASTE ON THE STABILITY OF CLAY LINERS AND SYNTHETIC LINERS

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By Terry H. Brown

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EXECUTIVE SUMMARY

This project was developed to provide design criteria for landfill disposal sites used for fly ash injection materials such as those generated using the clean coal technologies (CCT) tested at the Public Service Company of Colorado's Arapahoe Power Plant. The CCT injection materials used were produced at the Arapahoe Plant Unit No. 4, which is equipped with an integrated dry NOx/SO2 emissions control system installed under the Clean Coal Technology (CCT) Program. The investigation emphasized the potential impact of clean coal technology materials (sodium injection material, calcium injection material, and urea injection material with low NOx burners; the injection materials include fly ash) on the permeability and stability characteristics of clay liner materials and the stability of synthetic liner materials.

Geotechnical evaluations were made for the fly ash injection materials for use in laboratory setup and to aid in the interpretation of data with regard to the long-term integrity of the clay liner system. The data indicate that there are significant differences in the geotechnical properties of the ashes collected during the various test runs. The calcium injection materials were found to develop rather high strength compared to the other materials tested. The shape of the strength development curve is typical of the lime and fly ash reactions with a very slow early strength development up to 7 days followed by a more rapid development from 14 days onward. The strength development for the two sodium injection ashes was very slow. In fact, the conditioned and compacted injection material specimens deteriorated after approximately 14 days, apparently as a result of expansion.

The clay liner materials were characterized using total elemental analysis and X-ray diffraction (XRD). Both clay liner materials used in the study contained high amounts of clays, with Sample A containing about 40% and Sample B containing about 53%. The clay fraction found in both clay liner materials was dominated by montmorillonitic clays with amounts ranging from about 50 to 70%. These types of materials usually make good clay liners.

Flexible-wall permeameters were used to determine the hydraulic conductivities (HC) of the clay liner materials impacted by various compactive conditions. Tests were conducted using the waste materials overlaying the clay liner materials under wet/dry cycles, freeze/thaw cycles, and over 120-day periods. Clay treatments with $CaCl_2$ were also evaluated.

The impact of CCT materials on the characteristics of the clay liner materials studied in this project was minimal. The HC measurements of the waste/clay liner systems were similar to the water/clay liner systems. HC decreased for clay liners compacted at moisture levels slightly higher than optimum (standard Procter) and increased for liners compacted at moisture levels lower than optimum (standard Procter). Although some swelling was evident in the sodium injection materials, these materials did not have a negative impact on the integrity of the liners over the 120-day tests. Wet/dry cycles tended to result in lower HC values, while freeze/thaw cycles substantially increased HC for the liners tested.

The solutions leached from the various injection materials showed large differences in chemical constituents. The solutions collected from the sodium injection materials are characterized by more problematic constituents compared to the calcium injection materials, the urea injection materials and the baseline fly ash materials. The sodium injection materials generated solutions containing high pH and EC values and large levels of Na and SO_4^{-2}, and elevated levels of B, Al, Se and As. However, these constituents decreased in concentration following the reactions with clay liner materials and the formation of minerals. It should be noted that without a clay liner, solutions leaching from the sodium injection material could impact the environment. Solutions leached from the calcium and urea injection materials have little potential of negatively impacting the environment. The major issue would be the high pH values of the solutions (near 12 for both materials). However, most disposal environments with or without a clay liner would be expected to gradually buffer the pH. An important question is the impact that the relatively high pH has on elements present in other materials at the disposal site. High pH solutions could cause constituents from other materials to become soluble, thus impacting the environment.

Tests were also conducted to assess the compatibility of synthetic liner materials with the CCT by-products. The test program was conducted using methods specified and/or referenced in Environmental Protection Agency (EPA) SW 846-Method 9090 with some modifications. Compatibility evaluations were made using high-density polyethylene (HDPE), very low-density polyethylene (VDPE), and polyvinyl chloride (PVC) synthetic liner materials treated with baseline fly ash materials, sodium injection materials, calcium injection materials, and materials generated from the sodium injection, urea injection, low NO_x burner control system. The synthetic liner materials were subjected to a 50:50 ratio of sludge to water for periods to 120 days at room temperature (23°C). At the end of each equilibration period, the liner materials were evaluated using mechanical engineering techniques and weight losses due to volatiles and extractables.

Sustained incremental changes in the measured physical properties of the materials over time were not observed. Some abrupt changes in strength were found several times during the testing period. However, these aberrations seemed more indicative of isolated changes in the conditioning methods or test procedures and could be related to flaws or changes in the materials related to manufacturing conditions. After 120 days of conditioning, none of the measured physical properties varied significantly from those of the untreated liner materials. This was true for all samples, regardless of the conditioning solution used.

The volatiles and extractables tests for the HDPE and VDPE materials indicated that the waste materials had little influence on their overall structure. However, the extractables data suggest that PVC liner material might decompose in the waste environments evaluated. The PVC liner material reacted similarly for all treatments with about a 30% weight loss.

INTRODUCTION

Landfills commonly used for disposal of solid wastes pose a threat to surface and groundwater quality. The major concern is that the leachates from the waste may contain elements that are detrimental to the quality of the waters for their designated uses. Clay liners are usually used in landfills, often in combination with synthetic liner materials to help ensure the prevention of the movement of leachate from the disposal site. It is important to determine the compatibility of both the clay liner material and the synthetic liner material to the specific waste prior to prescribing a suitable liner system for a specific application.

Clay liners are often used in landfills to contain and attenuate the leachate from solid waste materials. The suitability of soil materials for liner use is usually based on permeability criteria (Brown and Anderson, 1980). However, other considerations relative to chemical and physical relationships often determine whether a clay liner is compatible with a specific type of waste. These relationships must be evaluated in detail before an appropriate liner can be prescribed for a specific landfill.

Problems often found with clay liners are related to volume shrinkages (Hettiaratchi et al., 1988). Shrinkages in compacted liners often result from increases in salt concentrations in the solutions within the clay liner (Green et al., 1983). Also, the impact of acidic and alkaline solutions on the dissolution of the clay minerals present in the clay liner materials results in increased permeabilities for similar reasons (Peterson and Krupka, 1981). The presence of certain organic compounds in the leachates are sometimes associated with increased permeabilities (Green et al., 1983).

There are a number of variables that determine the effect of waste leachate on the long-term stability of a clay liner material. The primary variables are clay mineralogy, texture, surface chemistry, the physical nature of the materials, and the chemistry of the waste leachate. Increases in salt concentrations can result in double layer collapse or less interaction between clay particles and resulting decreases in repulsive forces (Bohn et al., 1985). A decrease in repulsive forces causes the materials to flocculate, reducing the effective stress in the liner, which results in a volume shrinkage (Hettiaratchi et al., 1988). The mineralogy of the clay and the specific elements present in the solution associated with the clay will determine the amount of shrinkage that will result from double layer collapse. The 2:1 layer clay minerals such as montmorillonite have a much greater tendency for swelling and shrinking than the 1:1 clay types such as kaolinite. In addition, monovalent elements such as Na, which have a very large hydrated radius, have the potential to cause swelling, while divalent elements, such as Ca, have a tendency to reduce double layer expansion. Therefore, materials that have high-swelling montmorillonite clay minerals with sodium as the dominant element should be avoided. Elements such as calcium can displace the sodium and cause the double layers to collapse. This type of reaction resulted in a large amount of shrinkage in studies done by Hettiaratchi et al. (1988) with permeant solutions containing calcium. These authors suggested that clay liner materials should be conditioned with calcium solutions during the compaction stage to prevent shrinkage and cracking due to double layer collapse. However, it should be noted that if the salt concentration increases to high levels (high electrical conductivity or EC) due to leachate migrating into the clay liner, no matter which cation is present, double layer collapse could occur, resulting in the formation of cracks.

Shrinkage of clay liners can also be caused by the influence of organic compounds on the electrical double layer. The low dielectric constant of organic compounds relative to water reduces the influence of the surface charge, promoting flocculation of clay particles causing cracking of clay liners (Green et al., 1983). However, the amount of organic compounds seems to determine the degree of impact that the clay liners experience. Daniel et al. (1988) found that solutions containing low levels of organic compounds did not cause shrinkage of clay liner materials. Therefore, it is apparent that most situations will require testing for compatibility between the specific wastes and the clay liner material to be used at the disposal site.

The load on the clay liner associated with the waste will also impact the effective stress experienced by the clay liner. Changes in effective stress with time may be an important factor relative to the long-term stability of a clay liner.

The use of synthetic membrane liner materials to line waste disposal sites has been shown to be very effective in reducing leakage of contaminated solutions from the storage sites. Such membranes are used in numerous waste disposal applications, including the storage of fly ash materials in landfills. As technologies are developed to control air contaminant emissions from power plants, fly ash/sludge materials are produced that have characteristics much different from the conventional fly ash materials. It is important to develop an understanding of the compatibility of the new sludge materials with the flexible liner materials used at the disposal sites. It is also important to understand that sludge materials are unique. Each power plant operates under differing combustion conditions, a variety of coal qualities, and using differing emission control systems; therefore, the character of the fly ash/sludge materials will differ. This requires that liner compatibility evaluations be made for each waste and/or waste leachate that is produced.

Synthetic membrane liner compatibility studies have been conducted using clean coal technology (CCT) wastes by Koegler et al. (1991). These tests were done using fly ash/sludge materials that were generated from a number of power plants that represented desulfurization technologies such as spray dryer, atmospheric fluidized bed combustors (AFBC), limestone injection and sodium injection. These researchers looked at 20 synthetic membrane liners of various types from different venders. The findings indicated that water slurries of the wastes tested are chemically incompatible with some of the synthetic membrane liners tested. They also found that variations among synthetic liners of the same type, but obtained from different vendors, were significant. Therefore, it is recommended that before a liner is selected for a specific installation, compatibility tests using the actual waste material and liner samples from specific vendors should be completed.

OBJECTIVES

The purpose of this research was to investigate the potential impact of clean coal technology solid wastes on the permeability and attenuation characteristics of clay liner materials and on the integrity of synthetic membranes.

EXPERIMENTAL PLAN

The test program included two clay liner materials representing different overall characteristics. The liner materials represent two landfill sites located in Colorado. Four waste materials generated at the Arapahoe Power Plant during the clean coal technology testing program were used in the testing. The CCT materials used in this study include: materials collected during baseline operations without the applications of the CCT; the sodium injection materials; the calcium injection materials; and the materials generated from the sodium/urea injection/low NO_X control system.

Geotechnical evaluations were made for the fly ash injection materials and the clay liner materials to provide information required for the experimental setup in the laboratory and to enhance the understanding of the impact of the materials on the long term integrity of the clay liner system. The clay liner materials were evaluated for water/density relationships using American Society for Testing and Materials (ASTM) D 698, and Atterberg Limits were determined using ASTM D 4318. Clay mineralogy evaluations were also made for the liner materials. This work was done using methods as described in *Methods of Soil Analysis* (1982). The chemical and physical testing of the fly ash injection materials was done using procedures outlined in ASTM C 311.

Flexible-wall permeameters were used to determine the hydraulic conductivities (HC) of the clay liner materials impacted by various compactive conditions, confining pressures, gradients, effective stresses and solution chemistry conditions. In addition, tests were conducted using the waste materials overlying the clay liner materials under wet/dry cycles, freeze/thaw cycles, and over 120-day periods. Dry cycles were conducted by allowing the liner materials to air dry to a point near field capacity (-1/3 bar matric potential) and did not represent an oven-dry condition.

Clay liner and fly ash injection materials were tested using compacted cylinders 6 in. long and 4 in. in diameter. The tests were conducted at densities based on moisture/density relationships as described in ASTM D698. Clay liner material/injection fly ash material simulations were done using 2 in. of clay liner material overlain by 2 in. of fly ash injection materials. The hydraulic conductivities of the various materials were determined using ASTM D5084-90.

The fly ash injection materials were also characterized for constituents on a total and extractable basis. The extractable constituents were determined on solution removed from a saturated paste of the materials (ASA, 1982). The cations and anions were determined using an inductively coupled plasma system (ICP) and ion chromatography (IC), respectively. Atomic absorption (AA) was used where appropriate.

The solutions collected during sample permeation and those collected from various water sources in the power plant were evaluated for major constituents using U.S. EPA methodology (1983) and Standard Methods for the Examination of Water and Wastewater (1992).

The analyses of solutions collected from the fly ash injection materials and the leachate associated with the HC tests were used as input for the geochemistry evaluations. This work was done using the speciation and solubility model EQ3 and the reaction path model EQ6 developed by Wolery at Lawrence Livermore National Laboratory.

The test program included compatibility evaluations for three types of synthetic liner materials including: (1) high-density polyethylene (HDPE); (3) very low density polyethylene (VDPE); and (3) polyvinyl chloride (PVC). The synthetic liners were immersed in the leachate environment associated with four waste materials generated at the Arapahoe Power Plant during the CCT testing program as noted. The synthetic liners were subjected to the fly ash materials for periods of 30, 60, 90, and 120 days. The 50:50 ratio of sludge to water used in this study deviates from the EPA Method 9090, which requires a 5 to 15% solids solution. This procedure was modified because the pH values associated with the dilute system specified in Method 9090 were 2 pH units lower than the pH of the 50% solids solution. In addition, the pH of the 50% solution compared well to the pH of the saturated pastes of the sludge materials used in the study. The studies were done at room temperature (23° C). Comparisons of measurements of the synthetic materials' physical properties, taken before and after contact with the leachates from the fly ash materials, were used to evaluate the compatibility of the liner with the waste over time. Testing included physical tests, tensile strength properties, and changes in volatile and extractable components of the materials.

The mechanical testing was performed using the guidelines of EPA Method 9090 with the exception of the puncture test, which was done using ASTM D4833. As directed by EPA Method 9090, the tensile properties method was specified as ASTM D638. The modulus of elasticity was measured for the HDPE and VDPE materials as outlined in ASTM D882, Method A. Tear strength was measured using ASTM D1004. The punch strength test method used was specified in ASTM D4833. The change in volatile and extractable weights presented on a percentage basis was done using methods specified in SW 870 Appendix III-D and Appendix III-E. Volatile losses provide indications of the amount of water absorbed into the liner. Large amounts of absorption show a degradation of the liner. A decrease in liner extractions compared to the material before testing provides an indication of the components leached from the liner during exposure to a waste.

RESULTS

Geotechnical Testing of Fly Ash Injection Materials

Solid wastes from the clean coal technology test runs at the Public Service Company of Colorado Arapahoe Unit No. 4 were collected and characterized. The four wastes studied are as follows:

1. Baseline Test – representing the ashes from the unit without emissions control processes in operation. These ashes were collected 4/23/93.

2. Urea Test – representing the ashes from the unit operating with urea injection for Ox emissions control. These ashes were collected 4/7/93 and 4/8/93.

3. Calcium Injection Tests – representing the ashes from the unit operating with calcium injection/humidification. Three sets of ashes from these tests were collected on 6/29/93, 7/02/93, and 10/20/93

4. Sodium Injection Tests – representing the ashes from the unit operating with Sodium injection. Two different sets of ashes were collected from the same injection run on 10/15/93. The sampling methodology for the two sets were different.

The basic chemical composition of the ashes is presented in Table 1. Of particular note is the increase in carbon content in the ash from the urea test relative to the baseline test fly ash. The introduction of the urea had an adverse impact on the carbon conversion in the combustor. The three calcium injection ashes differed considerably in the amount of sulfur capture (SO_3 values) and the amount of lime injection (CaO values). By far the best calcium injection test is the run of 10/20/93. The Sodium injection ashes also show differences. These ashes were from the same injection run, but the ash from the baghouse hoppers were collected differently. The Pass 1 sample was collected using a vacuum assisted sampling tube that was inserted diagonally through the ash collected in the hopper. In this method, each hopper was treated as contributing equally to the ash being discharged. Sample 2, on the other hand, was collected as the bag was being cleaned, and the amount collected from each hopper was proportional to the amount discharged. The results of the particle size distribution of the ashes are presented in Table 2. The relative enlargement of the particle size of the urea test ash is probably a reflection of the increased unburned carbon content for these ashes (see Table 1).

Table 1. Summary of the Chemical Characteristics of the Fly Ashes Collected from the Clean Coal Technology Test Runs at the Public Service Company of Colorado Arapahoe No. 4 Unit

Analytic Parameter	Baseline Ash	Urea Ash	Ca Inj Ash (1)	Ca Inj Ash (2)	Ca Inj Ash (3)	Na Inj Ash-1	Na Inj Ash -2
Total Moisture (105 °C)	0.13	0.14	0.73	0.53	0.84	0.30	0.22
Total Carbon	4.92	8.68	12.72	5.60	4.62	11.95	8.29
Mineral Carbon	0.04	0.03	0.1	0.04	0.09	0.72	0.73
Total Sulfur	0.06	0.08	0.70	0.50	1.59	0.98	2.33
Loss on Ignition (LOI)	5.53	8.80	16.37	7.45	7.35	12.71	10.56
SiO_2	57.16	53.77	45.40	54.41	36.66	47.74	43.11
TiO_2	0.75	0.87	0.48	0.52	0.48	0.59	0.63
Al_2O_3	24.81	23.20	17.62	19.49	20.78	19.56	19.22
Fe_2O_3	3.10	3.23	2.80	2.50	2.94	2.95	3.31
CaO	4.38	5.23	11.84	9.72	24.03	3.74	3.92
MgO	1.34	1.26	1.08	1.07	1.14	1.16	1.23
Na_2O	0.89	1.07	1.02	0.94	0.47	6.87	9.81
K_2O	1.06	1.04	0.81	1.05	0.58	1.01	1.02
P_2O_5	0.60	0.65	0.56	0.47	1.04	0.67	0.75
SO_3	0.15	0.11	1.75	1.25	3.97	2.45	5.83
CO_2	0.15	0.19	0.37	0.15	0.33	2.64	2.67
TOTAL	99.92	99.42					

(1) Baseline test-4/23/93
(2) Urea test-4/7-8/93
(3) Calcium injection test-6/29/93
(4) Calcium injection test-7/02/93
(5) Calcium injection test-10/20/93
(6) Sodium injection test-10/15/93, sampled pass 1.
(7) Sodium injection test-10/15/93, sampled pass 2.

Table 2. Summary of the Pertinent Particle Size Distribution Data for the Fly Ashes Collected from the Clean Coal Technology Tests at the Public Service Company of Colorado Arapahoe No. 4 Unit

	Baseline Test 4/23/93	Urea Test 4/7-8/93	Ca Inj. Test 6/29/93	Ca Inj Test 7/02/93	Ca Inj Test 10/20/93	Na Inj Test-1 10/15/93	Na Inj. Test-2 10/15/93
PSD of <325 mesh							
D_{20} (microns)	9.40	na	na	na	8.2	9.4	8.1
D_{50} (microns)	33.10	na	na	na	26.6	28.9	27.3
D_{80} (microns)	40.90	na	na	na	32.3	34.6	33.2
Surface Area*	na	na	na	na	0.94	0.72	0.93
Bulk Density (pcf)							
Poured	41.8	40.5	33.4	37.5	37.3	43.5	41.7
Packed	53.0	48.2	43.2	48.7	48.2	54.6	52.9

* surface area measured in units m2/cm3 na - not available

Prior to testing the impact of waste materials on the integrity of waste materials, it is necessary to determine the chemical and physical characteristics of the waste material over time. As discussed, some waste materials undergo cementation reactions that can fill pores, reducing the permeability. In addition, the chemistry of the permeate solution can provide an indication of the nature of the reactions that are ongoing. This information, in turn, can provide an understanding of the chemistry of leachate-liner interactions.

Waste materials collected from the clean coal technology test runs at the Public Service of Colorado Arapahoe No. 4 unit were subjected to a series of geotechnical tests, including moisture/density relationships, unconfined compressive strength, and expansion/shrinkage. Durability tests (wet/dry and freeze/thaw cycles) were not conducted due to the nature of the ashes. In addition, the characteristics of the ashes relative to the ASTM C-311 properties were also determined. The results of ASTM C-311 for each of the major tests are presented in Table 3.

Calcium injection ash meets the specifications for use as a pozzolan with the exception of loss on ignition (LOI) (7.35 - 6.0 max) and water requirement (105.8 - 105 max). Although the data are very preliminary, the strength requirements appear to be met by the calcium injection ashes, specifically the 10/20/93 materials.

Table 3. Summary of the Results of the ASTM C-311 Testing of the Fly Ashes Collected from the Clean Coal Technology Test Runs at the Public Service Company of Colorado Arapahoe Unit No. 4

ASTM C-311 Testing	Baseline Test (1)	Urea Test (2)	Ca Inj Test (3a)	Ca Inj Test (3b)	Ca Inj Test (3c)	Na Inj Test (4a)	Na Inj Test (4b)	C-618* Class F	C-618* Class C
Chemical Tests									
Total of SiO2+Al2O3+Fe2O3 (%)	85.07	80.20	65.82	76.40	60.38	70.25	65.64	70 min.	50 min.
SO3 (%)	0.05	0.19	1.39	1.18	3.97	2.45	5.83	5.0 max.	5.0 max.
Moisture (%)	0.13	0.14	0.73	0.53	0.84	0.30	0.22	3.0 max.	3.0 max.
Loss on Ignition (LOI) (%)	5.23	8.80	16.37	7.45	7.35	12.71	10.56	6.0 max.	6.0 max.
Available Alkalis (%)	na	na	na	na	na	na	na	1.5 max.	1.5 max.
Physical Tests									
Fineness (>325 mesh)	23.04	39.95	41.75	42.23	30.36	39.96	22.51	34 max.	34 max.
Pozzolanic Activity w/ Cement									
7 days (% of Control)	63.3	49.2	55.2	55.2	77.9	63.5	47.6		
28 days (% of Control)	73.6	56.4	65.5	63.5	na	na	na	75 min.	75 min.
Pozzolanic Activity w/ Lime									
7 days (psi)	860	620	560	590	na	na	na	800 max.	No Limit
Water Requirement (% of Control)	107.4	109.9	109.1	107.4	105.8	105.8	106.2	105 max.	105 max.
Soundness (Autoclave % Expansion)	-0.031	-0.024	0.001	-0.019	na	0.028	0.027	0.8 max.	0.8 max.
Drying Shrinkage (inc. @ 28 days)	0.006	0.010	na	0.005	na	na	na	0.03 max.	0.03 max.
Alkali Reactivity	nd	nd	nd	nd	nd	nd	nd	0.02 max.	0.02 max.
Specific Gravity	2.00	2.08	1.93	2.07	2.13	2.04	2.20		

nd - not determined
na - not available
(1) Ash from baseline test-4/23/93
(2) Ash from Urea test-4/7-8/93
(3a-c) Ash from calcium injection tests-6/29/93, 7/02/93, and 10/20/93 .
(4) Ash from sodium injection test-10/15/93 test runs , sample 2.
** Specifications for use as a pozzolan according to ASTM C-618.*

The properties of the calcium injection ashes and the sodium injection ashes varied considerably with the specific ashes and the nature of the tests. The data for the 6/29/93 and the 7/02/93 calcium injection tests appear to be similar in both chemistry and pozzolanic properties. The data also indicate that the 10/20/93 calcium injection ash is quite dissimilar, being higher in lime and sulfates and superior in pozzolanic properties. As such, the data in Table 3 indicates that the pozzolanic qualities of the ash are benefited by the additional injection of lime into the system. The 10/20/93 ash appears to be significantly superior in pozzolanic quality, with pozzolanic activity of portland cement exceeding the 28-day requirements of ASTM C-618 by 21 days. In addition, the 10/20/93 ash is a finer material than that produced during the 6/29/93 and 7/02/93 runs.

The ASTM C-311 data for the two sodium injection ashes presented in Table 3 indicate that the two ashes are distinctly different from each other and that neither of these ashes appears to show promise as a pozzolan. The two ashes are different chemically in Na_2O content and associated sulfur capture (SO_3 value) and in their fineness (pass 2 being much finer). The causes of these differences are still being evaluated.

The results of the general geotechnical testing are presented in Table 4. The data indicate that there are significant differences in the geotechnical properties of the ashes from the various test runs. This is illustrated in the moisture-density relationship data. Moisture-density relationships were determined according the ASTM D-698. The relationships define the optimum moisture content of the ash that provides the maximum dry density of the sample. This is one of the primary criteria used to determine disposal properties of the ash. The relatively large swing in the maximum dry density (MDD) was surprising, as was the optimum moisture needed to achieve this density (compaction). The maximum dry density varies from 50.1 pcf to 77.5 pcf, while optimum moistures varied from 27.73% to 44.42%. The low density and high water requirement for the urea test again reflects the difficulty of wetting the ash and the resultant production of a well compacted material.

The ashes from the calcium injection technology runs varied considerably, with MDD of 50.1 to 66.50 and optimum moistures from 27.7 to 40.5. The higher lime injection ash (10/20/93) required the higher moisture and achieved the higher maximum dry density. The two sodium injection ashes were also quite different. The low strength development made expansion and shrinkage testing according to ASTM C-157 impossible.

Table 4. Summary of the General Geotechnical Properties of the Fly Ashes Collected from the Clean Coal Technology Test Runs at the Public Service Company of Colorado Arapahoe No. 4 Unit

Geotechnical Properties	Baseline 4/23/93	Urea 4/7-8/93	Ca Inj. 6/29/93	Ca Inj. 7/2/93	Ca Inj 10/20/93	Na Inj-1 10/15/93	Na Inj-2 10/15/93
Moisture-Density Relationship							
Maximum Dry Density (pcf)	66.5	56.7	50.1	55.93	66.50	69.07	77.49
Optimum Moisture (wt. %)	34.45	44.42	29.02	27.73	40.50	28.22	25.86
Unconfined Compressive Strength							
Optimum Proctor Moisture							
7 days (psi)	nd	nd	23	21	215	22	22
14 days (psi)	28	37	105	123	625	19	***
28 days (psi)	38	50	198	252	1653		***
Optimum Proctor Moisture less 2%							
7 days (psi)	nd	nd	15	19	nd	nd	nd
14 days (psi)	24	36	59	97	nd	nd	nd
28 days (psi)	27	46	97	195	nd	nd	nd
Optimum Proctor Moisture plus 5%							
7 days (psi)	nd	nd	31	23	nd	nd	nd
14 days (psi)	41	32	143	128	nd	nd	nd
28 days (psi)	50	36	213	379	nd	nd	nd
Expansion/Shrinkage*							
Sealed Cured							
7 days (%)	**	**	nm	nm		nm	nm
28 days (%)	**	**	nm	nm		nm	nm
Saturated Cured							
7 days (%)	**	**	nm	nm		nm	nm
28 days (%)	**	**	nm	nm		nm	nm

* Tested at Optimum Proctor Moisture ** Specimen too soft to demold.
nd - not determined nm - not made

The calcium injection ashes were distinctly different in unconfined compressive strength properties. A summary of the strength development of the calcium injection ashes is presented in Table 5. The unconfined compressive strength for the early calcium injection tests (6/29/93 and 7/02/93) are clearly lower than for the 10/20/93 calcium injection ash. This is reflected in the lower amount of calcium in the ash (see Table 1). The benefit of calcium in the ash on the development of self-cementing properties is even evident in the early test ashes. The 6/29/93 ash was also spiked with additional lime in order to determine if the small amount of lime (5%) could enhance the strength development of the ash. The data presented in Table 5 appear to indicate little benefit of lime addition for this ash.

Table 5. Summary of the Unconfined Compressive Strength Data for the Calcium Injection Ashes Collected from the Clean Coal Technology Test Runs at the Public Service Company of Colorado Arapahoe No. 4 Unit

	Ca-Inj-29 6/29/93	Ca-Inj+Ca(1) 6/29/93	Ca-Inj-28 7/2/93	Ca-Inj 10/20/93
Unconfined Compressive Strength (psi)				
1 day	10	12	9	nd
3 days	13	22	15	51
7 days	23	23	21	215
14 days	105	124	123	625
28 days	198	212	252	1653
56 days	484	510	515	
90 days				
Density (pcf)	63.30	64.05	67.03	95.31

(1) Calcium oxide addition of 5% by weight of dry ash. nd - not determined

The strength development of the 10/20/93 ash is quite high, and the shape of the strength development curve is typical of the lime and fly ash reactions, showing a very slow early strength development up to 7 days and more rapid development from 14 days onward.

The strength development for the two sodium injection ashes was very low. In fact, the conditioned and compacted ash specimens deteriorated after approximately 14 days, apparently as a result of expansion. Strengths in the range of 20 to 40 psi were determined prior to deterioration of the test specimens. The deteriorated specimens were remixed and recompacted into cubes to determine if the expansion was essentially over by 14 days. The results indicated that within 24 hours of being stripped from the molds, the new repacked specimens cracked and expanded. The deterioration occurred for both specimens stored open to the air and sealed in plastic bags.

Clay Liner Material Evaluations

Clay Mineralogy and Elemental Analysis of Materials Projected for Use as Clay Liners

As noted in the methods section, two clay liner materials were tested for suitability for the Public Service Company (PSC) disposal sites. A sample of realite clay (RC) aggregate was used and a liner material collected from the airport disposal site was identified as airport clay (AC). Total elemental analyses are presented in Table 6.

Table 6. Total Elemental Analysis of Clay Liner Materials Using HF Dissolution

Sample	Na	Mg	Al	Si	K	Ca	Ti	Mn	Fe	Zn
Realite Clay	0.7	3	8	24	2.0	1.0	0.3	0.04	4.0	0.01
Airport Clay	0.3	3	10	25	1.0	0.4	0.3	0.04	4.0	0.02

The particle size analysis showed that the realite clay contained 0.5% sand, 59.1% silt, and 40.4% clay while the airport clay has 14.3% sand, 32.8% silt, and 52.9% clay. The texture analysis for the realite clay may be erroneous because of the extreme difficulty experienced in dispersing the sample. Realite clay is marketed as a lightweight aggregate that is calcined during preparation. It is likely that this treatment enhances aggregation, which reduces its ability to disperse. Clearly, many of the silt-sized particles are really aggregates of clay.

Realite clay is dominated by montmorillinite in the clay fraction, with some kaolinite and illite present. The XRD peak height for illite would suggest that realite clay contains high levels of illite. The high potassium content found in realite clay supports the presence of a higher illite content.

The airport clay contains smectite, illite, and kaolinite clay minerals. The smectite was shown to be montmorillinite containing high levels of iron, which is very common. Based on the diagnostic XRD peaks, the kaolinite is probably dickite. Relative peak heights suggest that montmorillonite dominates the clay fraction, followed by kaolinite and small amounts of illite. Airport clay was determined to have similar clay mineralogy compared to realite clay.

A quantitative evaluation of the various clay types was completed using calibration standards as shown in Table 7. Problems quantifying the clay phases were due to the very complex XRD spectra. The peaks of the various clay phases overlapped. The results of the quantitative analyses are presented in Table 8.

Table 7. Calibration Standards Used for the Quantification of the Clay Minerals Present in the Clay Liner Materials

Clay Mineral	Standard Name	Certification	%
Montmorillonite	USGS-CSB-1	about 95%	95%
Kaolinite	Fithian Illite	not certified	60%
Illite	McNamme Pit, SC	not certified	100%

Table 8. The Percentage of Each Clay Mineral Found in the Clay Liner Materials

Sample	Clay Mineral (%)* Montmorillonite	Kaolinite	Illite
Realite clay	50% ± 20%	10% ± 70%	30% ± 20%
Airport clay	70% ± 20%	10% ± 70%	10% ± 70%

* = An

Geotechnical Testing of Clay Liner Materials

The clay liner materials were evaluated relative to water/density relationships, Atterburg limits and water characteristic relationships (water content vs. pressure).

The water/density relationships were determined for standard Proctor (ASTM D698) and modified Proctor (ASTM D1557) compaction levels. These values were used to prepare samples for hydraulic conductivity testing and to provide an indication of how the clay liner material might respond to use as a clay liner. Plastic clay liner materials are less likely to crack as a result of overburden pressure.

The test results for the Atterburg limits are shown in Table 9. These data indicate that the airport clay contains a higher clay content than the realite clay and that the plastic limit for the two liner materials are comparable. The plasticity index (PI) for the airport clay is higher than the PI for the realite clay. This information provides an indication of the activity (A) of the clay materials, or their susceptibility to swelling or shrinkage. The activity of the clay liner materials can be estimated using the following equation:

$$A = PI (\%) / \% < 21m$$

Table 9. Atterburg Limits for the Clay Liner Materials Evaluated in This Study

Clay Sample	Liquid Limit	Plastic Limit	Plasticity Index	Activity
Realite Clay	47	17	30	0.74
Airport Clay	58	19	39	0.74

The activity for each clay material is provided in Table 9. The clay liner materials studied in this research effort have equivalent A values and are expected to have similar swelling and shrinkage characteristics.

The water characteristic curves for the clay liner materials are presented in tabulated form in Table 10. In general, the airport clay contains much higher soil water levels at each of the applied pressures than the realite clay. In fact, the realite clay material reacts more like aggregated clay particles or lighter textured material. This tendency may be associated with the heating treatment used in preparing the realite clay for lightweight aggregate use. In any case, the water release characteristics of the materials are very similar, as approximately the same percentage of soil water is removed from the system for each applied pressure.

Table 10. Characteristic Curves for the Realite and Airport Clay Liner Materials

Pressure	Realite Clay Water Content (%)	Airport Clay Water Content (%)
1/3 bar	21.13	32.34
1 bar	19.77	30.77
3 bar	18.20	29.21
5 bar	17.27	28.52
10 bar	17.20	27.22

Hydraulic Conductivity Testing

In general, the impact of CCT fly ash injection materials on the characteristics of the clay liner materials studied in this project was minimal. As shown in Table 11, the HC measurements decreased for clay liners compacted at moisture levels slightly higher than optimum (standard Procter) and increased for liners compacted at moisture levels lower than optimum (standard Procter). The HC measurements show that the reactions of the fly ash injection materials/clay liner system were very similar to those of the water/clay liner systems. Although some swelling was evident in the sodium injection materials, these materials did not have a negative impact on the integrity of the liners over the 120-day tests (Figure 1). Some initial dispersion of clays resulting in plugging of pores may be responsible for the gradual reduction in HC. Swelling and shrinkage due to the high sodium or sodic condition followed by the impact of high salt concentrations on the electronic double layer did not occur. This clay chemistry phenomenon was expected to have a negative impact on the integrity of the clay liner materials. The HC values for the 120-day test of the clay liner materials contacted with calcium injection material are presented in Figure 2. Shrinkage of the clay liner materials due to high electrical conductivity levels was expected to cause cracking of the clay liner. However, cracking was not apparent, and the HC values stabilized within several weeks, indicating that the clay liner remained stable.

Table 11. Hydraulic Conductivity Evaluations for the PSC Natural Liner Material Under Various Water/Density Conditions With Tapwater as the Permeant Liquid

	cm/s
HC at STD Dry	2.0E-05
HC at STD Opt.	4.0E-09
HC at STD Wet	2.0E-09
HC at MOD Dry	2.0E-08
HC at MOD Opt.	7.5E-09
HC at MOD Wet	1.3E-09

Wet/dry cycles did not have a major impact on the HC of the clay liner materials with time. The impact of wet/dry cycles on the system with sodium injection material overlaying a clay liner is shown in Figure 3. The decline of HC values with time closely resembles the trend shown in Figure 1 for a liner not impacted with wet/dry cycles. Other HC data representing wet/dry cycles are presented in Appendix A.

The influence of freeze/thaw cycles on the HC values of a clay liner impacted with a calcium injection material is shown in Figure 4. The initial HC values resemble those shown in Figure 2 for the calcium fly ash overlaying the clay liner. However, each freeze/thaw cycle substantially increases HC values for the system above the previous equilibration HC level. These results suggest that during the initial development and use of a disposal site, freezing conditions could result in the failure of the clay liner system. The complete data set for HC associated with the various tests is presented in Appendix A.

Chemistry of Fly Ash Material Solutions

Solutions collected from the flexible-walled permeameters during the hydraulic conductivity determinations show large differences between the chemistry of the injection materials (Table 12). Solutions collected from the baseline ash material (wet/dry cycles) over the extraction period have relativity high pH values ranging from 10.3 to 11.6. In addition, the B levels are high, with values ranging from about 26 to 60 mg/L. Both parameters tend to decrease with time during the extraction period. The pH levels and the B levels are higher than appropriate for discharge into water systems. In addition, solutions with such high pH could impact the solubility of clay minerals, causing long-term degradation, and could negatively impact the integrity of the clay liner.

As expected, the sodium injection materials contained large amounts of soluble sodium and SO_4^{-2}. In addition, the solutions collected from the materials contain elevated levels of B. Al, Se, and As (Table 10). It should be noted that the As, B, and Se levels decreased substantially during the testing period, probably due to the formation of less soluble minerals under the changing redox conditions developing in the materials. With time, the redox condition of the core/solution system has changed from oxidizing conditions to more reduced conditions. This type of redox condition would be expected to develop in the landfill storage facility with time. The high Na and SO_4^{-2} levels found in the solutions pose a potential contamination problem for water. Na ranged from 58,700 mg/L to 11,100 mg/L over the extraction period, and the SO_4^{-2} levels ranged from 83,200 mg/L to 12,800 mg/L. However, the clay liner is expected to reduce this potential through its influence on the redox conditions of the system and through attenuation due to sorption of cations and anions. The solution retrieved from the sodium injection sludge contained large amounts of Na, resulting in a sodium adsorption ratio (SAR) of from 3610 for the initial extract to about 1960 for the last extract. Therefore, the solutions would be expected to disperse clay minerals. In this situation the EC is high (EC=98.6 to EC = 33.1 mS/cm), which would tend to counteract the dispersion caused by the sodicity.

However, the solution could result in a sodic condition if the excess salts were removed from the system without removal of the sodium. Another important consideration of the impact of the sodium materials on the integrity of the clay liner materials is th pH. The sodium injection materials have a final pH of about 11.8. This pH, along with the chemistry of the system, may negatively impact the clay itself. As will be shown, there is an indication that the smectitic clays may be unstable in the conditions found in the sodium sludge system.

Figure 12. The Analysis of Solutions Collected From the Fly Ash Injection Materials

PSC Extract Data	Na Ash	Na Ash	Na Ash	Ca Ash	Ca Ash	Ca Ash	Urea Inj Ash	Urea Inj Ash	Urea Inj Ash	BaseAshW/D	BaseAshW/D	BaseAshW/D	BaseAshW/D	BaseAshW/D
Sample Number>	1	2	3	1	2	3	1	2	3	1	2	3	4	5
pH(su)	11.4	11 9	11.8	12.4	12.2	12	11.8	11.9	11 8	11.6	11.4	10 8	10.3	10 6
EC-25C(mS/cm)	98.6	50 5	33 1	14.4	9.9	7.95	4.4	4.34	3.55	2.38	2.1	0.86	0 53	0.77
TDS-Cal (mg/L)	179000	53300	31600	4140	2740	2040	1430	1160	738	799	649	275	235	336
B (mg/L)	680	230	120	0.651	0.349	0.23	4.78	5.7	6.98	47.6	59.5	33	25.6	30.3
F (mg/L)	<0.01	327	188	0.44	0.23	0.19	0.28	0.25	0.27	1.73	1.55	0.87	0.58	0.63
PO_4^{-3} (mg/L)	470	160	116	<0.01	<0.01	<0.01	<0.01	<0 01	<0.01	<1.1	<1.1	<0.6	<0.6	<0.6
SAR	3610	2220	1960	24.8	6.4	2	4.1	0 6	0.9	5.91	8.09	1 57	1.18	0.99
Tot-Alk as $CaCO_3$ (mg/L)	60200	21600	12700	3470	2500	2040	1390	1210	585	682	682	162	155	291
Tot-Hard as " (mg/L)	50	13	6	529	1290	1550	499	924	617	180	60	192	157	210
Tot-Acidity-" (mg/L)	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide+sulfite (mg/L)	3870	1026	168-<150	81-<130	66-<30	12-<30	15-<5	35-<5	74-<5	<11	<11	<11	<11	<11
Thiosulfate (mg/L)	72	<25	<25	10	<5	<30	<30	<30	<30	<5.5	<5.5	<3	<3	<3
HCO_3^{-1} (mg/L)	2623	2490	0	0	0	0	1410	0	0	0	0	0	0	0
CO_3^{-2} (mg/L)	34800	11700	7610	258	323	581	142	258	129	152	165	88	83	83
OH^{-1} (mg/L)	0	0	0	1030	667	530	0	283	338	146	138	5	5 8	52
Cl (mg/L)	321	185	123	331	106	46	19	14	7.1	12	12	7.2	6 6	6.7
Nitrate+Nitrite-N (mg/L)	708	196	85	21	10	4.4	6.7	3.08	2.44	4.9	4.05	2.96	2.96	2 36
SO_4^{-2} (mg/L)	83200	21500	12800	41	15	7.8	6.7	1.3	51	106	44	34	30	29
Ca (mg/L)	2	<1	<1	177	497	440	463	367	313	72	24	77	63	84
Mg (mg/L)	11	3.2	1.5	22	13	110	<1	1.6	<1	<1	<1	<1	<1	<1
K (mg/L)	72	56	<0.2	159	72	26	47	4	1	13	12	7	5	5
Na (mg/L)	58700	18400	11100	1310	527	183	212	45	52	182	144	50	34	33
Al (mg/L)	3 3	17	17	0.2	0.1	0.1	1	0.2	0.5	0.4	3 9	3.1	2.7	4.5
As (mg/L)	4.29	1.546	0 904	<0.005	<0 005	<0.005	<0 005	<0 005	<0.005	0 005	<0.005	<0.005	<0.005	<0.005
Ba (mg/L)	<0.5	<0.5	<0.5	3.3	47.1	52.7	13.3	25.7	13	0.8	3 5	2.4	1 6	2.1
Be (mg/L)	<0.01	<0 01	<0 01	<0 005	<0.005	<0.005	<0 005	<0 005	<0.005	<0.05	<0.05	<0.05	<0 05	<0 05
Cd (mg/L)	<0.01	<0.01	<0.01	<0.002	<0 002	<0.002	<0.002	<0.002	<0.002	<0.002	<0 002	<0.002	<0.002	<0.002
Cr (mg/L)	<0.15	<0.15	<0.15	<0.02	<0.02	<0 02	<0.02	<0.02	<0 02	<0.01	<0.01	<0 01	<0 01	<0 01
Co (mg/L)	<0.15	<0.15	<0 15	<0.02	<0 02	<0.02	<0 02	<0.02	<0.02	<0.02	<0 02	<0.02	<0 02	<0 02
Cu (mg/L)	<0.1	<0.1	<0.1	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0 01	<0 01	<0 01	<0.01	<0.01
Fe (mg/L)	0.63	0.61	0 86	<0 05	<0.05	<0.05	<0.05	<0.05	<0 05	<0.05	<0.05	<0.05	<0 05	<0.05
Pb (mg/L)	<0.1	<0.1	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Li (mg/L)	1.6	0.7	0.5	2.7	1.3	0.6	0.7	0.2	0.1	0.43	0.59	0.2	0.17	0.17
Mn (mg/L)	<0.04	<0.04	<0.04	<0.02	<0.02	<0.02	<0 02	<0.02	<0 02	<0 02	<0.02	<0 02	<0.02	<0 02
Mo (mg/L)	5.1	1.3	0.6	0.7	0.33	0.19	0.06	0.05	0.27	0.57	0.24	0.34	0.52	0.66
Ni (mg/L)	<0.2	<0.2	0.2	<0.01	<0.01	<0.01	<0.01	<0 01	<0.01	<0.01	<0.01	<0.01	<0 01	<0.01
Se (mg/L)	9.58	2.888	1.431	0.066	0.028	0.019	0.062	0.035	0.024	0.083	0.057	0.042	0.042	0 052
Si (mg/L)	41	48	42	9.4	2	1.1	5.9	3.1	2.8	4	6.2	8.6	9 9	6.7
Sr (mg/L)	0.41	0.12	0.08	12.6	69.9	56.7	34	45.8	10 9	17.4	17.4	10.7	8.45	10.5
V (mg/L)	5.6	2.1	1.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.02	0.02
Zn (mg/L)	<0.15	<0.15	<0.15	<0.01	<0.01	<0.01	0.01	<0 01	<0 01	<0.01	<0.01	<0 01	<0 01	<0 01

The solution from the calcium injection sludge contained few elements that would be of concern. For example, B levels were found to be less than 1 mg/L. Also, Mo, As, Se, and Al levels were found to be of little environmental concern. The levels of SO_4^{-2} found in solution were low, probably a result of the formation of relatively insoluble SO_4^{-2} minerals. The major issues associated with the calcium injection material are the pH and EC values. The pH values ranged from 12.4 to 12.0 during the extraction period, and the EC values ranged from about 14.4 to 8.0 mS/cm. Large quantities of this solution could result in environmental damage. The impact of pH on the integrity of the clay liners does not appear to be an important issue relative to the solution extracted from the calcium injection material. This will be addressed in the modeling section.

The solution collected from the urea injection sludge materials also contained very few constituents of concern relative to environmental degradation. B levels ranged from 4.8 to 7.0 mg/L during the extraction period, which are low compared to the baseline ash material. The only potential problem is associated with the pH values. The pH values were about 11.8 during the extraction period. As noted, such high pH solutions may have an impact on the dissolution of clay minerals.

In summary, the solutions collected from the sodium injection materials are characterized by more problematic constituents relative to the calcium injection materials, the urea injection materials, and the baseline fly ash materials. This does not mean that such material will cause environmental degradation but that it has a greater potential to degrade the environment if adequate disposal facilities are not designed to prevent leakage.

Attenuation of the Solution Constituents by the Clay Liner Materials

When the sodium injection materials were placed on a clay liner, the resulting solutions permeating from the liner were substantially different from the sodium injection material solutions. For example, B concentrations ranging from 680 mg/L to 120 mg/L in solutions collected from the sodium injection materials ranged from a high of 406 mg/L during the initial permeation of the liner to about 3.8 mg/L after the 120-day period. Also, As levels ranging from 4.3 mg/L to 0.9 mg/L in solutions collected from the sodium injection materials to a range of 3.2 mg/L to 0.1 mg/L in solutions collected from the clay liner. Se levels also showed large declines, from a range of 9.6 mg/L to 1.4 mg/L in solutions collected from the sodium injection materials to a range of 0.6 mg/L to <0.005 mg/L in solutions collected from the clay liner. Other constituents, such as SO_4^{-2}, ranged from 83,200 mg/L to 12,800 mg/L in the extracts collected from the sodium injection materials to 21 mg/L in solutions collected from the sludge/liner system after 120 days of flow. Sodium levels also declined to values of 12 mg/L after 120 days of flow through the clay liner material.

It appears that the clay liner substantially decreased the levels of the major potentially toxic elements found in the sodium injection materials. Also important in the reduction of many of the elements is the change in redox condition. After the 120-day flow period, it was evident by the H_2S odor present during the take-down of the column that the system was under reduced conditions. However, the pH levels of the solutions permeating from the clay liner materials were still high (pH = 11). With time, this characteristic of the solutions could compromise the long-term integrity of the clay liner material. This proposed conclusion is discussed in the next section. In most cases, degradation of the clay liner will not pose a problem to sludge disposal since the placement of the material will be within large bodies of earthen material a considerable distance from an aquifer or surface water sources.

The clay liner and the reduced conditions in the system during the 120-day permeation period substantially changed the characteristics of the solutions for the calcium injection materials. The pH of the solutions decreased from about 12 for the calcium injection material extracts to a range of 8 to 9 for the permeate leaving the clay liner. This is a substantial reduction and would greatly modify the chemistry of the solution. However, it should be noted that the pH of the solution permeating the clay liner was gradually increasing during the 120-day permeation period. This might indicate that the clay liner initially buffered the pH of the system to about 8, and with time, the buffer capacity of the clay liner was decreasing and the pH of the solution was increasing. Therefore, after a period of time dependent on the buffer capacity of the clay and the amount of clay present (thickness), the pH of the permeating solution might approach that of the calcium injection material.

The clay liner also caused a reduction in the EC of the solution from a range of 14.4 mS/cm to 8.0 mS/cm to a range of 3.7 mS/cm to 1.4 mS/cm. This change is undoubtedly due to surface sorption and the formation of minerals and amorphous materials. An interesting aspect of the solution permeating the clay liner is the increase in SAR, which would indicate the retention of Ca at adsorption sites and the release of Na from the adsorption sites. Also, Ca may be involved in mineral formation, while Na remains in solution at levels about the same as extracted directly from the calcium injection material. There was also some indication of an increase in soluble As in solutions permeating from the clay liner. This may have resulted from the change in oxidation condition or may have been associated with the presence of As in the clay liner material and not with the calcium injection material.

The solution collected from the urea injection materials associated with a clay liner closely resembled the calcium injection material/clay liner system. The pH of permeating solution from the clay liner was about 11.8, while the solution permeating from the clay liner varied from 7.9 to 9.3. This fluctuation did not appear to follow any apparent relationship. Also, the B levels permeating from the clay liner initially declined to a range of 1.0 mg/L to 1.5 mg/L but tended to increase with time to values of 4.9 mg/L and 9.9 mg/L. This compared with 4.8 mg/L and 7.0 mg/L for the B levels found in the urea injection material. The chemical constituents for the selected permeate samples collected during the HC evaluations are presented in Appendix B.

Geochemical Modeling Using EQ3/6

The presence of the clay liner significantly reduced the potential for leachates from the injection sludges from impacting the environment in a negative manner. As noted, elemental constituents were substantially reduced, with a few exceptions as a result of mineral formation and possibly surface sorption of various elements and compounds. To better understand the solution chemistry of the clay liner and sodium and calcium injection materials, the speciation and solubility model EQ3 and the reaction path model EQ6 developed by Wolery at Lawrence Livermore National Laboratory were used. The following discussions provide an estimate of the solution chemistry associated with the sludge materials under saturated flow and reducing conditions. These conditions would be expected in a disposal site that has solution permeating the clay liner. This would be the worst-case condition as water is not anticipated to impact the disposal site in any great amounts.

Sodium Injection Materials

Solutions collected from the sodium injection material/clay liner materials were analyzed for the major constituents for use in the geochemical model evaluation. The results of the analysis are present in Table 12. The analyses of the solutions collected from the sodium injection material/clay liner material system are presented in Appendix B. The solution permeating from the sodium injection materials contained very high levels of Na, SO_4^{-2}, B, and other constituents as reported. It is clear that the clay liner material greatly reduces the solution levels of these constituents. It is important to determine why this is happening and the impact that the concentrated solution will have on the integrity of the clay liner. The reaction path model shows that the extracted solution will form a number of minerals and solid solutions as the solution from the sodium injection material moves through the clay liner material. The formation of saponite-tri solid solutions, mesolite, gibbsite and $MoSe_2$ occur almost immediately. The formation of natrolite occurs soon after. The formation of this mineral seems to be favored over the formation of gibbsite, thus the Al present in the gibbsite is used for the formation of natrolite, and the formation of gibbsite is stopped.

During this time, the smectitic clay present in the clay liner material begins to dissolve into solution. As quartz begins to precipitate in some form, the pH decreases from 11.6 to about 9.5 and the Eh of the system changes from -520 mv to -330 mv. Next, smectite-di solid solutions begin to form, and the pH of the system drops to about 8.7, while the Eh remains about -300 mv. The precipitation of saponite-tri solid solutions and mesolite stops as the solution continues to react with the clay liner material. As the solution continues to react with the clay liner materials, the mineral selenium is favored to form. At the same time, the montmorillonite present in the clay liner continues to dissolve. The clay in the clay liner seems to dissolve with time when impacted with the sodium injection material. However, at the same time a large number of precipitates have been formed as solid solutions or mineral phases.

Many of the minerals forming are aluminosilicates that closely resemble montmorillonite. The formation of these materials tends to maintain the integrity of the clay liner at least during the 120-day testing period. Also, some of the elements that may negatively impact the environment are tied up in various minerals and/or solid solutions. The elements expected to be maintained in solution at relatively high levels after interacting with the clay liner are Na^{+1}, SO_4^{-2}, F^{-1}, $B(OH)_3$, and Cl^{-1}. The impact of these constituents on the ground water or surface water resources would depend on the hydraulic conductivity and the width of the liner and the materials present below the liner. The hydraulic conductivity of the liner expected at the Public Service Company of Colorado disposal site will be very low (10^{-9} cm/s), and the disposal sites are located in large bodies of fine-textured materials. Therefore, the constituents noted are unlikely to have a negative impact on the water resources.

Calcium Injection Materials

The analysis of the solutions collected from the calcium injection materials are presented in Table 12, and the analyses of solutions collected from the calcium injection material/clay liner material system are presented in Appendix B. As noted, constituents extracted from the calcium injection materials provide little concern to the environment. The only issues may be related to pH and EC values and the impact of these characteristics on the long-term integrity of the clay liner. The reaction path model EQ6 shows that the solutions permeating the clay liner material will have the tendency to form several minerals without having a negative impact on the liner material. Barite, artinite, and saponite-tri solid solutions are saturated with the solutions leaching from the fly ash injection material and begin to form immediately. As the solution reacts with the clay liner material, other mineral forms, such quartz and gibbsite, begin to form. The solutions passing through the clay liner material are still saturated with respect to saponite solid solutions; however, barite and artinite minerals do not continue to form. With time, the formation of gibbsite terminates and solid solutions of smectite-di become saturated. As the solution continues to react with the clay liner, saponite-tri solid solutions and quartz continues to form, and near the end of the testing period carbonate solid solutions (calcite, magnesite, and strontianite) begin to precipitate from solution. During the formation of these minerals in the clay liner material or in the solution permeating through the clay liner material, the reaction model does not indicate any dissolution of the clay liner material.

The data collected from the permeates show that the initial pH of about 12 is reduced to between 8 and 9 as it passes through the clay liner material. In addition, the modeling effort indicates that no constituents are expected to be in solution that would cause concern to the environment.

Synthetic Liner Evaluations

The punch strength test data for the HDPE, VDPE and PVC materials are shown in Figure 5. This is the only property that permits direct comparison across the three materials tested, since the test was performed identically for each material type and at the same crosshead speed as required by the testing methods. The information demonstrates that the materials have much different capabilities to resist puncture. The heavy, thicker HDPE has the greatest punch strength, compared to the VDPE and the PVC materials. The PVC material, which is slightly thicker and stiffer, has more strength than the VDPE, which is a very low density polyethylene material. However, it is apparent that the influence of the various wastes on the integrity of the synthetic liner materials is not significant. This was also found to be true for the tear strength with grain and stress at 100% elongation with grain (Figures 6 and 7). The HDPE had high tear strength compared to the VDPE and the PVC, which have comparable tear strength. However, the stress at 100% elongation with grain for the PVC material (untreated and treated) was the same as for the HDPE material, and both had higher stress strength than the VDPE material. This information provides an indication that the HDPE, VDPE, and PVC materials have the overall strength capabilities after 120 days of treatment with the various wastes as the untreated liner materials have. The HDPE material has higher strength than the VDPE and PVC materials. The strength characteristics of the VDPE and PVC materials are not compromised by the waste materials and could be used in waste landfill applications for which they are suited. However, the weight loss of the PVC materials associated with the extractables tests suggests that the PVC material may decompose in the waste environments evaluated. More detailed results for the tests associated with each liner material are presented in the following discussion.

High Density Polyethylene

Elongation at yield data for both with-grain and cross-grain testing are shown in Figures 8 and 9, respectively. The baseline sludge material seemed to increase the elongation slightly with time, but the other injection materials did not seem to have any significant, lasting effect on elongation.

Test results for elongation at break testing showed very high %CV values, indicating that the scatter of the data was very large. Thus, meaningful trends could not be identified. (See Appendix C.)

The yield strength tested with grain is shown in Figure 10. The data indicate that the yield strength was not influenced by the baseline fly ash materials, the Na_2CO_3, or the Ca injection materials. However, the Na_2CO_3-urea injection materials caused an initial drop in yield strength that disappeared by the end of the 120-day testing period. The cross-grain yield strength data shown in Figure 11 indicate identical results.

Breaking strength tested with grain and cross grain are presented in Figures 12 and 13, respectively. Here again, the baseline, Na_2CO_3 and Ca injection materials had no effect over time on the breaking strength in either orientation. But the Na_2CO_3-urea injection material appeared to initially depress the breaking strength. This effect disappeared by the end of the 120-day test for both orientations. The %CV values were small for the with-grain tests and were significantly higher for the cross-grain tests. (See Appendix C.)

Tensile stress at 100% and 200% elongation for with-grain and cross-grain testing is shown in Figures 14-17. The tensile stress at 100% and 200% elongation tested in both orientations was unaffected by the condition sludges. The only exception was with the specimens conditioned with Na_2CO_3-urea injection materials. These specimens displayed an initial drop in tensile stress that appeared to be a transient effect, since the decreased strength was no longer evident at 120 days.

Elastic modulus results for both orientations are presented in Figures 18 and 19. The data for the with-grain tests show that the conditioning materials had a transient effect on the elastic response of the tested materials over time. For the cross-grain tests there appeared to be a transient effect caused by the baseline, Na_2CO_3, and Ca injection materials that lowered the elastic modulus. However, after 120 days of conditioning, the reduction of the elastic modulus values was no longer apparent.

The tear strength tests with grain and cross grain are shown in Figures 20 and 21, respectively. The orientation of the test specimen did not affect the tear strength. However, a transient decrease in tear strength was observed for the sample conditioned in the Na_2CO_3 injection material.

Very Low Density Polyethylene (VDPE)

Elongation at yield results for specimens tested in the with-grain and cross-grain orientations are presented in Figures 22 and 23, respectively. In general, the baseline and injection materials had no lasting influence on elongation at yield. However, at 90 days the Na_2CO_3 injection material caused elongation at yield for both orientations to be inexplicably high. This was noted at the time of testing, and the test method was reviewed prior to continuing the tests. It should be pointed out that the technique used to measure elongation was not as precise at the low yield elongations as it was at the higher elongations. Therefore, these data are only considered to be a qualitative check on the behavior of the material.

Elongation and strength at break data are not presented since in all but a few cases the maximum displacement of the test frame was reached without specimen failure.

Yield strength data for both orientations are presented in Figures 24 and 25. The data indicate that the conditioning regime had no effect on this property. However, a temporary exception occurred at 60 days when the Na_2CO_3-urea treated specimens exhibited a significant drop in yield strength.

Stress values from testing at 100% and 200% elongation in both orientations are presented in Figures 26 through 29. The results indicate that conditioning of the material had no permanent effect on stress at elongation properties. Much like the yield strength results, there appeared to be a temporary drop in stress at 60 days of conditioning for the Na_2CO_3-urea treated specimens.

Elastic modulus results for with-grain and cross-grain VDPE material are presented in Figures 30 and 31. The testing did not show any clear trends for the treated VDPE material, except that initially all the conditioned materials but the Na_2CO_3-urea exposed specimens were stiffer. This condition usually is caused by the loss of plasticizer However, this condition was found to be transient.

Tear strength results for with-grain and cross-grain VDPE material are presented in Figures 32 and 33. The tear strength remained almost constant through 120 days of conditioning. However, a slight dip in strength was observed with the 60 day Na_2CO_3-Urea tests.

Polyvinyl Chloride (PVC)

Results of the elongation at break testing with grain and cross grain for the PVC materials are presented in Figures 34 and 35. The tabulated averages and %CV values are presented in Appendix C. No significant trend was observed for the with-grain testing. The outlier data collected from the 90-day testing must be discounted due to the high %CV associated with the data. For the cross-grain test results, the only consistent effect created by the conditioning was a small reduction in elongation with time for the Na_2CO_3 injected material conditioned specimens.

Breaking strengths for the with-grain and cross-grain specimens are shown in Figures 36 and 37. For both orientations, the conditioning had transient effects on this property.

The 90-day results for all conditioning solutions except Na_2CO_3-urea were greatly depressed. This was not a permanent effect, since the 120-day results were back to the untreated levels. The data were thoroughly checked, and there was no indication of a testing error, and the HDPE material tested at the same time came out as expected. The 60-day Na_2CO_3-urea conditioned specimens also showed a temporary drop in strength.

Results of the stress testing at 100% and 200% elongation for both orientations are shown in Figures 38 through 41. The same trend that appeared in the with-grain and cross-grain PVC breaking strength data occurred in the stress at 100% and 200% elongation data. These properties appeared to be unaffected by the conditioning except at 90 days, when the stress values dropped significantly, only to raise again at 120 days. Also, the specimens treated with Na_2CO_3 materials had an increased stress at 100% and 200% elongation at 120 days. As with the previous tests, the 60-day Na_2CO_3-urea conditioned samples displayed a temporary drop in strength.

Tear strength results for the with-grain and cross-grain tests are reported in Figures 42 and 43. The same pattern exists for the tear strength results as was seen with the tensile results. The tear strength after 120 days showed no ill effects from the conditioning regime. All apparent decreases in strength occurred in the 60- and 90-day samples.

Volatiles and Extractables Content Tests

Volatiles

An increase in volatile losses is an indication of water absorption into the liner materials. The percentage of volatiles present in the liner samples before and after exposure to the sludge materials are presented in Table 13.

Table 13. Weight Losses Due to Volatiles and Extractables

Membrane/Treatment	Volatiles, % Weight Loss	Extractables, % Weight Loss
PVC-Baseline	0.19	30.76
PVC-Na_2CO_3 Injection	0.20	30.19
PVC-Na_2CO_3 Injection	0.20	30.33
PVC -Na_2CO_3 Urea Injection	0.20	30.21
PVC-Ca Injection	0.26	30.36
HDPE-Baseline	0.14	0.34
HDPE -Na_2CO_3 Injection	0.08	0.53
HDPE -Na_2CO_3 Injection	0.10	0.61
HDPE -Na_2CO_3 Urea Injection	0.08	0.53
HDPE -Ca Injection	-0.01	0.60
VDPE-Baseline	0.07	1.31
VDPE -Na_2CO_3 Injection	0.07	1.23
VDPE -Na_2CO_3 Injection	0.16	1.12
VDPE -Na_2CO_3 Urea Injection	0.13	1.06
VDPE -Ca Injection	0.05	1.38

The volatile losses associated with the PVC material are similar after a 120-day period of conditioning in the baseline, Na_2CO_3, and the Na_2CO_3-urea sludge materials. The volatile losses associated with the Ca injection waste treatment appear to be higher. However, volatile losses for all the treated materials were rather small, with the largest loss found to be about 0.25%.

The HDPE liner materials had a weight loss of 0.14% when influenced by the sludge generated under baseline conditions which was higher than the CCT sludge treatments. The treatments using Na_2CO_3 and Na_2CO_3-urea sludges resulted in volatile losses of about 0.1% and 0.08%, respectively, and the Ca injection material gained 0.01% weight after 120 days of treatment. These data demonstrate that the water absorption into the HDPE liner materials is very limited. The VDPE liner material also tended not to absorb much water. The liner treated with Ca injection, Na_2CO_3, and baseline materials lost about equal amounts of weight with each of the treatments, about 0.06%. The liner treated with Na_2CO_3 had a volatile loss of about 0.16%, which is significantly higher than the losses resulting from treatment with the other wastes used.

Extractables

A decrease in liner extractables is an indication that liner components are leached from the liner due to exposure to a waste. The weight loss associated with liner materials is presented in Table 13. The PVC liner material reacted similarly for all treatments, with about a 30% weight loss due to extractables. The HDPE and VDPE liner materials reacted much differently, as the extractable losses for the HDPE were about 0.5% for each treatment, and the losses for the VDPE materials varied from about 1.06% for the Na_2CO_3-urea material to about 1.38% for the Ca injection waste.

CONCLUSIONS

Geotechnical evaluations made for the fly ash injection materials indicate that there are significant differences in the geotechnical properties of the ashes collected during the various test runs. The calcium injection materials were found to develop rather high strength as compared to the other materials tested. The shape of the strength development curve is typical of the lime and fly ash reactions, with a very slow early strength development up to seven days followed by a more rapid development from 14 days onward. The strength development for the two sodium injection ashes was very slow. In fact, the conditioned and compacted injection material specimens deteriorated after approximately 14 days due to apparent expansion.

The clay liner materials were characterized using total elemental analysis and XRD. Both clay liner materials used in the study contained high amounts of clays, with Sample A containing about 40% and Sample B containing about 53%. The clay fraction found in both clay liner materials was dominated by montmorillonitic clays, with amounts ranging from about 50 to 70%. These types of materials usually make good clay liners. The geotechnical properties of the clay materials seem to demonstrate that they have very similar activities or tendencies to shrink and swell. However, the water characteristic data seem to indicate great differences between the airport and realite-clay materials. The airport clay tends to hold much higher amounts of water than the realite clay at each pressure applied. This characteristic may be associated with the pretreatment of the realite clay (heating).

Flexible-wall permeameters were used to determine the hydraulic conductivities (HC) of the clay liner materials impacted by various compactive conditions. Tests were conducted using the waste materials overlaying the clay liner materials under wet/dry cycles, freeze/thaw cycles, and over 120-day periods.

The impact of CCT materials on the characteristics of the clay liner materials studied in this project was minimal. The HC measurements of the waste/clay liner systems were similar to the water/clay liner systems. HC decreased for clay liners compacted at moisture levels slightly higher than optimum (standard Procter) and increased for liners compacted at moisture levels lower than optimum (standard Procter). Although some swelling was evident in the sodium materials, the sludge materials did not have a negative impact on the integrity of the liners over 120-day tests. Wet/dry cycles tended to result in lower HC, while freeze/thaw cycles substantially increased HC for the liner materials tested. No large differences were found between the airport clay and the realite clay liner materials.

Sustained incremental changes in the measured physical properties of the synthetic liner materials over time were not observed. Some abrupt changes in strength were found several times during the testing period. However, these aberrations seemed more indicative of isolated changes in the conditioning methods or test procedures and could be related to flaws or changes in the materials related to manufacturing conditions. After 120 days of conditioning, none of the measured physical properties varied significantly from those for the untreated liner materials. This was true for all samples regardless of the conditioning solution used. It is apparent from the results of this study, that the HDPE liner material would be expected to perform better than the VDPE and PVC liner materials due to its higher strength characteristics.

The volatiles and extractables tests for the HDPE and VDPE materials indicated that the waste materials had little influence on their overall structure. However, the extractables data suggest that PVC liner material might decompose in the waste environments evaluated. The PVC liner material reacted similarly for all treatments, with about a 30% weight loss.

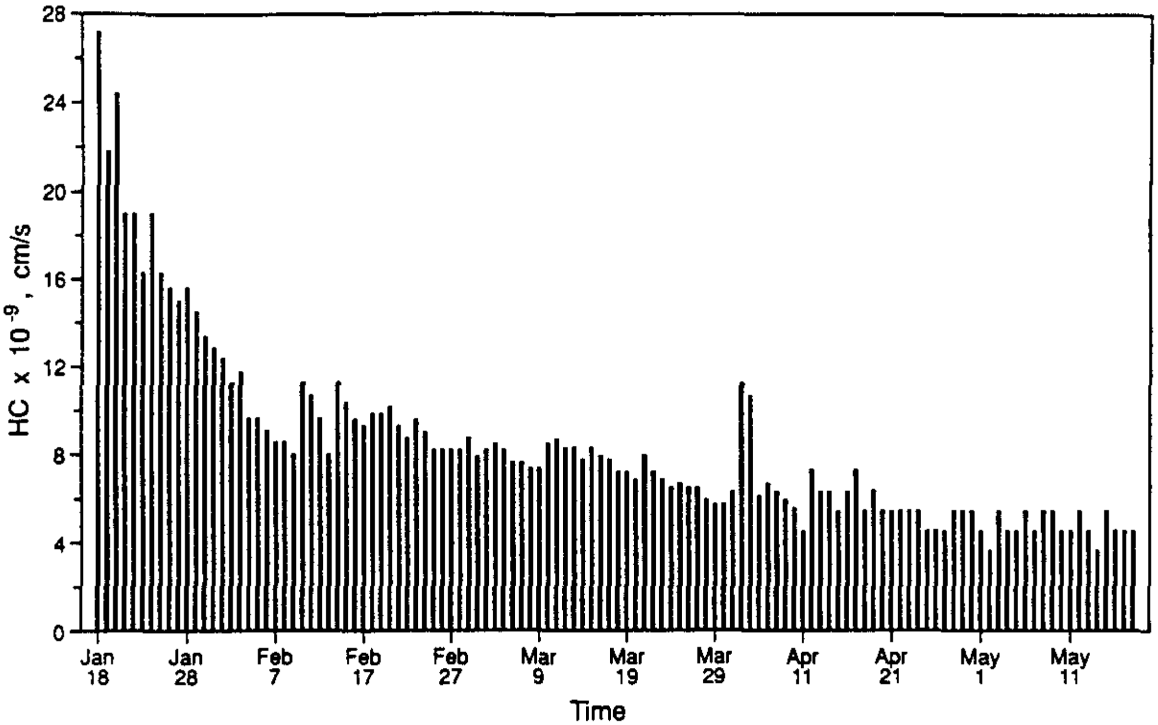

Figure 1. Long-Term Hydraulic Conductivity Values for a Clay Liner Impacted by Sodium Injection Fly Ash Leachate

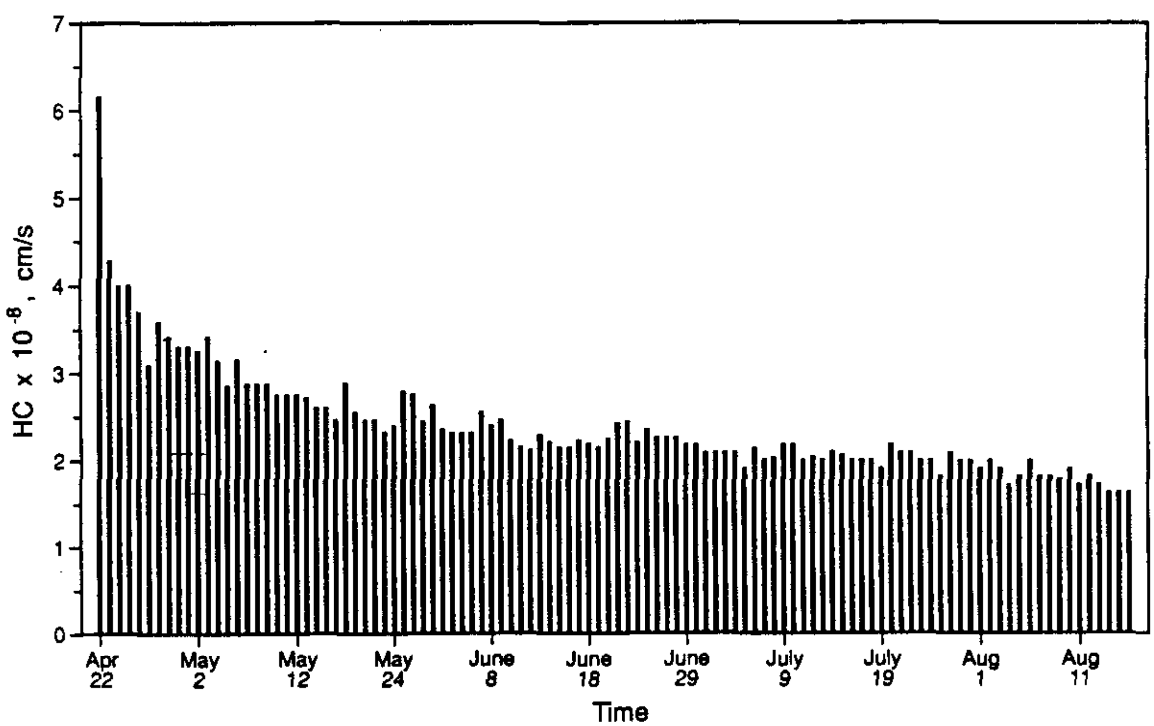

Figure 2. Long-Term Hydraulic Conductivity Values for a Clay Liner Material Overlain by Calcium Injection Fly Ash

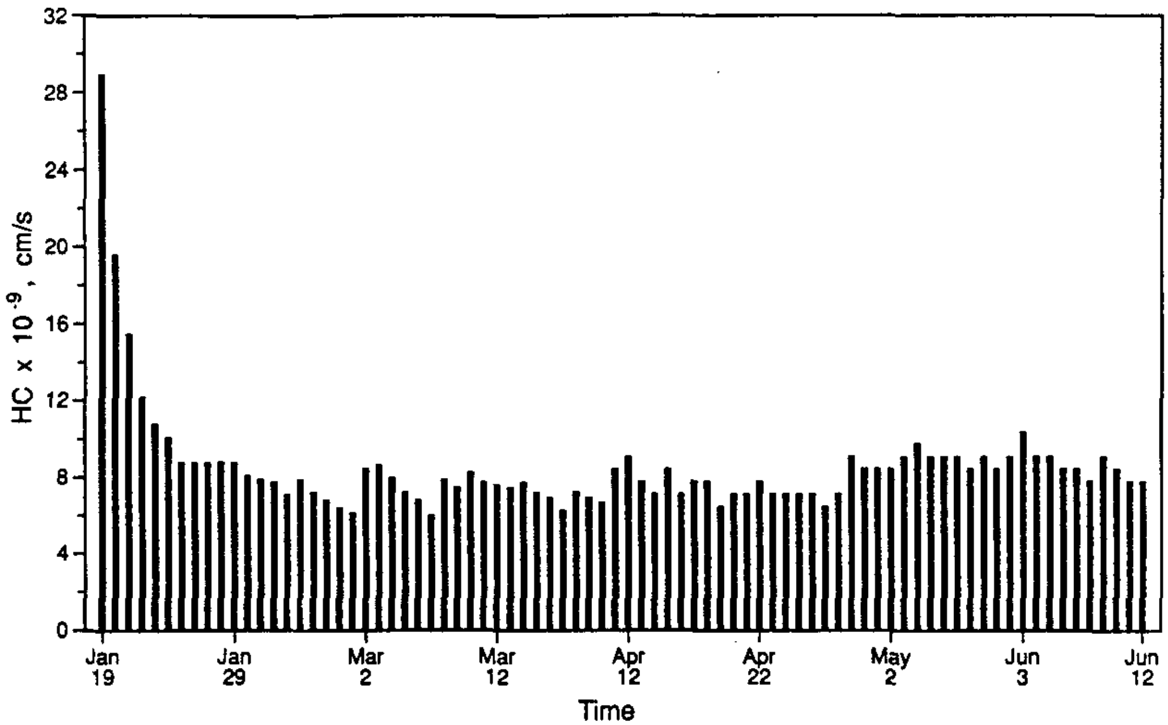

Figure 3. Hydraulic Conductivity Values for a Clay Liner Material Impacted by Leachate from Sodium Injection Fly Ash Undergoing Wet/Dry Cycles

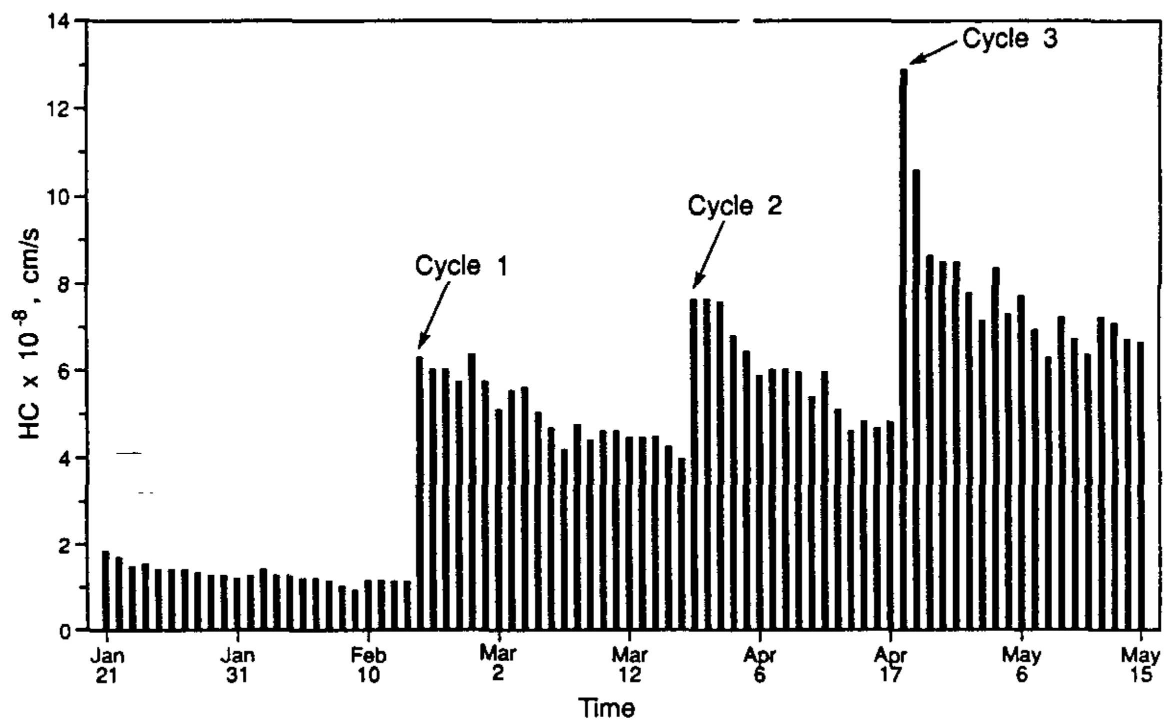

Figure 4. The Influence of Freeze/Thaw Cycles on the Hydraulic Conductivity of Clay Liner Material Impacted by Solution Extracted from Calcium Injection Fly Ash

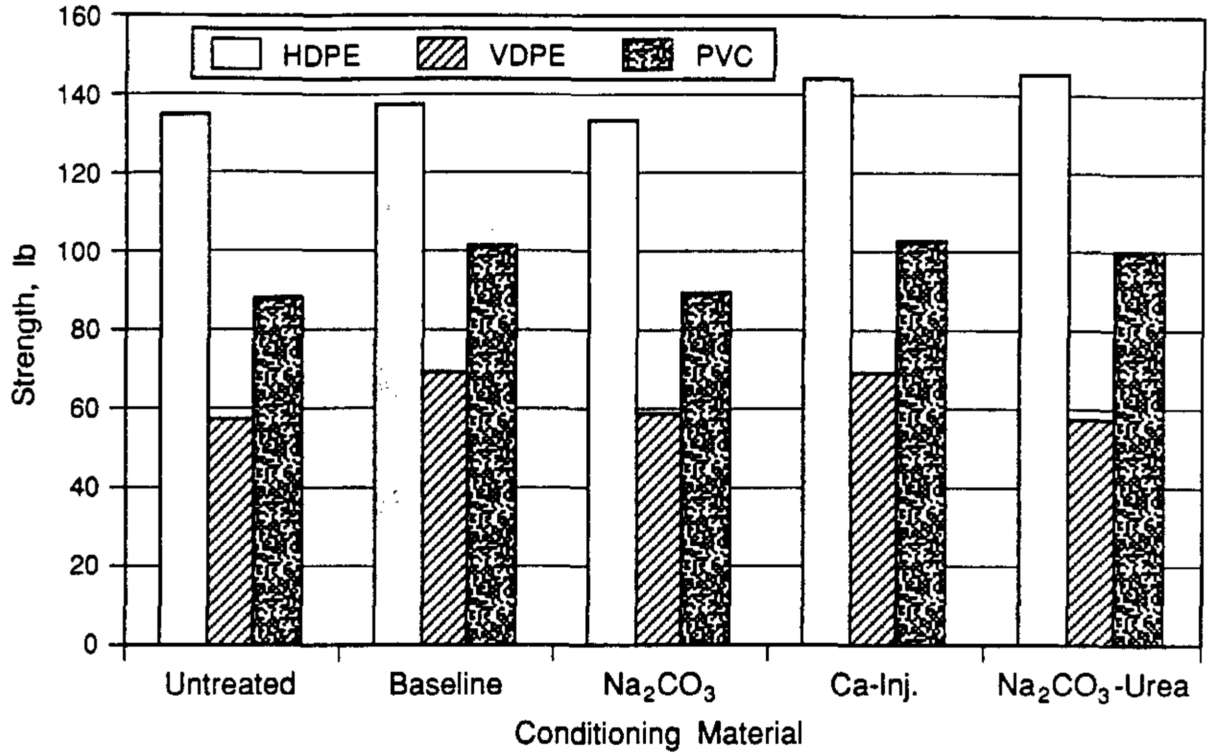

Figure 5. Punch Strength - 120 Days

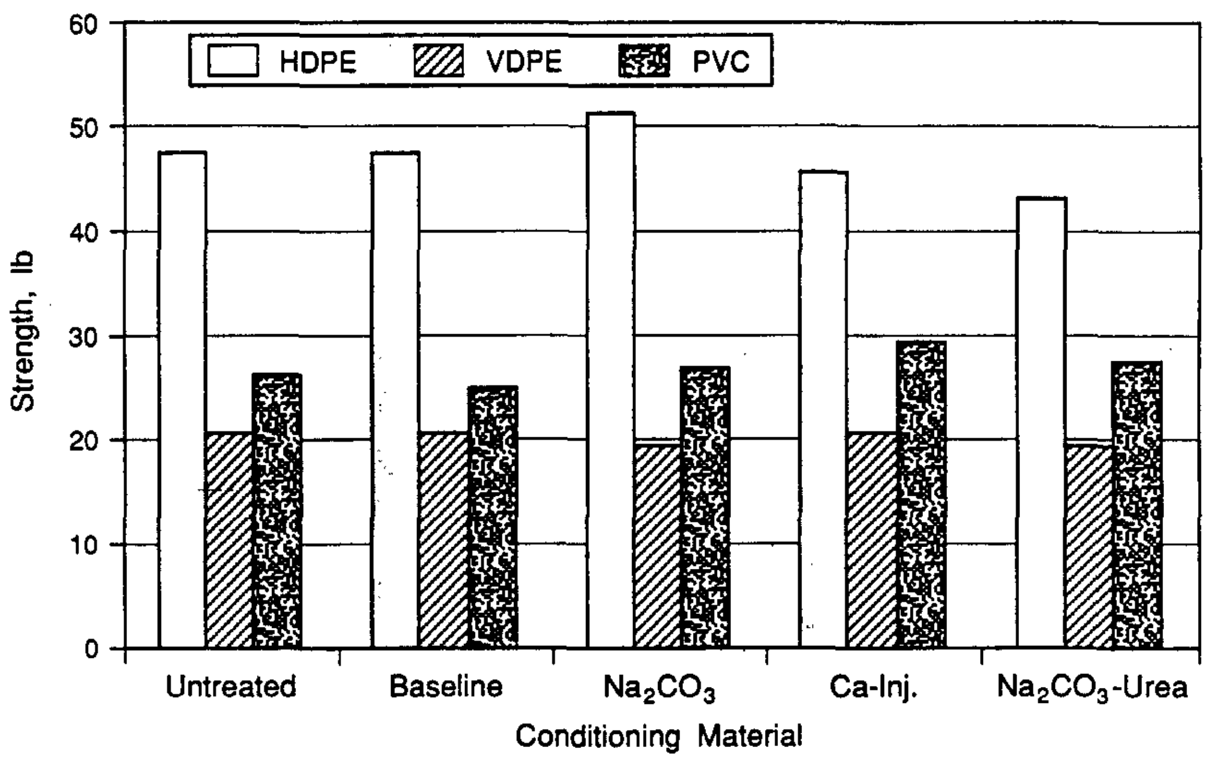

Figure 6. Tear Strength With-Grain - 120 Days

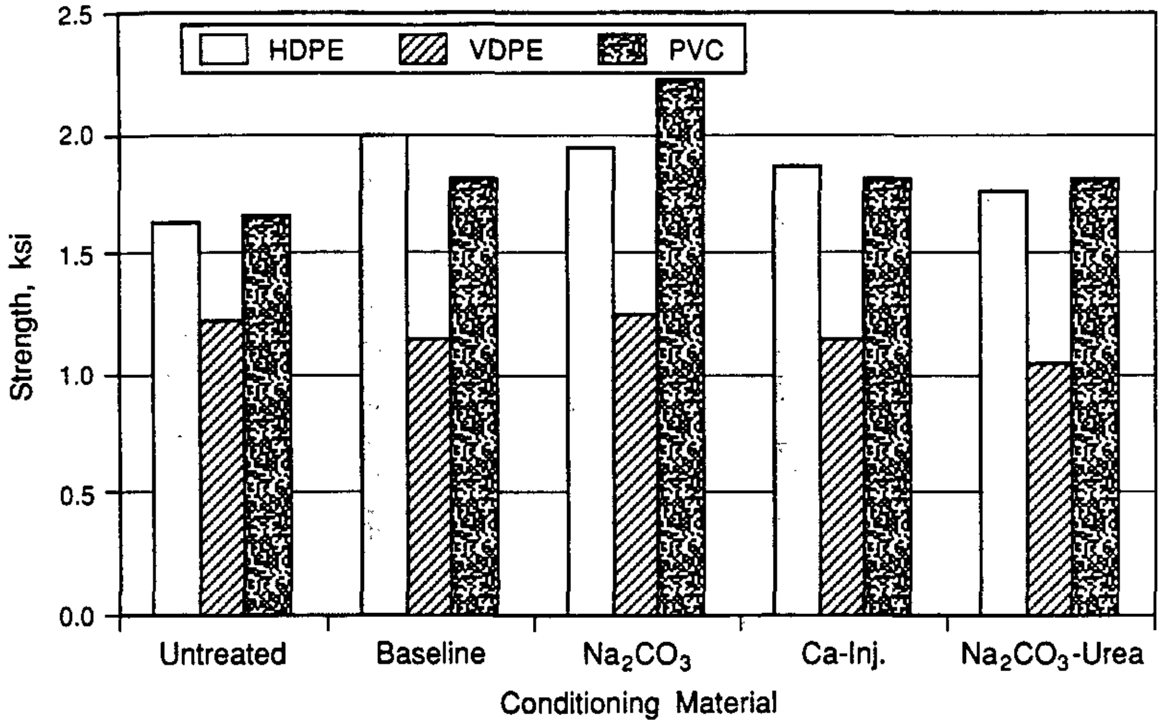

Figure 7. Stress at 100% Elongation With-Grain - 120 Days

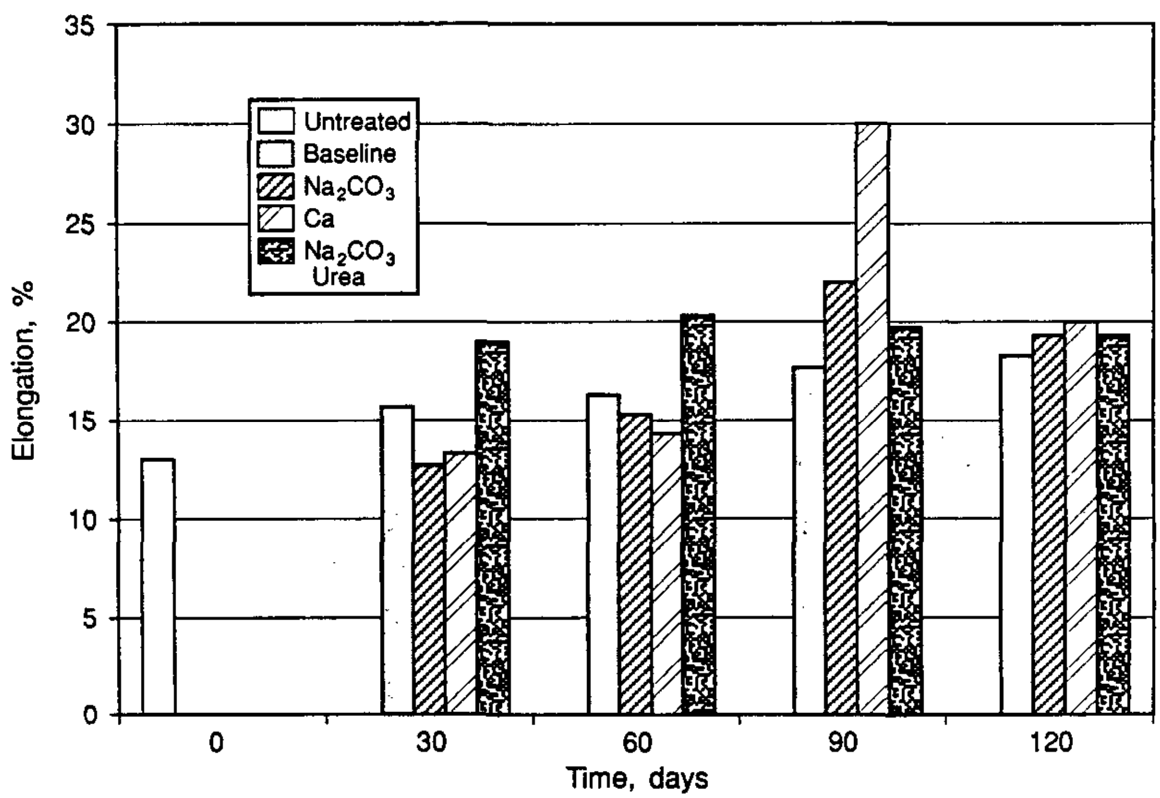

Figure 8. Elongation at Yield With-Grain for HDPE

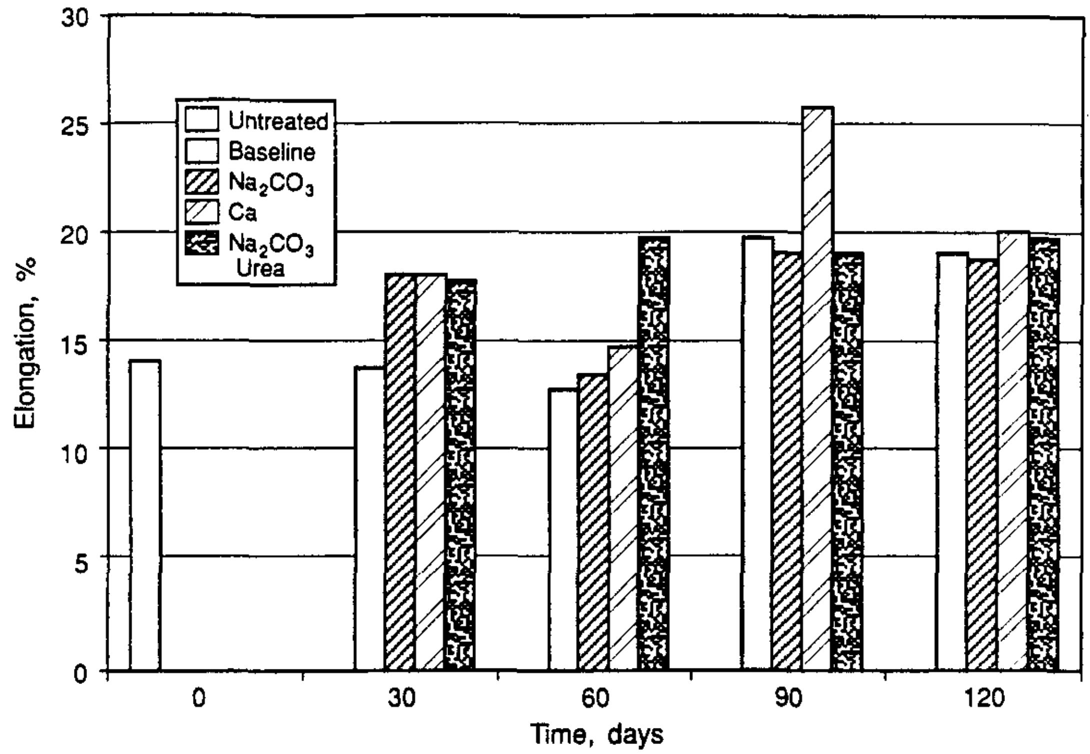

Figure 9. Elongation at Yield Cross-Grain for HDPE

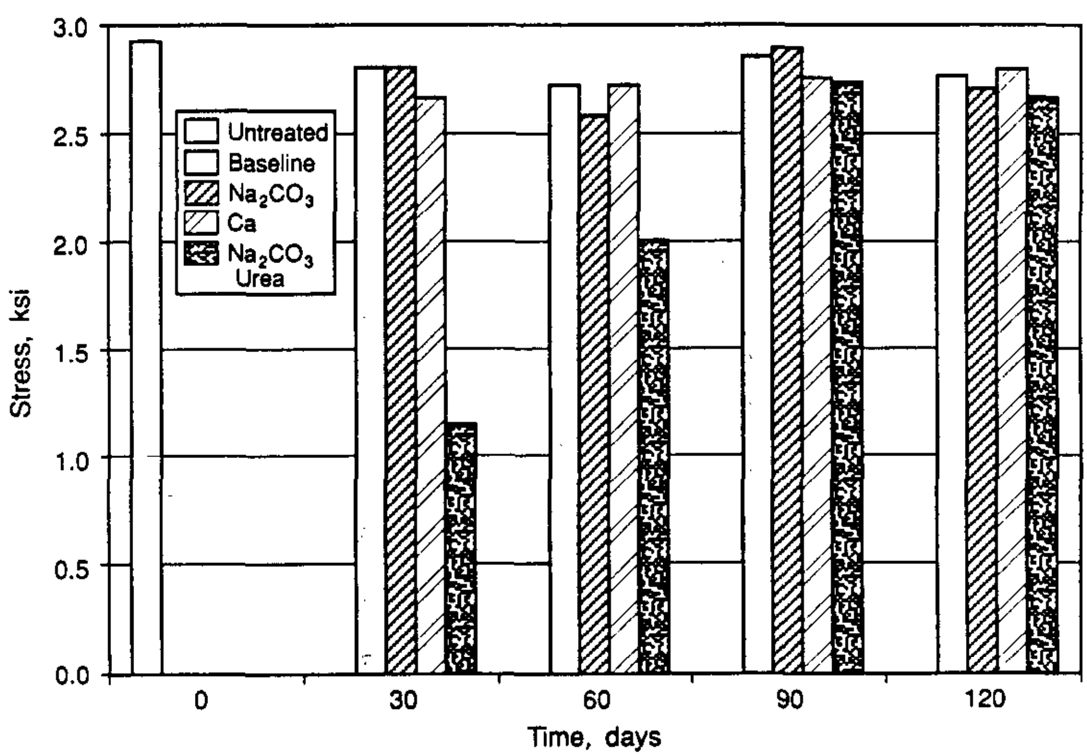

Figure 10. Yield Strength With-Grain for HDPE

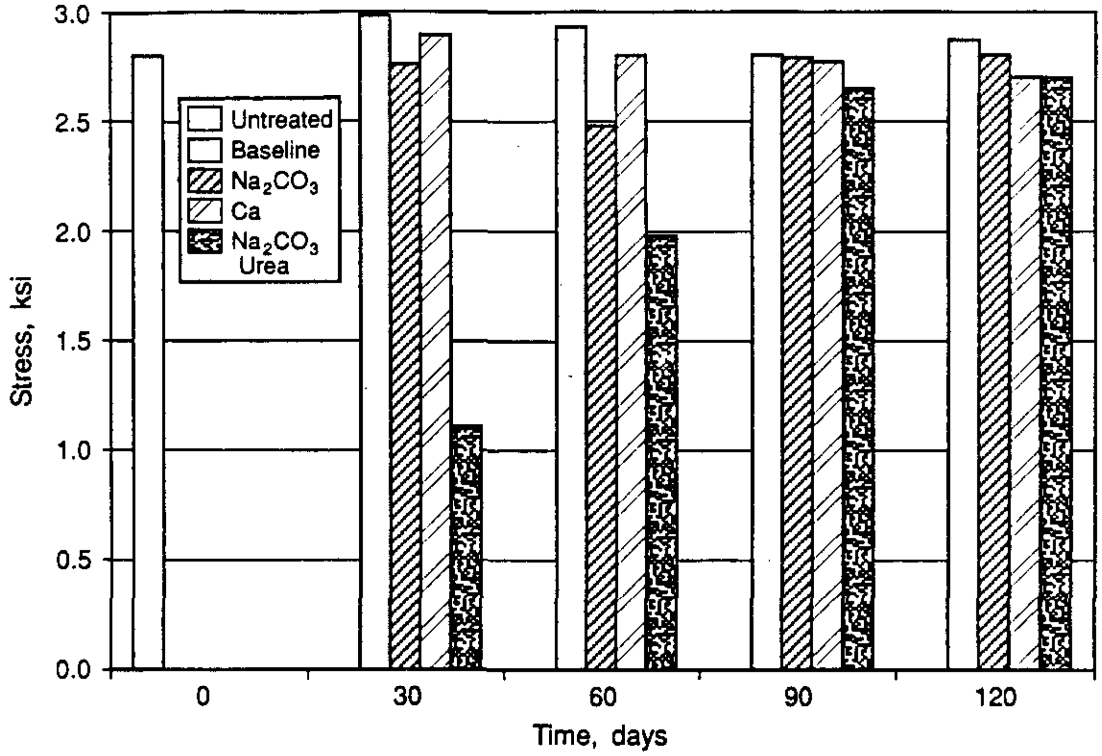

Figure 11. Yield Strength Cross-Grain for HDPE

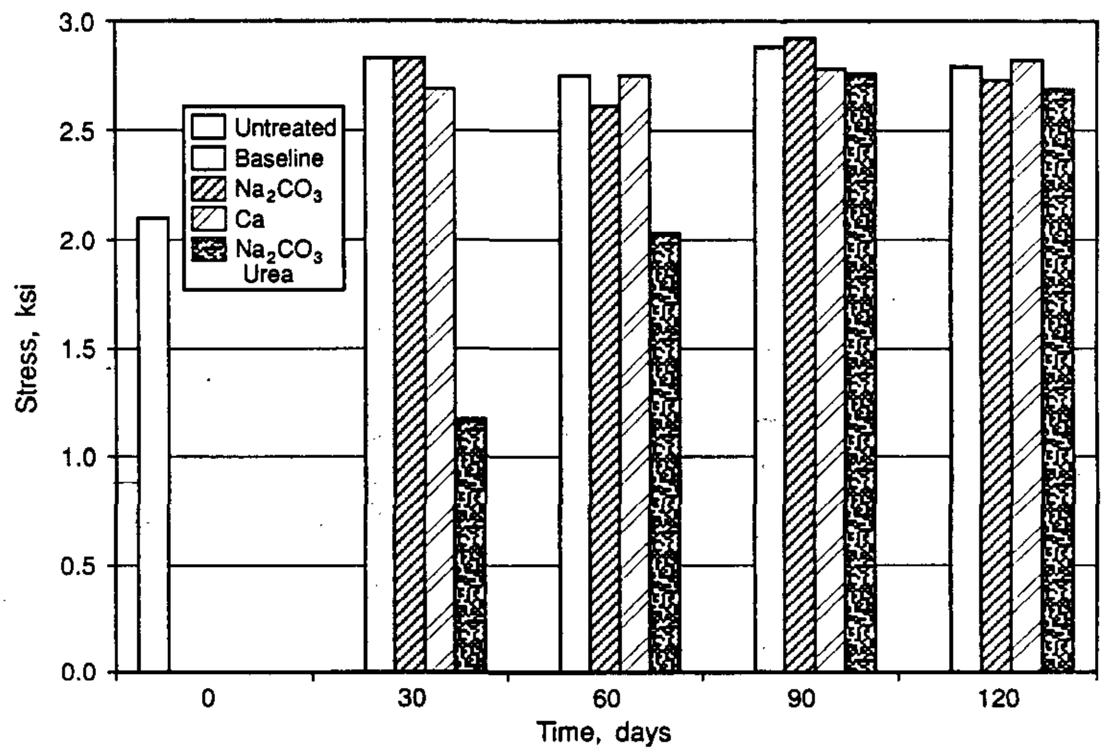

Figure 12. Breaking Strength With-Grain for HDPE

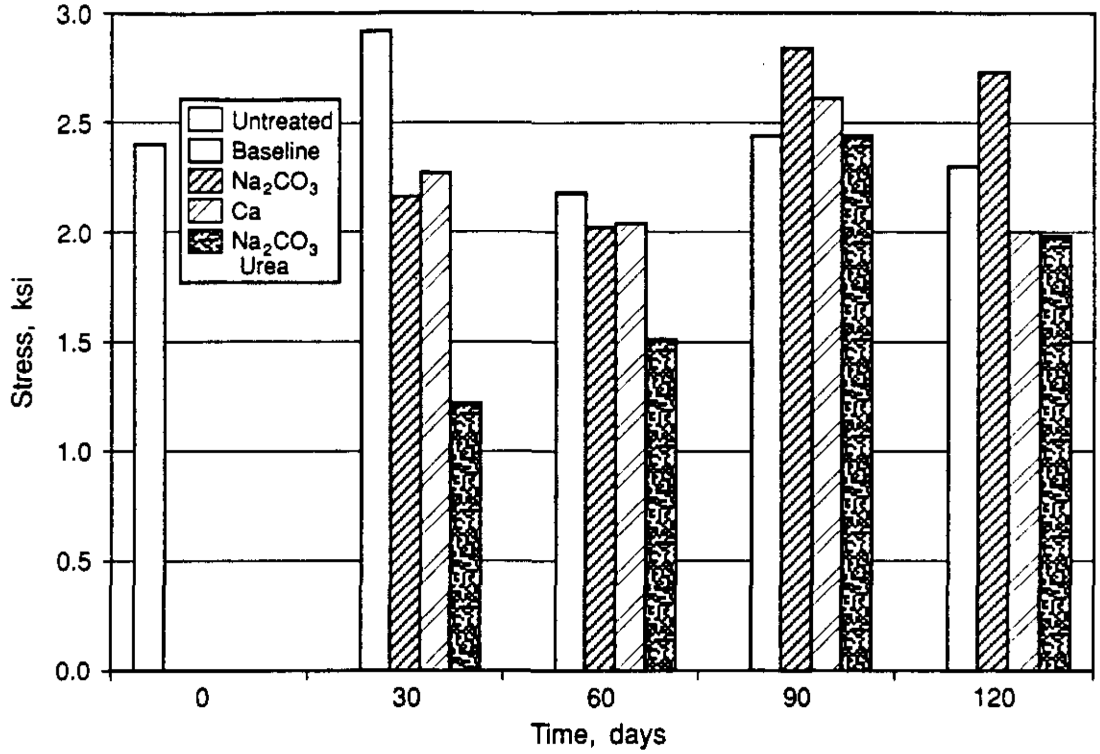

Figure 13. Breaking Strength Cross-Grain for HDPE

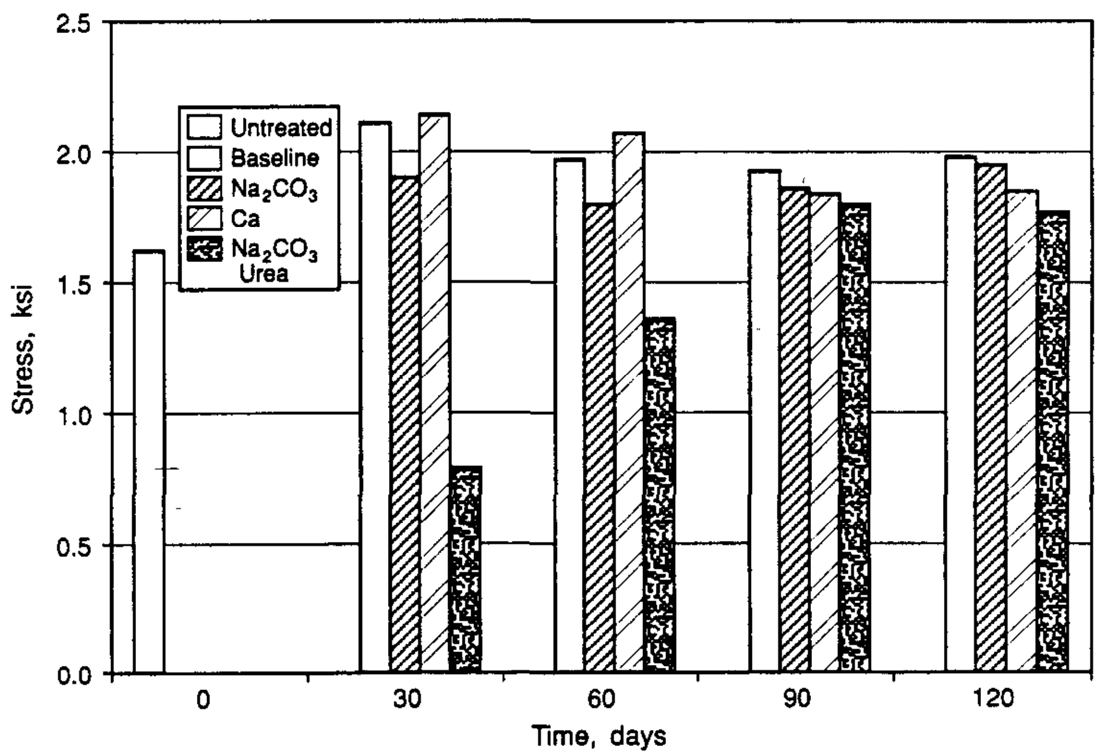

Figure 14. Stress at 100% Elongation With-Grain for HDPE

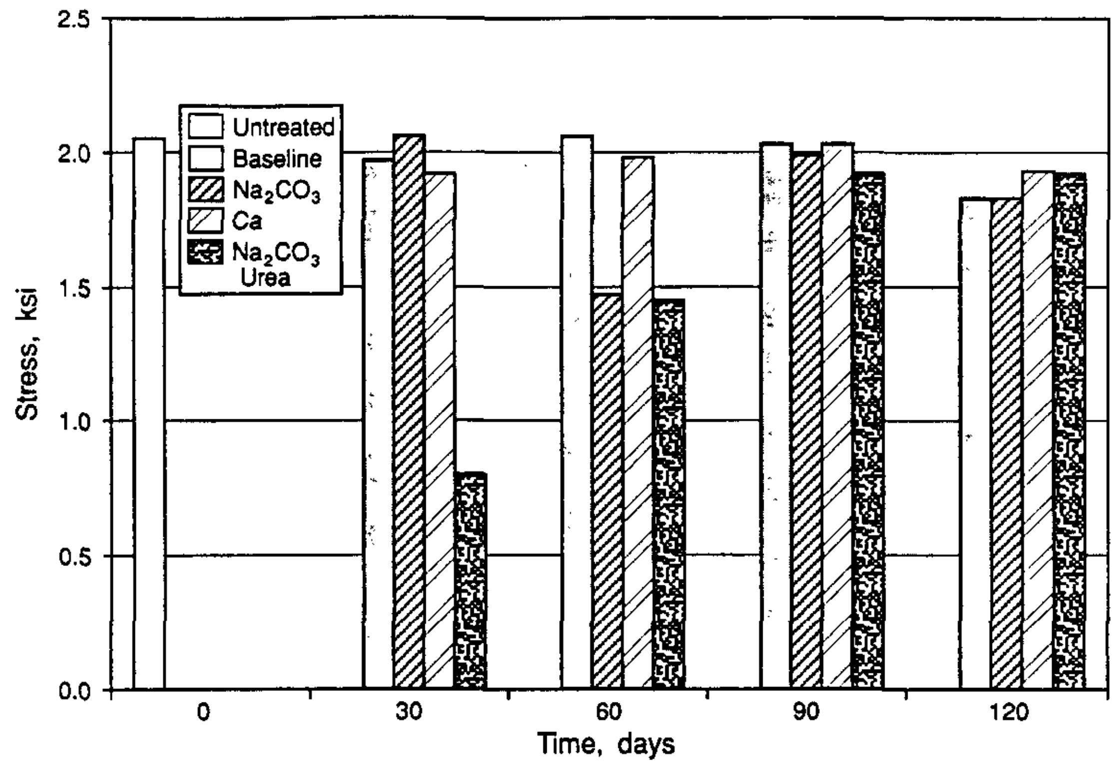

Figure 15. Stress at 100% Elongation Cross-Grain for HDPE

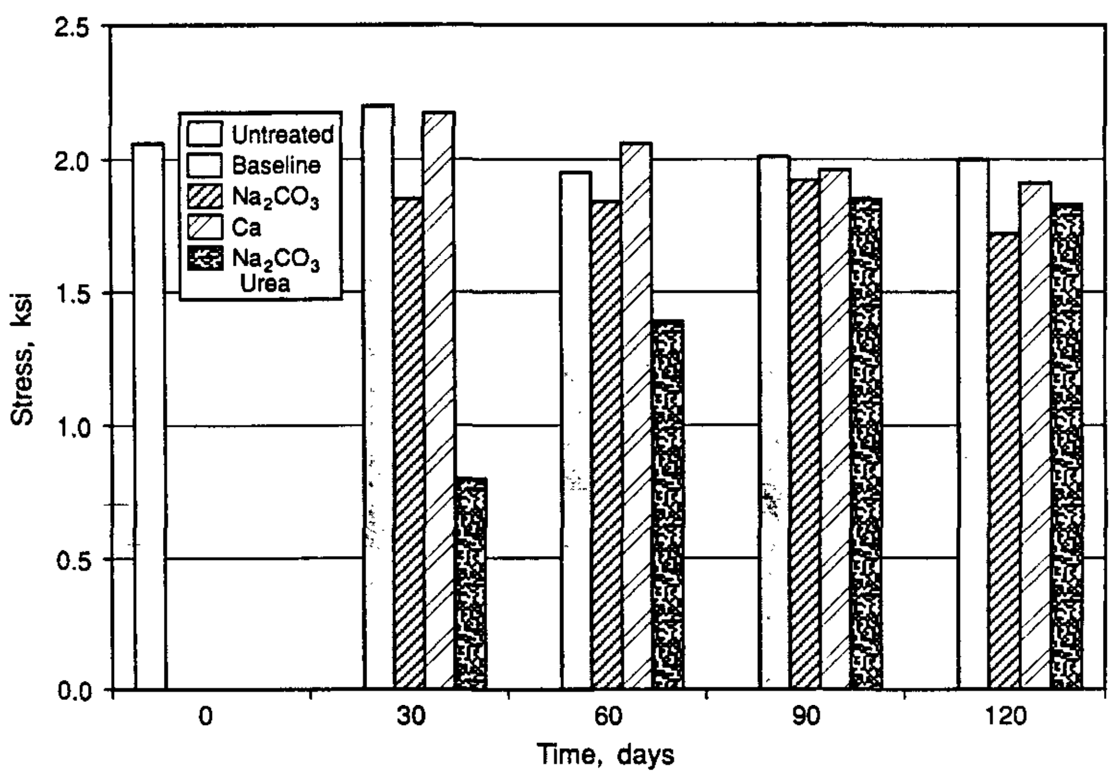

Figure 16. Stress at 200% Elongation With-Grain for HDPE

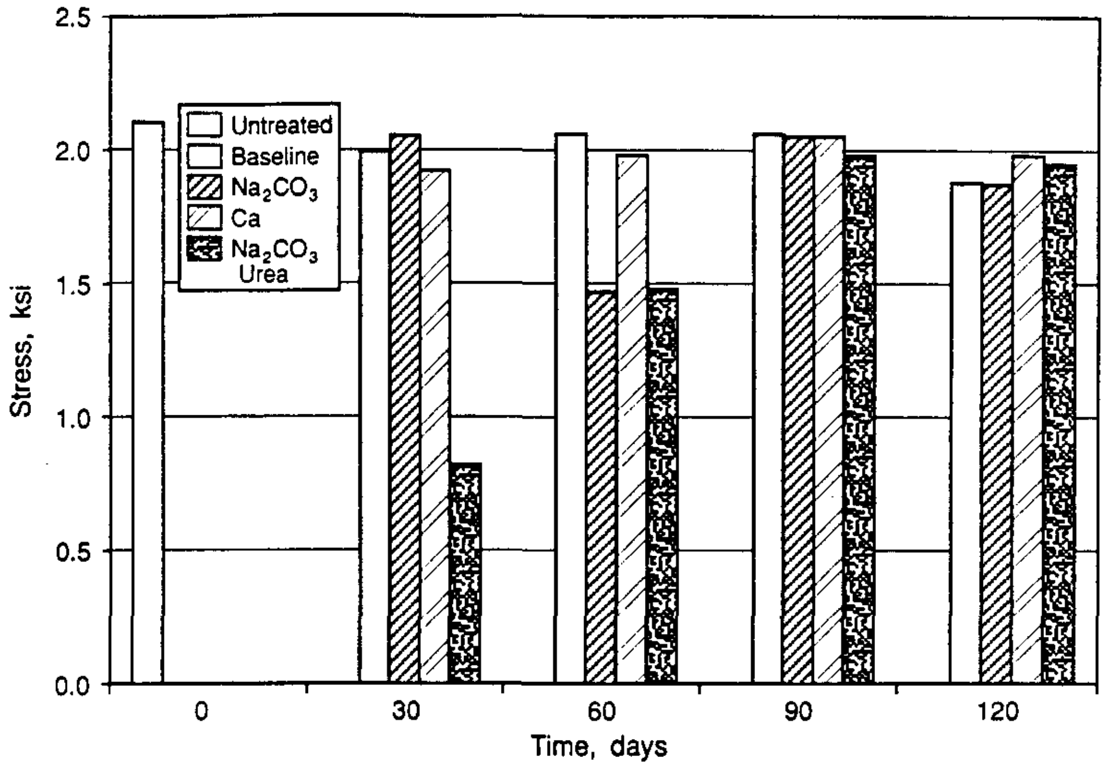

Figure 17. Stress at 200% Elongation Cross-Grain for HDPE

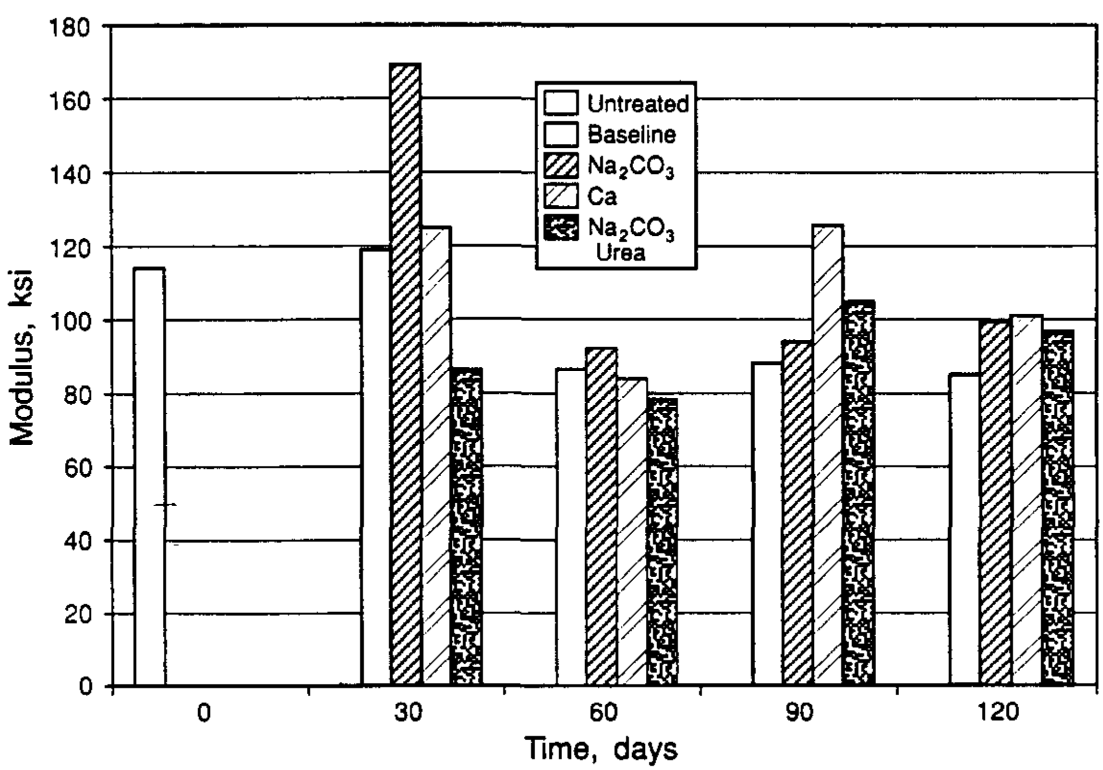

Figure 18. Elastic Modulus With-Grain for HDPE

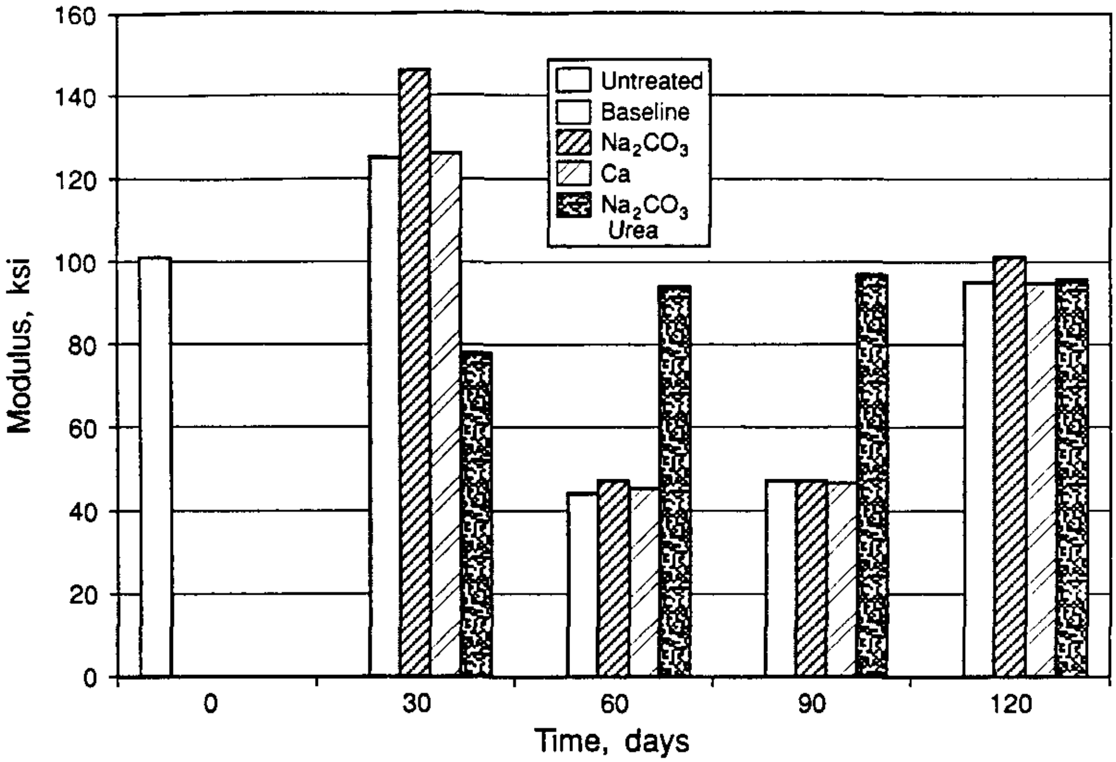

Figure 19. Elastic Modulus Cross-Grain for HDPE

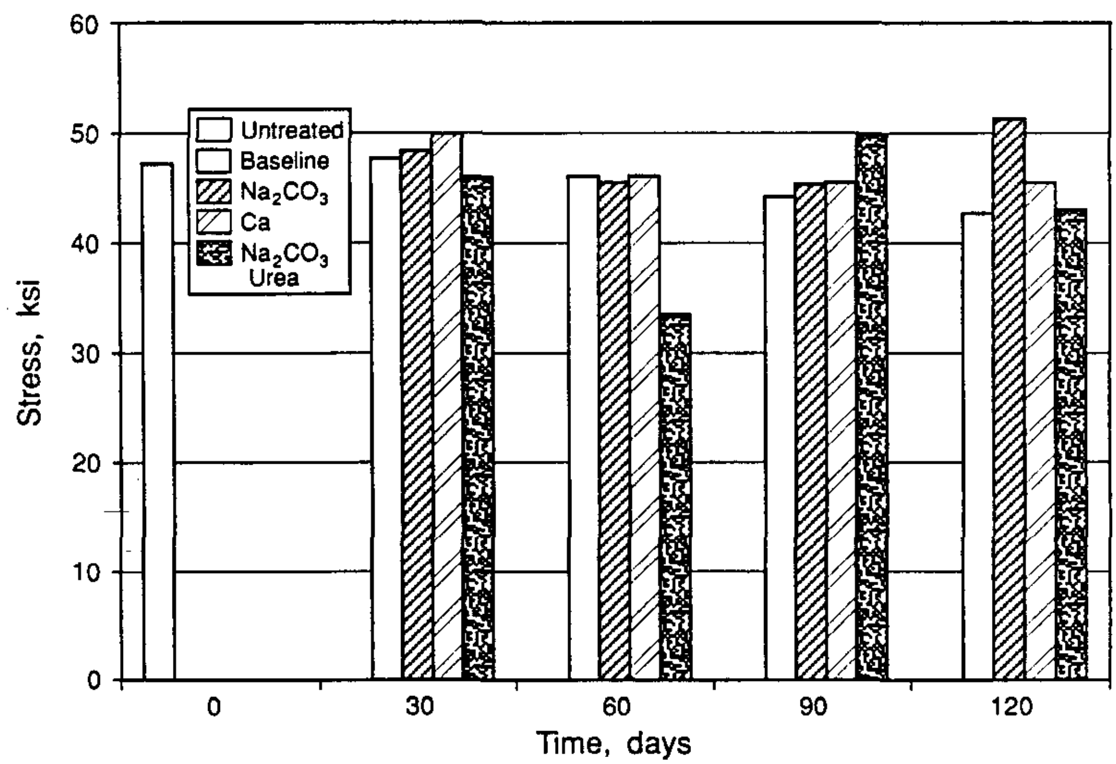

Figure 20. Tear Strength With-Grain for HDPE

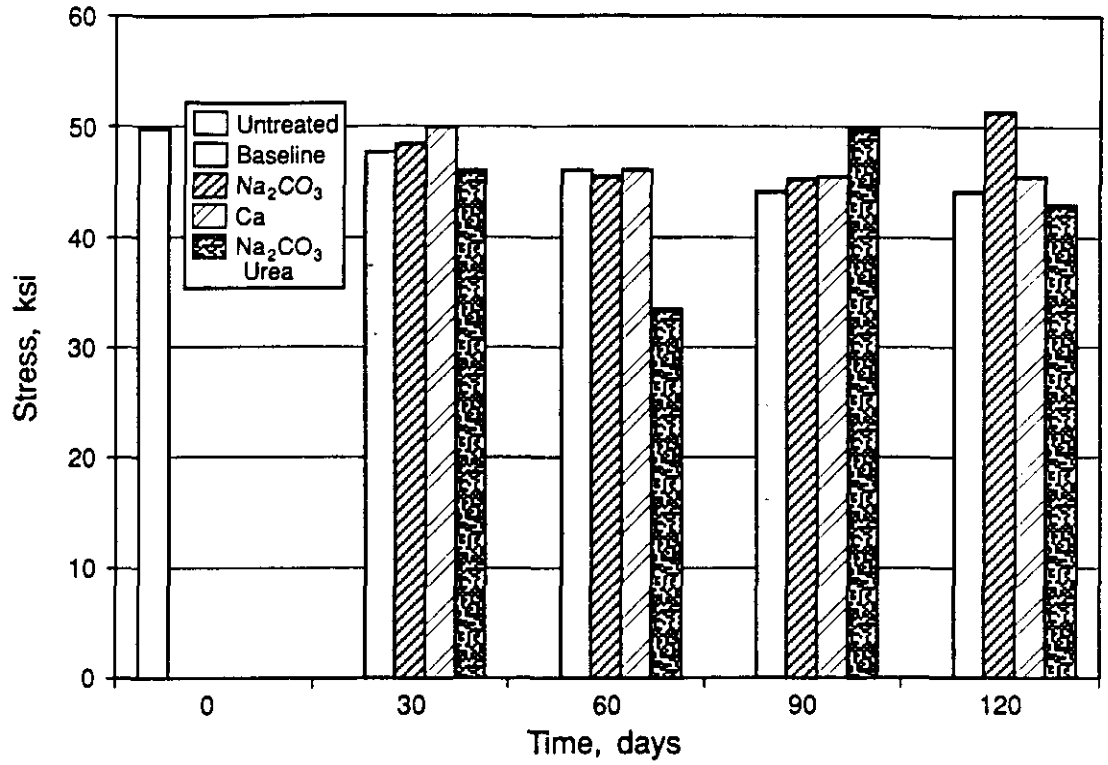

Figure 21. Tear Strength Cross-Grain for HDPE

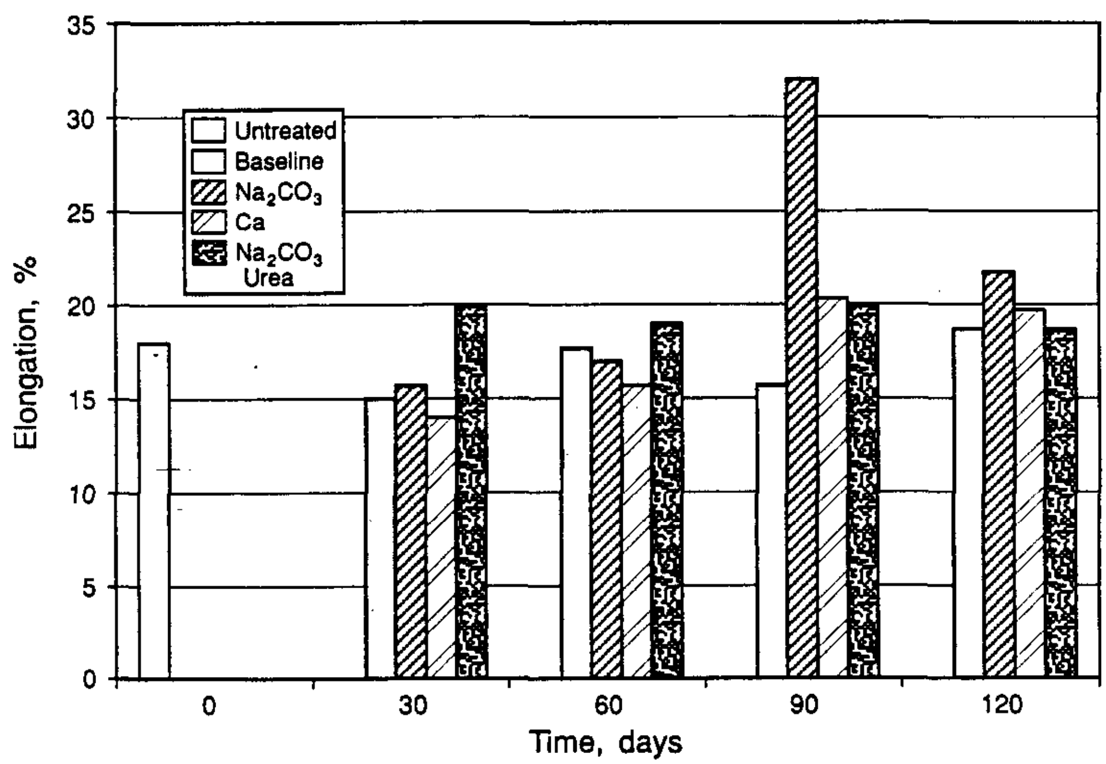

Figure 22. Percent Elongation at Yield With-Grain for VDPE

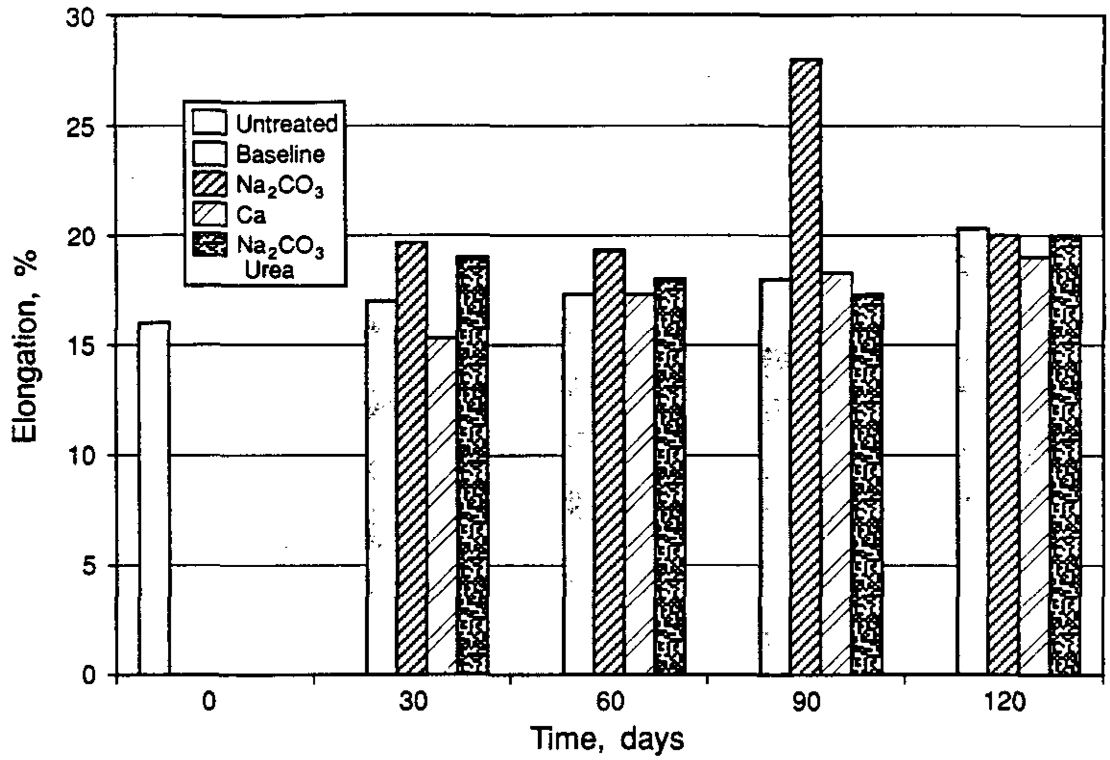

Figure 23. Percent Elongation at Yield Cross-Grain for VDPE

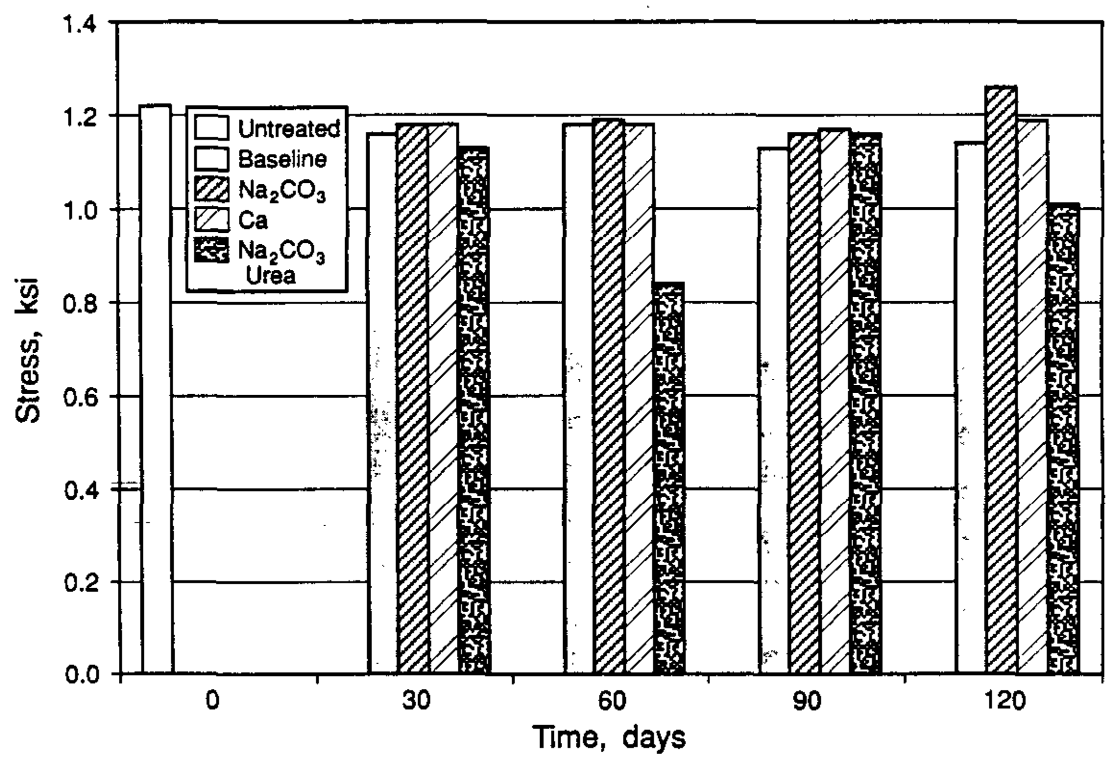

Figure 24. Yield Strength With-Grain for VDPE

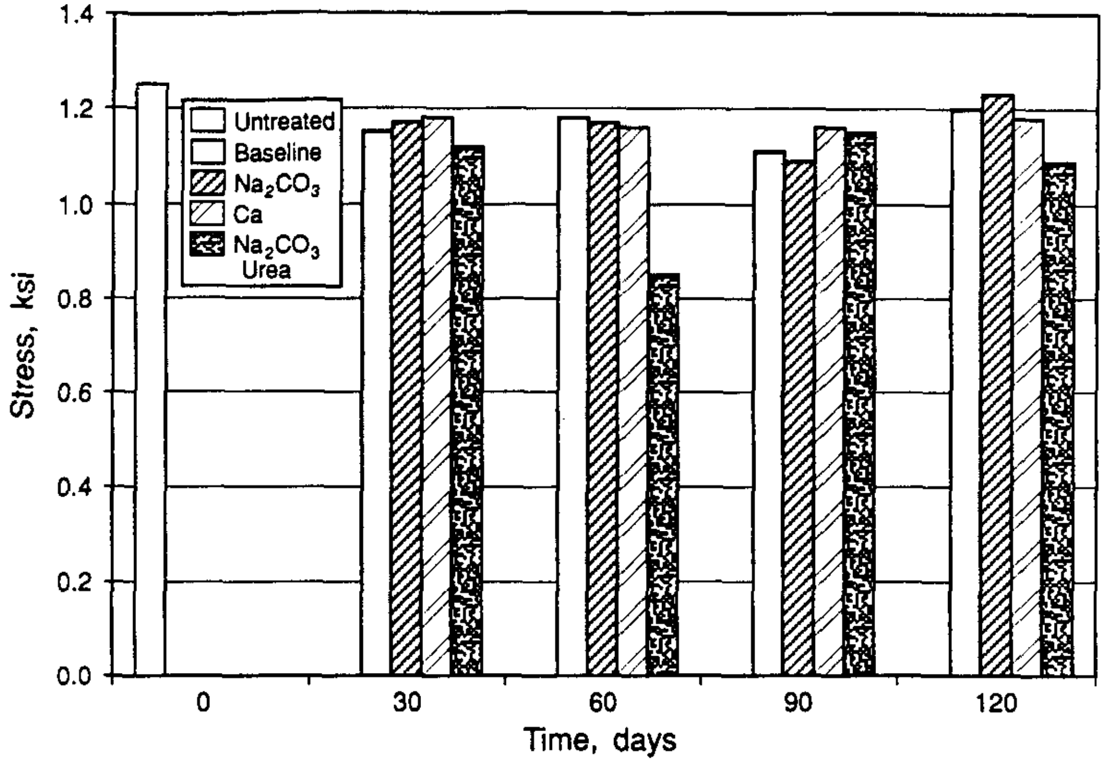

Figure 25. Yield Strength Cross-Grain for VDPE

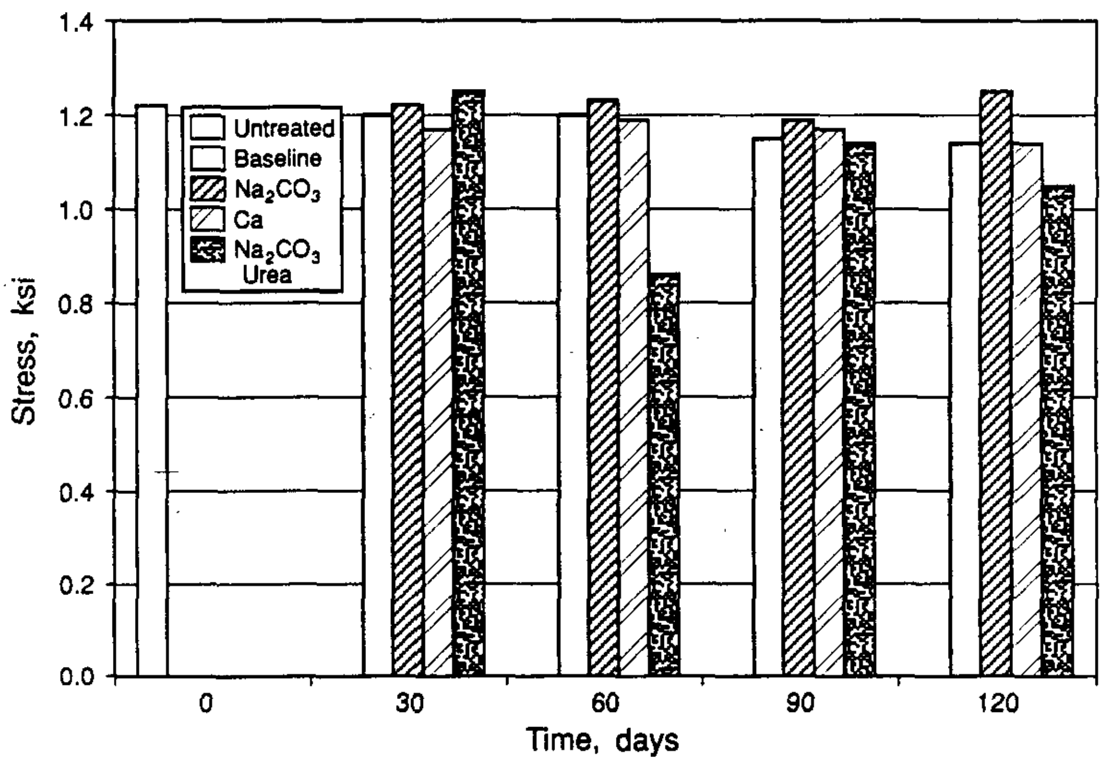

Figure 26. Stress at 100% Elongation With-Grain for VDPE

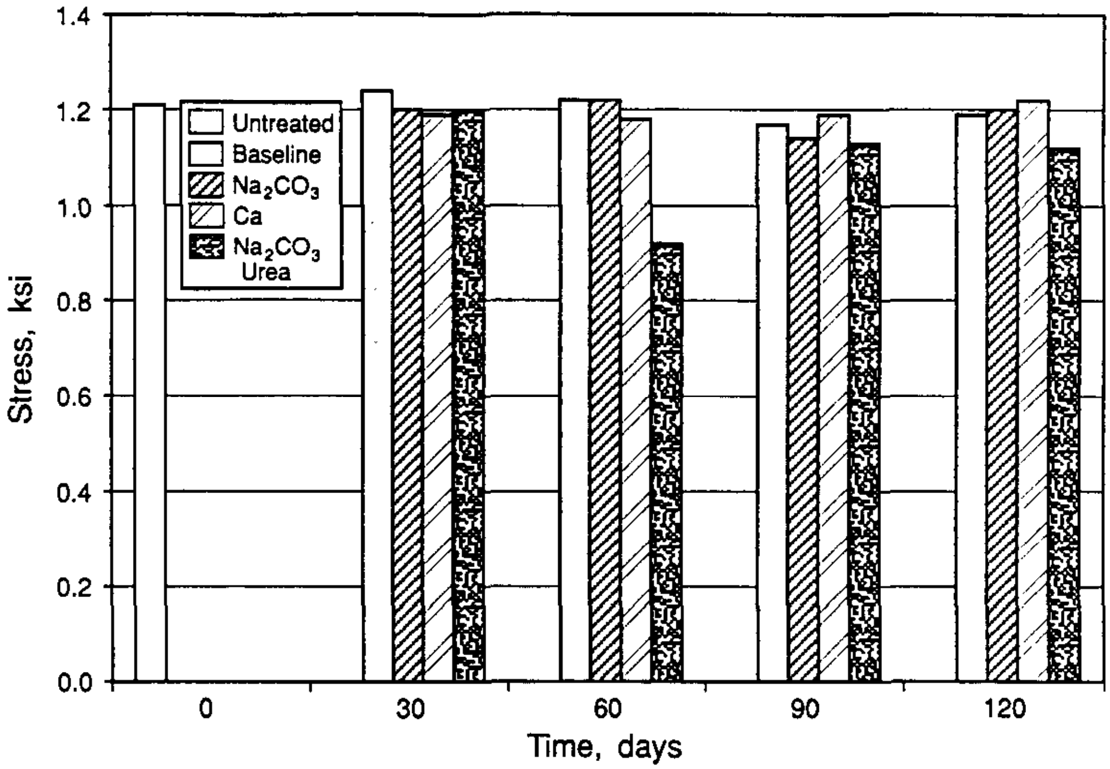

Figure 27. Stress at 100% Elongation Cross-Grain for VDPE

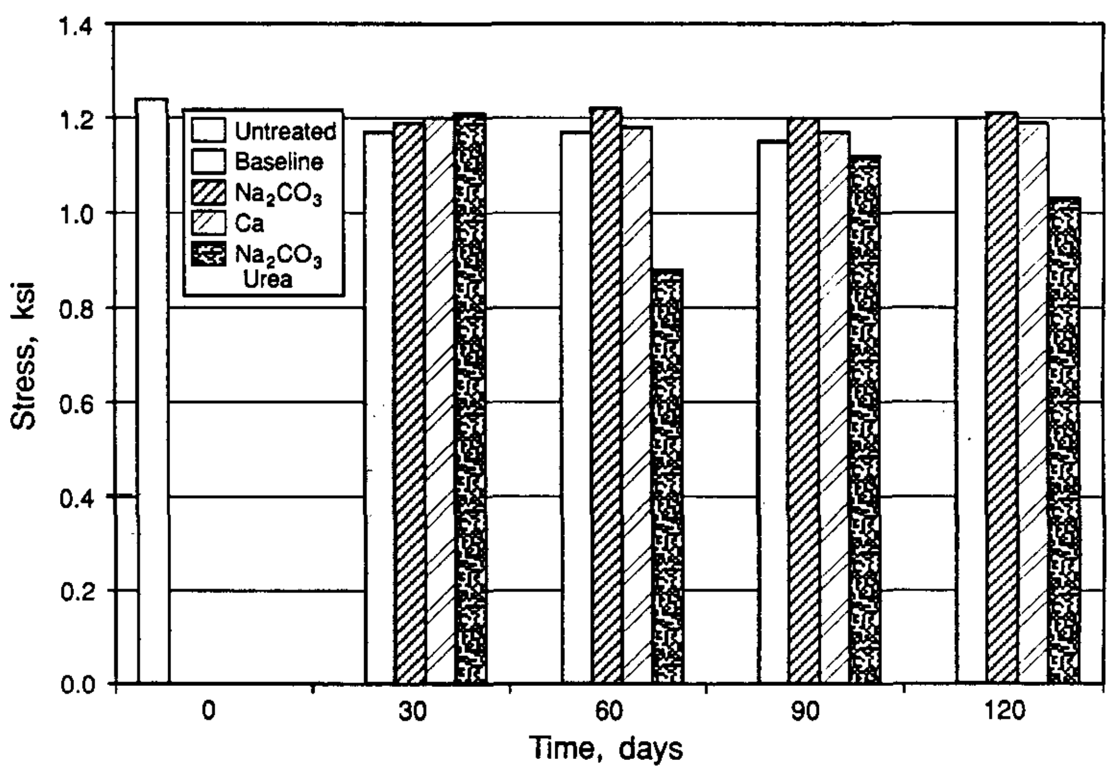

Figure 28. Stress at 200% Elongation With-Grain for VDPE

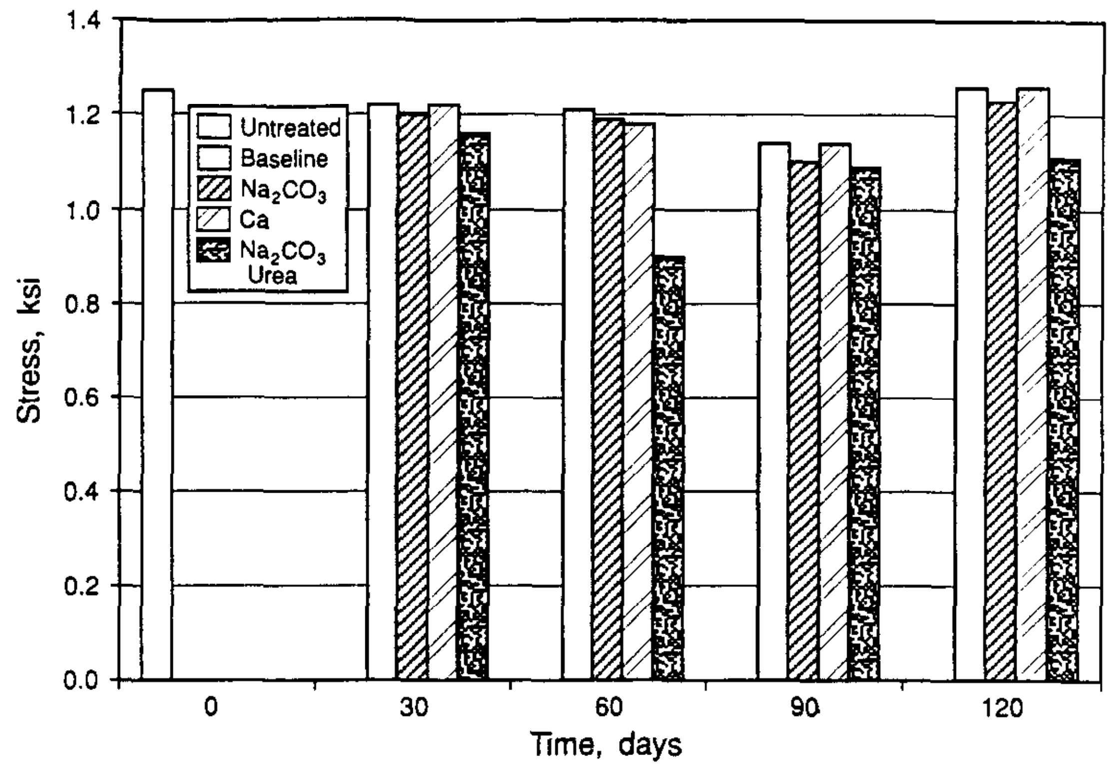

Figure 29. Stress at 200% Elongation Cross-Grain for VDPE

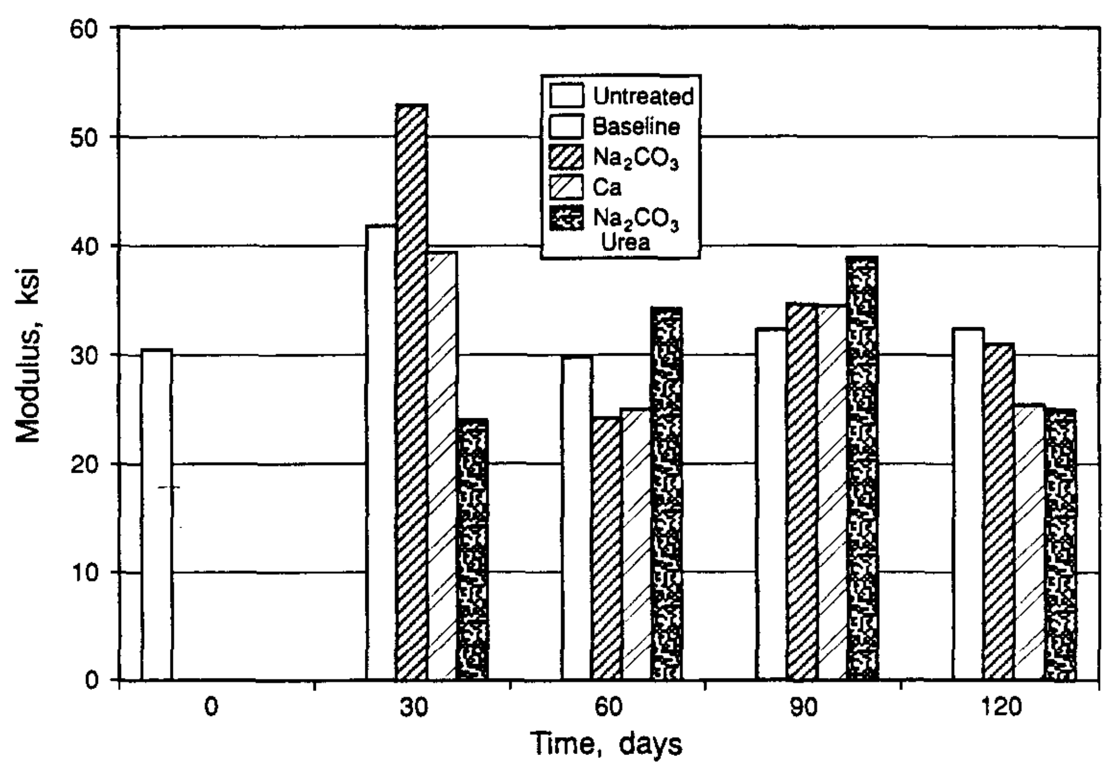

Figure 30. Elastic Modulus With-Grain for VDPE

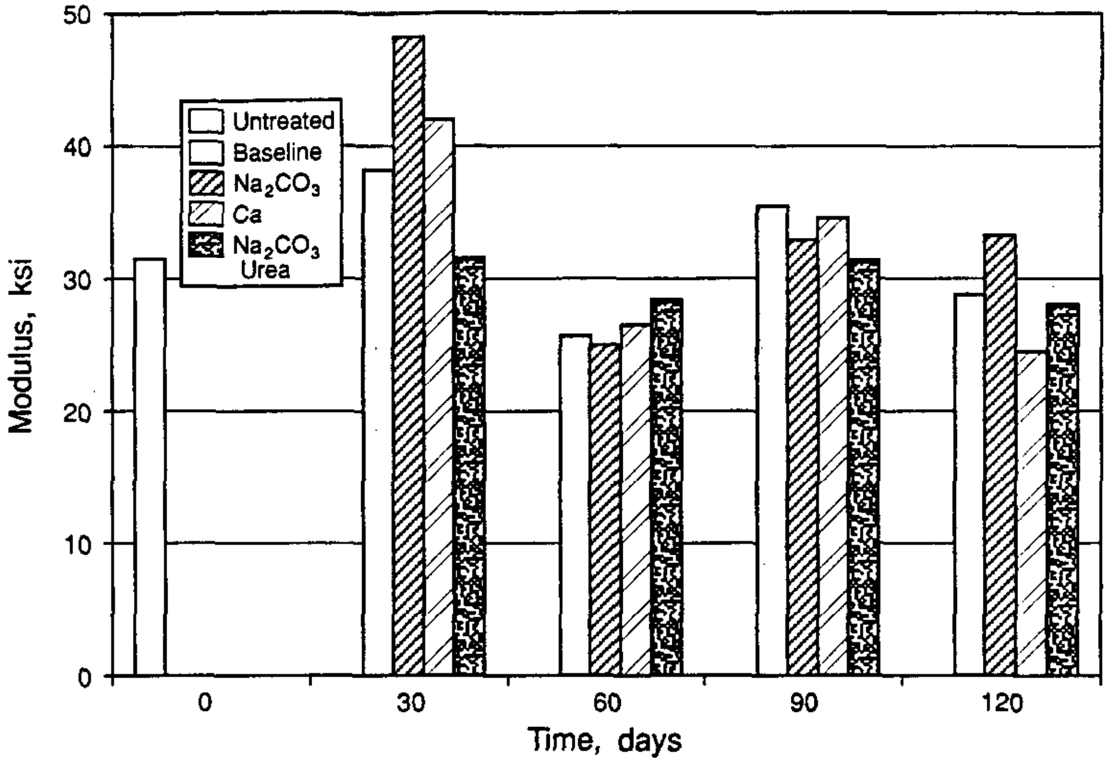

Figure 31. Elastic Modulus Cross-Grain for VDPE

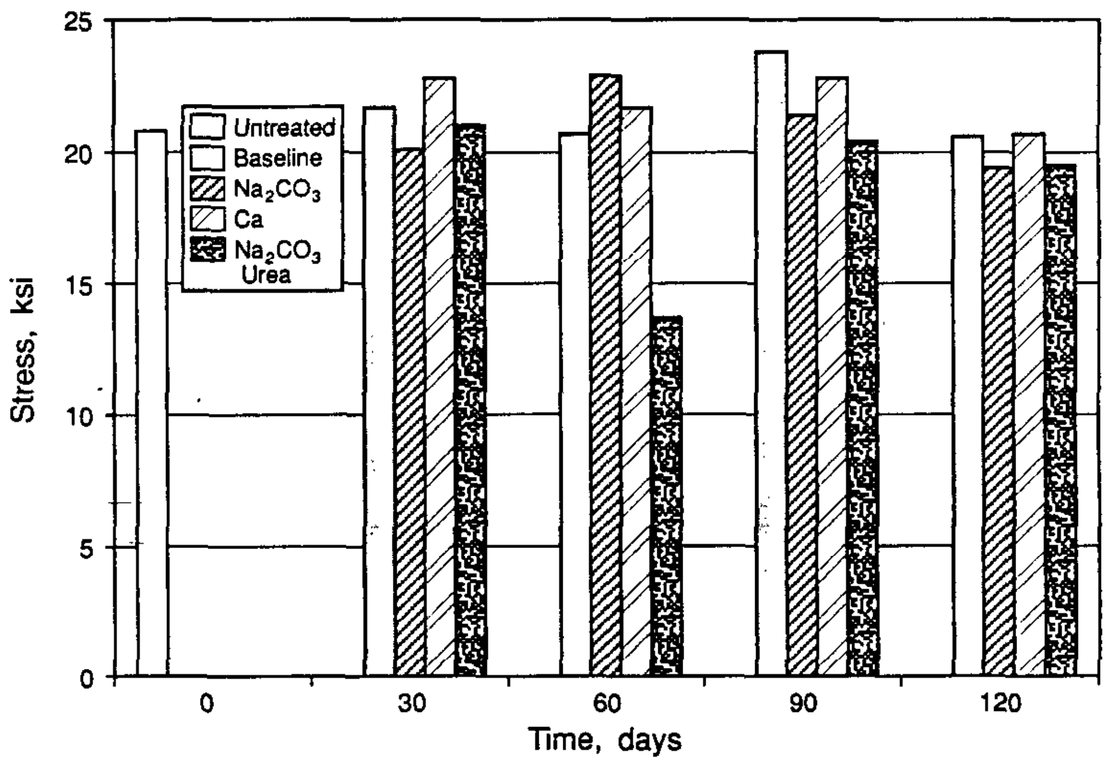

Figure 32. Tear Strength With-Grain for VDPE

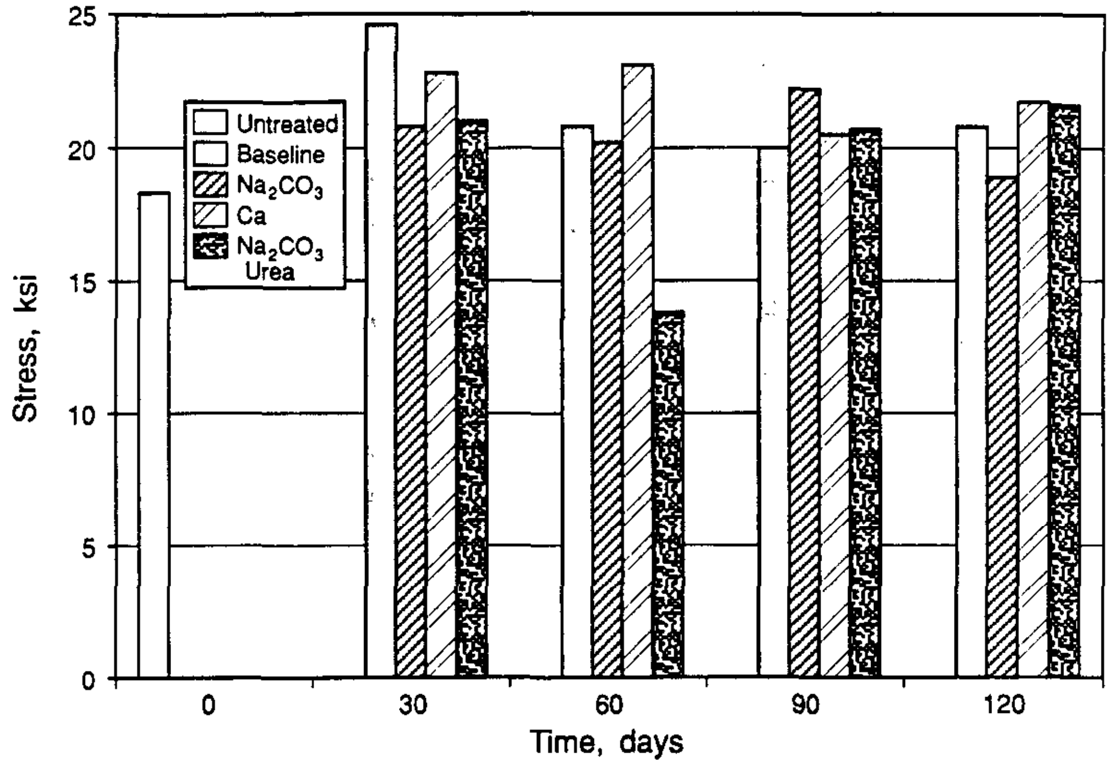

Figure 33. Tear Strength Cross-Grain for VDPE

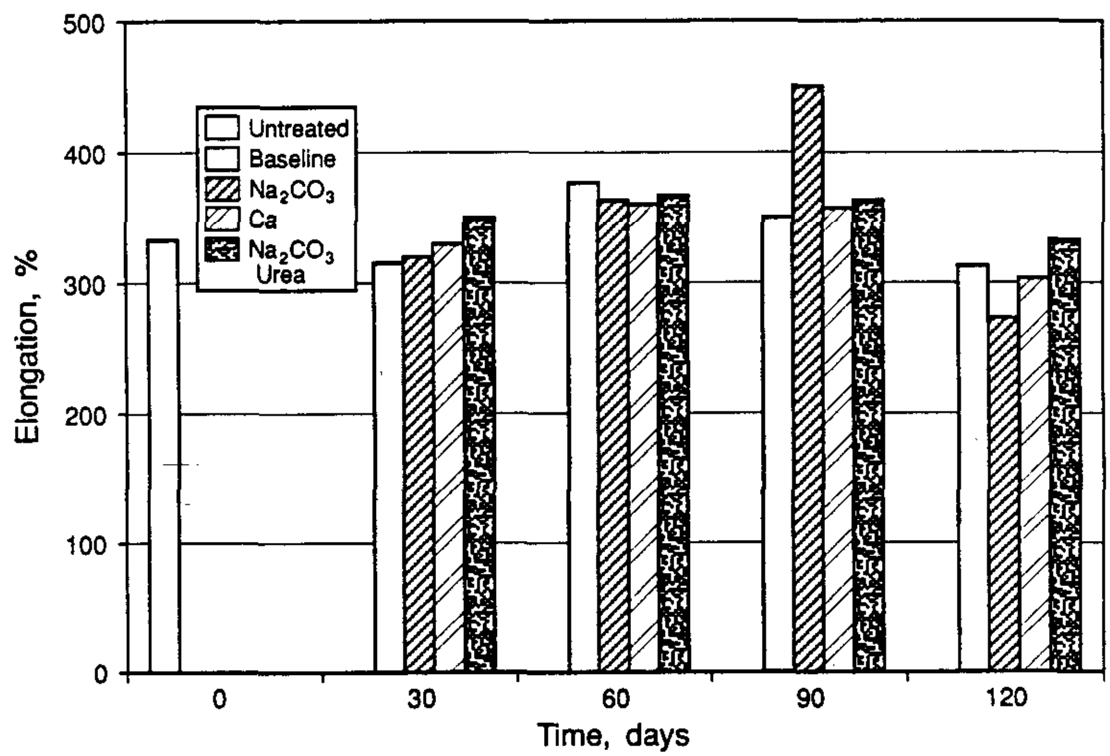

Figure 34. Percent Elongation at Break With-Grain for PVC

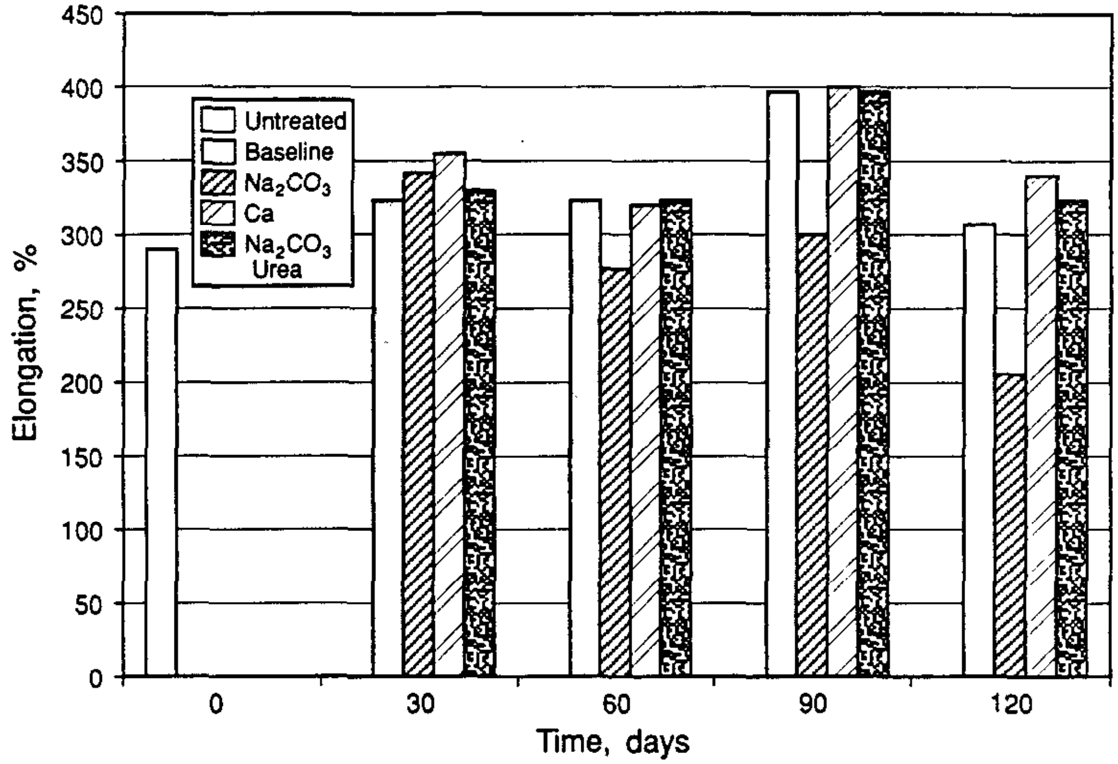

Figure 35. Percent Elongation at Break Cross-Grain for PVC

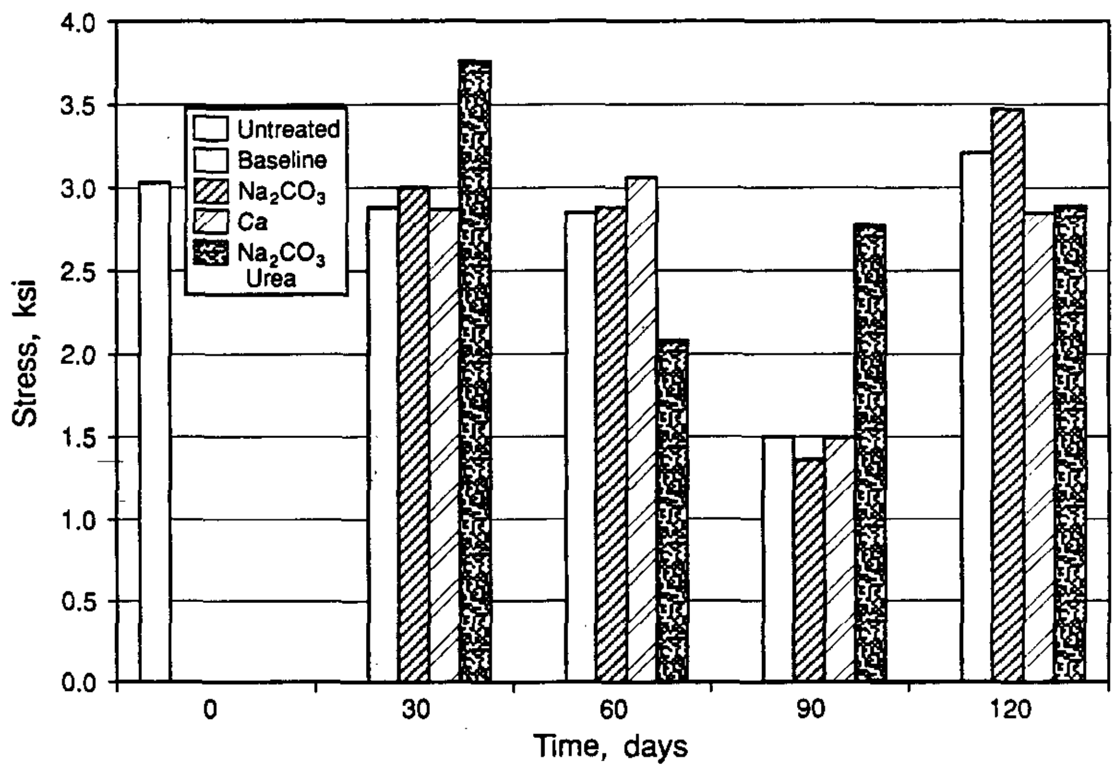

Figure 36. Breaking Strength With-Grain for PVC

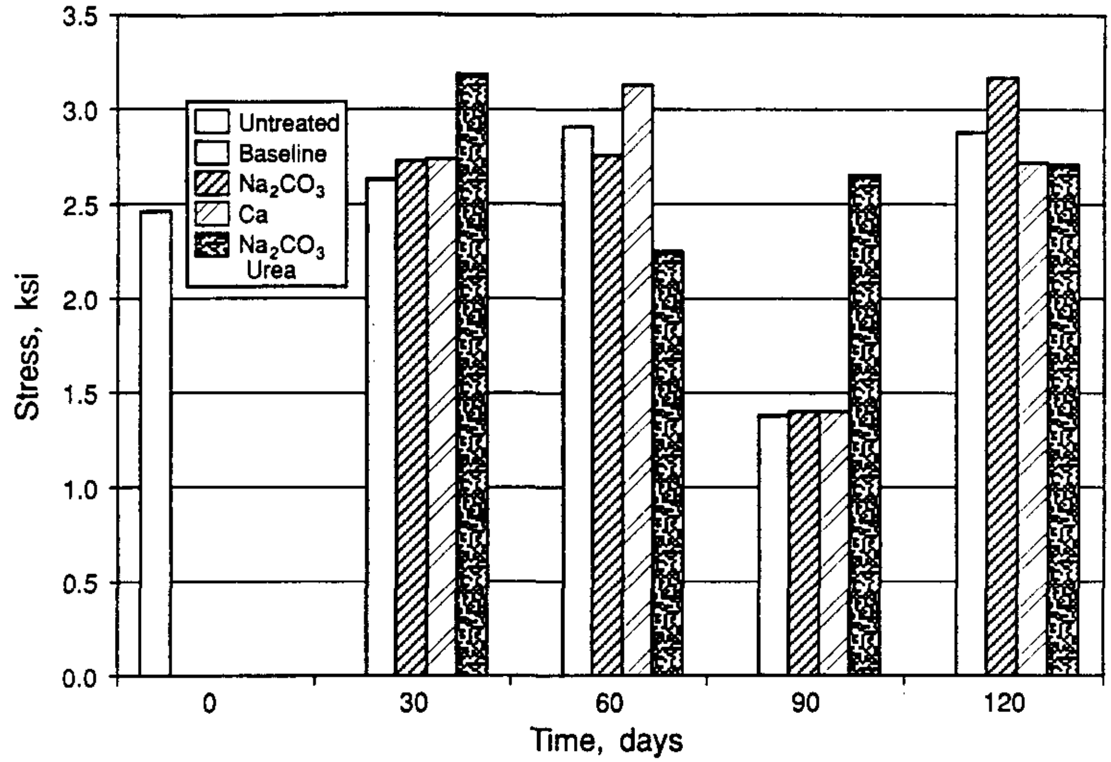

Figure 37. Breaking Strength Cross-Grain for PVC

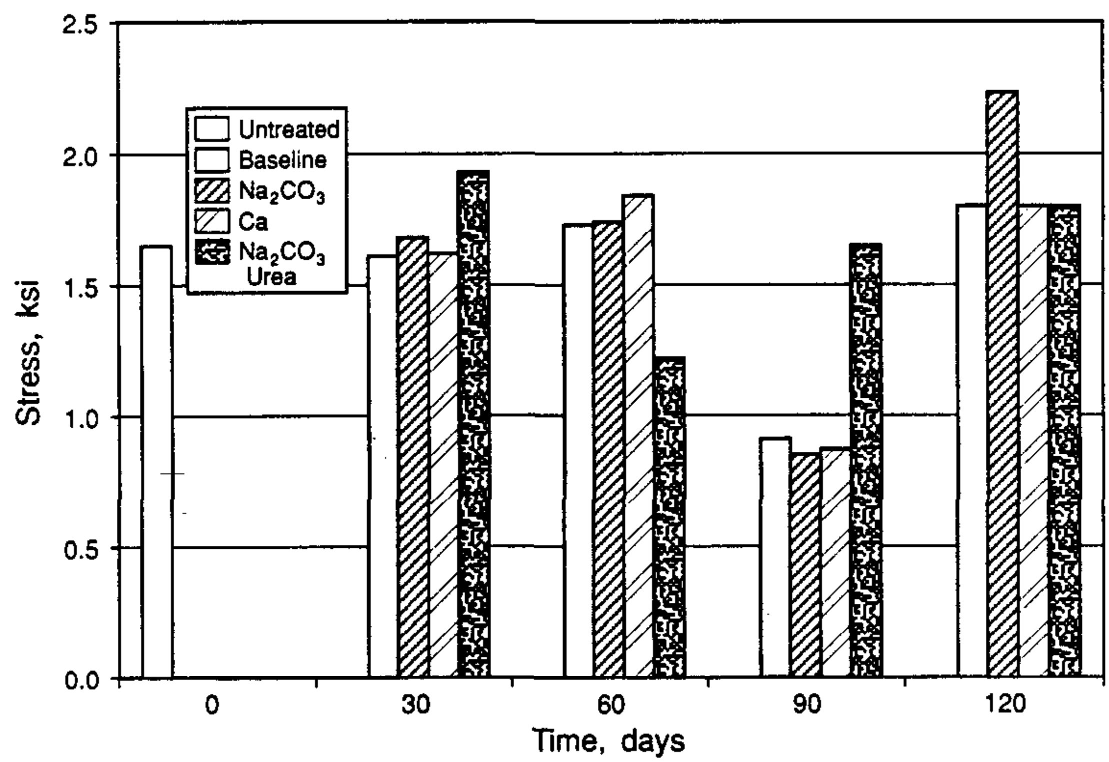

Figure 38. Stress at 100% Elongation With-Grain for PVC

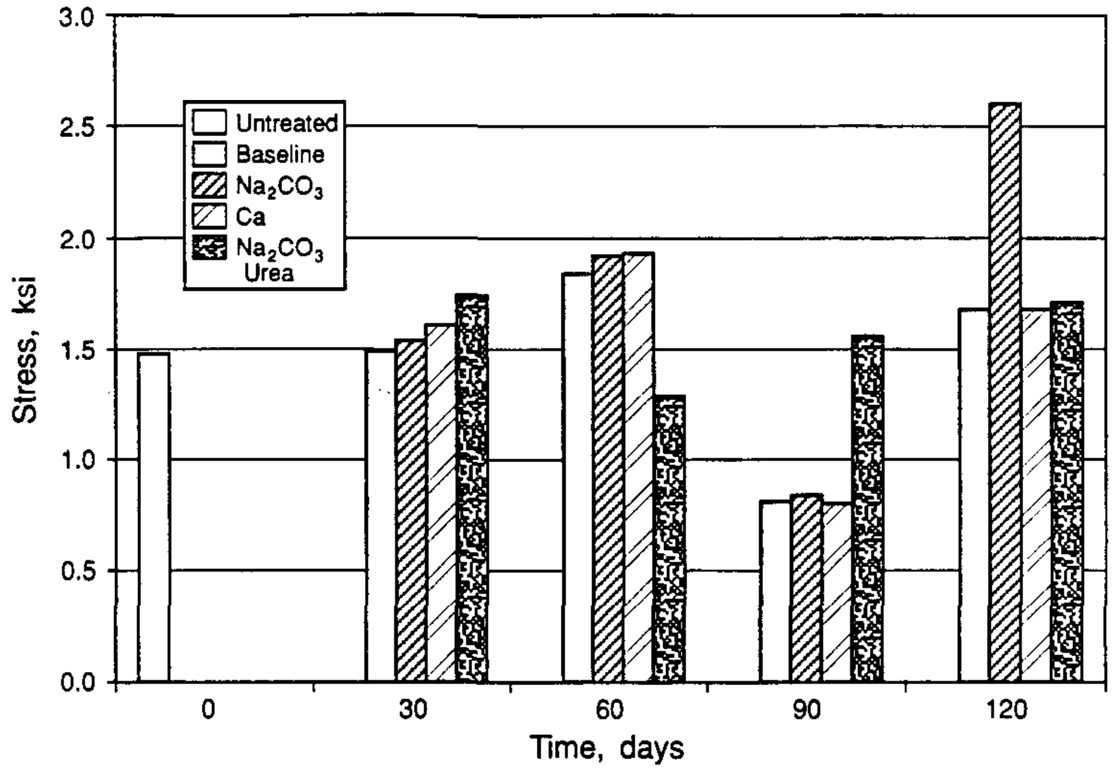

Figure 39. Stress at 100% Elongation Cross-Grain for PVC

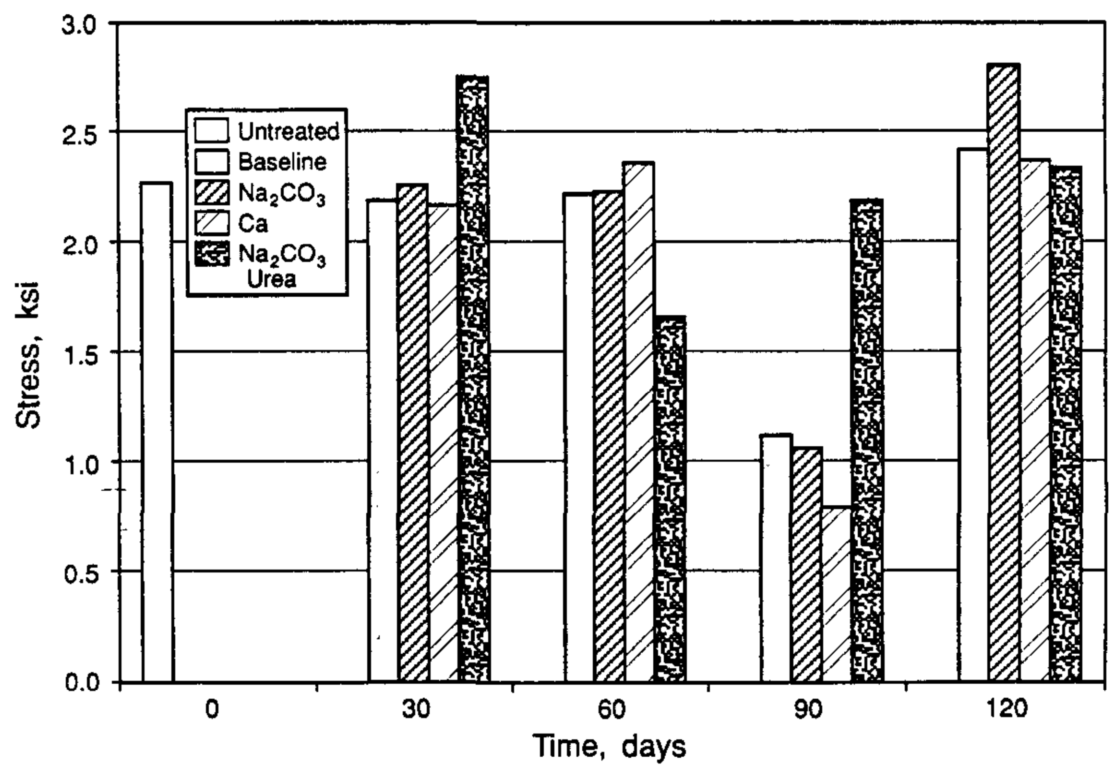

Figure 40. Stress at 200% Elongation With-Grain for PVC

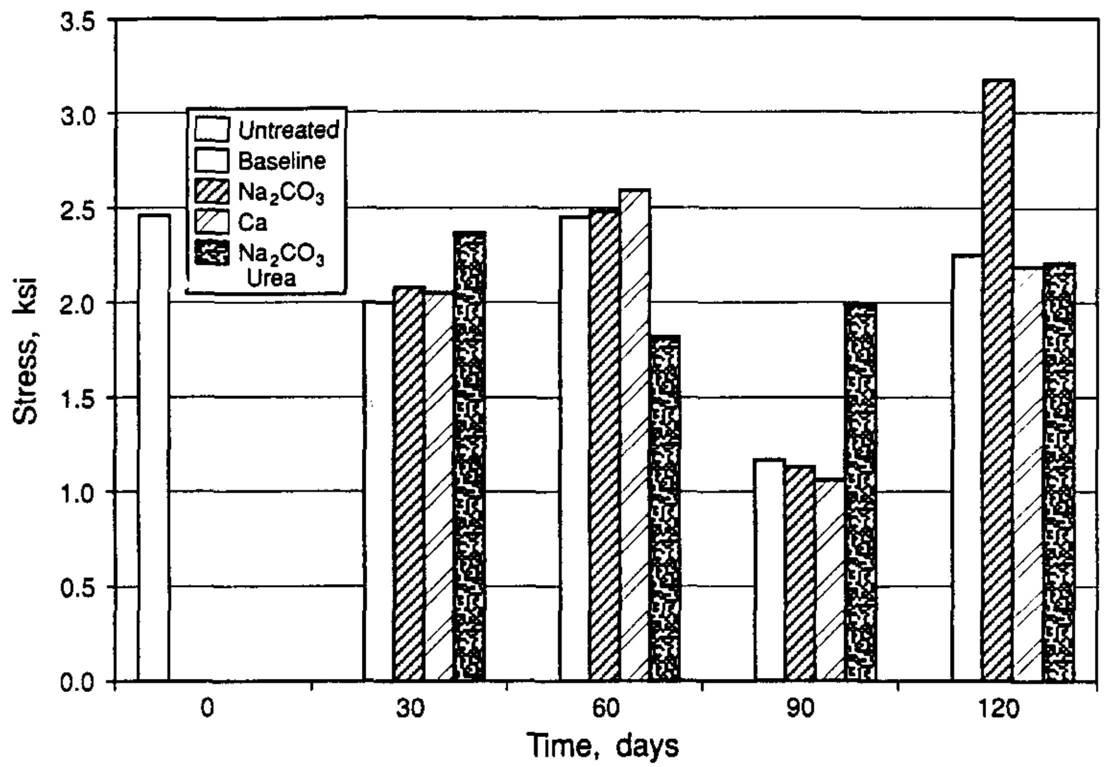

Figure 41. Stress at 200% Elongation Cross-Grain for PVC

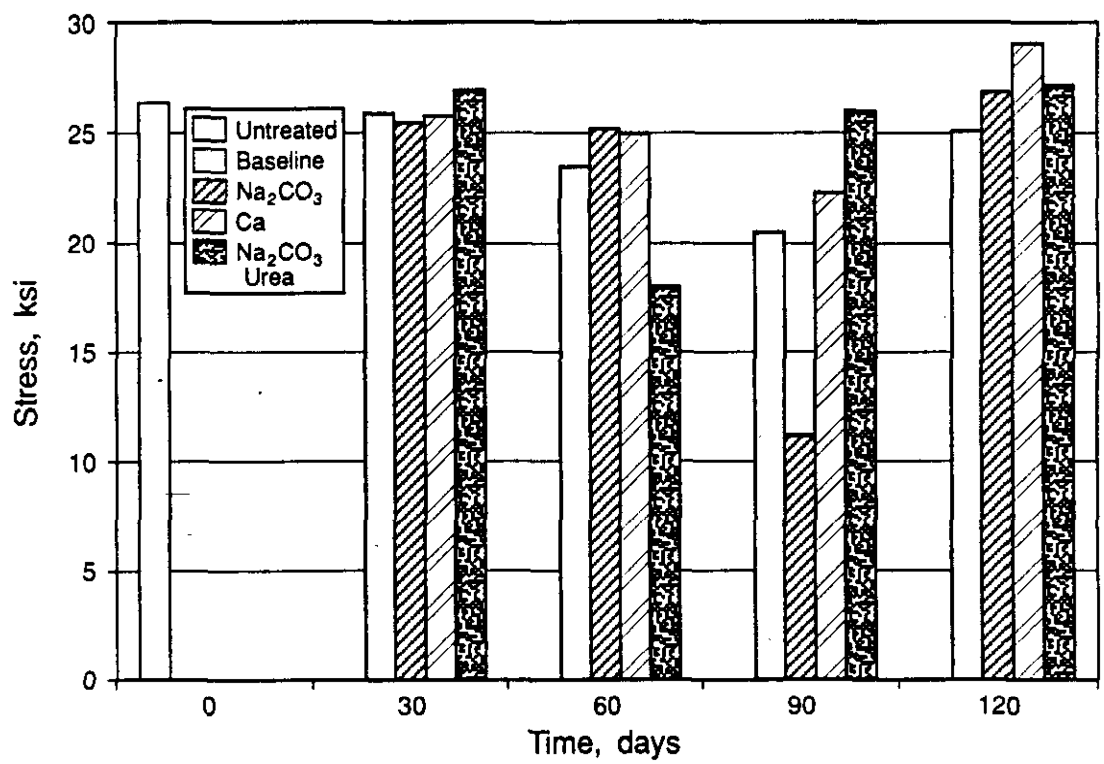

Figure 42. Tear Strength With-Grain for PVC

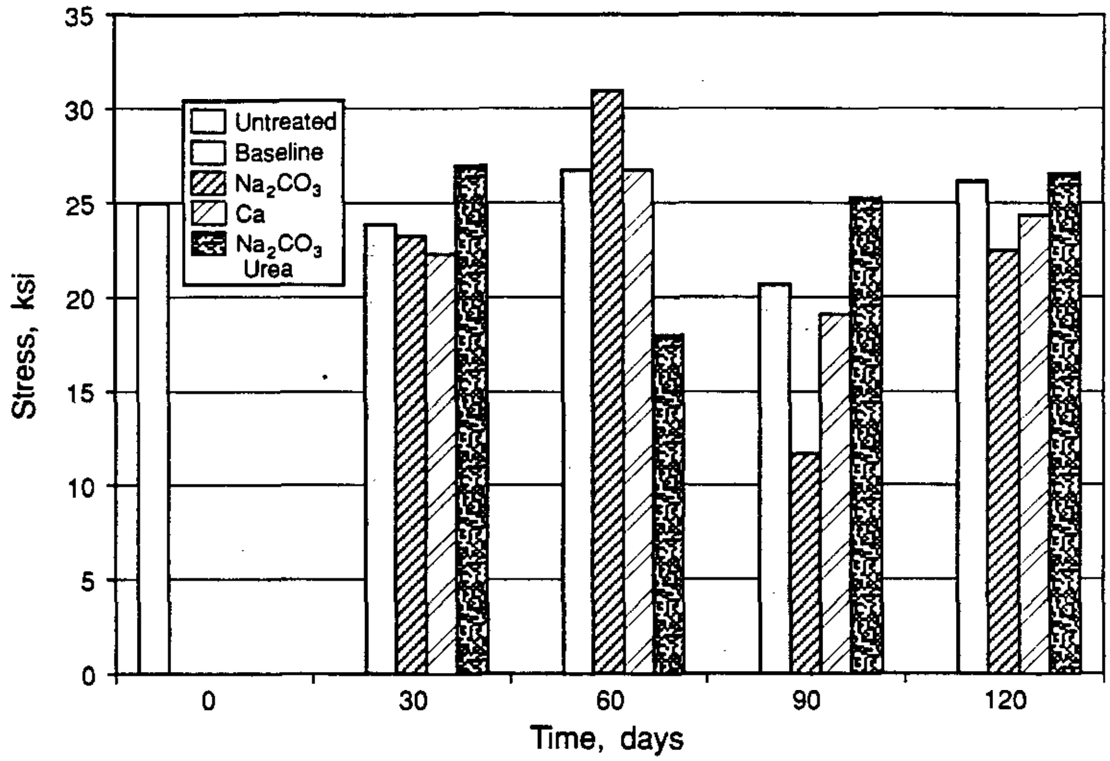

Figure 43. Tear Strength Cross-Grain for PVC

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APPENDIX A

DATA SUMMARY FOR THE HYDRAULIC CONDUCTIVITY EVALUATIONS

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
Sample 4									
17-Feb									
18-Feb	1.5	1.52	1.51	2.2	1.6226E-08	10	50	40	RC/St. Opt.
19-Feb	1.5	2.03	1.765	2.2	1.89662E-08	10	50	40	RC/St. Opt.
20-Feb	1.5	1.52	1.51	2.2	1.6226E-08	10	50	40	RC/St. Opt.
21-Feb	1.5	2.03	1.765	2.2	1.89662E-08	10	50	40	RC/St. Opt.
22-Feb	3.5	4.57	4.035	4.3	2.21836E-08	10	50	40	RC/St. Opt.
23-Feb	3	3.56	3.28	4.3	1.80328E-08	10	50	40	RC/St. Opt.
24-Feb	3.5	3.56	3.53	4.3	1.94073E-08	10	50	40	RC/St. Opt.
25-Feb	3	3.56	3.28	4.3	1.80328E-08	10	50	40	RC/St. Opt.
26-Feb	6	7.11	6.555	6.5	2.38406E-08	10	50	40	RC/St. Opt.
27-Feb	6	6.6	6.3	6.5	2.29132E-08	10	50	40	RC/St. Opt.
28-Feb	5.5	6.09	5.795	6.5	2.10765E-08	10	50	40	RC/St. Opt.
1-Mar	5	5.08	5.04	6.5	1.83305E-08	10	50	40	RC/St. Opt.
2-Mar	2	2.03	2.015	6.5	7.32857E-09	10	50	40	RC/St. Opt.
3-Mar	5.5	5.59	5.545	6.5	2.01672E-08	10	50	40	RC/St. Opt.
4-Mar	5.5	6.09	5.795	6.5	2.10765E-08	10	50	40	RC/St. Opt.
5-Mar	5	5.59	5.295	6.5	1.9258E-08	10	50	40	RC/St. Opt.
6-Mar	5.5	5.59	5.545	6.5	2.01672E-08	10	50	40	RC/St. Opt.
7-Mar	5.5	5.08	5.29	6.5	1.92398E-08	10	50	40	RC/St. Opt.
8-Mar	4.5	5.59	5.045	6.5	1.83487E-08	10	50	40	RC/St. Opt.
9-Mar	5.5	5.08	5.29	6.5	1.92398E-08	10	50	40	RC/St. Opt.
10-Mar	5	5.59	5.295	6.5	1.9258E-08	10	50	40	RC/St. Opt.
11-Mar	5.5	5.08	5.29	6.5	1.92398E-08	10	50	40	RC/St. Opt.
12-Mar	5	6.6	5.8	6.5	2.10947E-08	10	50	40	RC/St. Opt.
13-Mar	5	5.59	5.295	6.5	1.9258E-08	10	50	40	RC/St. Opt.
14-Mar	5.5	6.09	5.795	6.5	2.10765E-08	10	50	40	RC/St. Opt.
15-Mar	5	5.08	5.04	6.5	1.83305E-08	10	50	40	RC/St. Opt.
16-Mar	5	4.57	4.785	6.5	1.74031E-08	10	50	40	RC/St. Opt.
17-Mar	5	5.08	5.04	6.5	1.83305E-08	10	50	40	RC/St. Opt.
18-Mar	5	5.08	5.04	6.5	1.83305E-08	10	50	40	RC/St. Opt.
19-Mar	5	6.1	5.55	6.5	2.01854E-08	10	50	40	RC/St. Opt.
20-Mar	5.5	4.57	5.035	6.5	1.83123E-08	10	50	40	RC/St. Opt.
21-Mar	5.5	5.08	5.29	6.5	1.92398E-08	10	50	40	RC/St. Opt.
22-Mar	4	4.57	4.285	6.5	1.55846E-08	10	50	40	RC/St. Opt.
23-Mar	4	5.08	4.54	6.5	1.6512E-08	10	50	40	RC/St. Opt.
24-Mar	5	5.08	5.04	6.5	1.83305E-08	10	50	40	RC/St. Opt.
25-Mar	4	4.06	4.03	6.5	1.46571E-08	10	50	40	RC/St. Opt.
26-Mar	4.5	4.57	4.535	6.5	1.64938E-08	10	50	40	RC/St. Opt.
27-Mar	4	4.57	4.285	6.5	1.55846E-08	10	50	40	RC/St. Opt.
28-Mar	3.5	4.57	4.035	6.5	1.46753E-08	10	50	40	RC/St. Opt.
29-Mar	4.5	4.06	4.28	6.5	1.55664E-08	10	50	40	RC/St. Opt.
30-Mar	4	4.06	4.03	6.5	1.46571E-08	10	50	40	RC/St. Opt.
31-Mar	3.5	3.56	3.53	6.5	1.28386E-08	10	50	40	RC/St. Opt.
1-Apr	4	4.06	4.03	6.5	1.46571E-08	10	50	40	RC/St. Opt.

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
2-Apr	4	4.1	4.05	6.5	1.47299E-08	10	50	40	RC/St. Opt.
3-Apr	4	3.56	3.78	6.5	1.37479E-08	10	50	40	RC/St. Opt.
4-Apr	3.5	4.1	3.8	6.5	1.38206E-08	10	50	40	RC/St. Opt.
5-Apr	4.5	4.57	4.535	6.5	1.64938E-08	10	50	40	RC/St. Opt.
6-Apr	4.5	4.57	4.535	6.5	1.64938E-08	10	50	40	RC/St. Opt.
7-Apr	4	4.1	4.05	6.5	1.47299E-08	10	50	40	RC/St. Opt.
8-Apr	4	4.1	4.05	6.5	1.47299E-08	10	50	40	RC/St. Opt.
9-Apr	4	4.57	4.285	6.5	1.55846E-08	10	50	40	RC/St. Opt.
10-Apr	4	4.1	4.05	6.5	1.47299E-08	10	50	40	RC/St. Opt.
11-Apr	4.5	4.57	4.535	6.5	1.64938E-08	10	50	40	RC/St. Opt.
12-Apr	4.5	4.1	4.3	6.5	1.56391E-08	10	50	40	RC/St. Opt.
13-Apr	3.5	3.56	3.53	6.5	1.28386E-08	10	50	40	RC/St. Opt.
14-Apr	4.5	4.57	4.535	6.5	1.64938E-08	10	50	40	RC/St. Opt.
15-Apr	3.5	3.56	3.53	6.5	1.28386E-08	10	50	40	RC/St. Opt.
end	4.5	4.1	4.3	6.5	1.56391E-08	10	50	40	RC/St. Opt.
Sample 7									
28-Mar									
29-Mar									
30-Mar	1.03	1.03	1.03	2.2	1.10681E-08	20	60	40	RC/St. Opt.
31-Mar	1.03	1.03	1.03	2.2	1.10681E-08	20	60	40	RC/St. Opt.
1-Apr	1.03	1.03	1.03	2.2	1.10681E-08	20	60	40	RC/St. Opt.
2-Apr	1.03	1.03	1.03	2.2	1.10681E-08	20	60	40	RC/St. Opt.
3-Apr	0.52	0.52	0.52	2.2	5.58777E-09	20	60	40	RC/St. Opt.
4-Apr	1.03	1.03	1.03	2.2	1.10681E-08	20	60	40	RC/St. Opt.
5-Apr	0.52	0.52	0.52	2.2	5.58777E-09	20	60	40	RC/St. Opt.
6-Apr	1.55	1.55	1.55	4.3	8.5216E-09	20	60	40	RC/St. Opt.
7-Apr	2.07	2.07	2.07	4.3	1.13805E-08	20	60	40	RC/St. Opt.
8-Apr	1.55	1.55	1.55	4.3	8.5216E-09	20	60	40	RC/St. Opt.
9-Apr	1.55	2.07	1.81	4.3	9.95103E-09	20	60	40	RC/St. Opt.
10-Apr	1.55	2.07	1.81	4.3	9.95103E-09	20	60	40	RC/St. Opt.
11-Apr	1.55	1.55	1.55	4.3	8.5216E-09	20	60	40	RC/St. Opt.
12-Apr	2.07	1.55	1.81	4.3	9.95103E-09	20	60	40	RC/St. Opt.
13-Apr	1.55	2.07	1.81	4.3	9.95103E-09	20	60	40	RC/St. Opt.
14-Apr	1.55	1.55	1.55	4.3	8.5216E-09	20	60	40	RC/St. Opt.
15-Apr	2.59	3.1	2.845	6.5	1.03473E-08	20	60	40	RC/St. Opt.
16-Apr	2.07	2.59	2.33	6.5	8.47423E-09	20	60	40	RC/St. Opt.
end	2.59	2.59	2.59	6.5	9.41986E-09	20	60	40	RC/St. Opt.
	2.59	2.59	2.59	6.5	9.41986E-09	20	60	40	RC/St. Opt.
Sample 8									
28-Mar									
29-Mar									
30-Mar	2.2	1.57	1.885	2.2	2.02557E-08	10	55	45	RC/St. Opt.
31-Mar	1.65	1.57	1.61	2.2	1.73006E-08	10	55	45	RC/St. Opt.
1-Apr	1.65	1.57	1.61	2.2	1.73006E-08	10	55	45	RC/St. Opt.

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
2-Apr	1.65	1.57	1.61	2.2	1.73006E-08	10	55	45	RC/St. Opt.
3-Apr	1.1	1.57	1.335	2.2	1.43455E-08	10	55	45	RC/St. Opt.
4-Apr	2.2	2.09	2.145	2.2	2.30495E-08	10	55	45	RC/St. Opt.
5-Apr	1.1	1.05	1.075	2.2	1.15516E-08	10	55	45	RC/St. Opt.
6-Apr	2.2	1.57	1.885	4.3	1.03634E-08	10	55	45	RC/St. Opt.
7-Apr	2.2	2.09	2.145	4.3	1.17928E-08	10	55	45	RC/St. Opt.
8-Apr	2.75	3.14	2.945	4.3	1.6191E-08	10	55	45	RC/St. Opt.
9-Apr	2.75	2.61	2.68	4.3	1.47341E-08	10	55	45	RC/St. Opt.
10-Apr	2.75	2.61	2.68	4.3	1.47341E-08	10	55	45	RC/St. Opt.
11-Apr	3.3	2.61	2.955	4.3	1.6246E-08	10	55	45	RC/St. Opt.
12-Apr	2.75	2.61	2.68	4.3	1.47341E-08	10	55	45	RC/St. Opt.
13-Apr	2.75	2.12	2.435	4.3	1.33872E-08	10	55	45	RC/St. Opt.
14-Apr	3.3	3.66	3.48	4.3	1.91324E-08	10	55	45	RC/St. Opt.
15-Apr	4.4	5.75	5.075	6.5	1.84578E-08	10	55	45	RC/St. Opt.
16-Apr	4.95	4.71	4.83	6.5	1.75668E-08	10	55	45	RC/St. Opt.
17-Apr	4.95	4.71	4.83	6.5	1.75668E-08	10	55	45	RC/St. Opt.
18-Apr	4.4	4.71	4.555	6.5	1.65666E-08	10	55	45	RC/St. Opt.
END	4.95	4.71	4.83	6.5	1.75668E-08	10	55	45	RC/St. Opt.
	4.4	5.23	4.815	6.5	1.75122E-08	10	55	45	RC/St. Opt.
Sample 1									
28-Apr									
29-Apr									
30-Apr	61.99	61.99	61.99	2.2	6.66127E-07	10	50	40	RC/1% dry
1-May	30.24	30.24	30.24	2.2	3.2495E-07	10	50	40	RC/1% dry
2-May	14.11	14.11	14.11	2.2	1.51622E-07	10	50	40	RC/1% dry
3-May	17.64	17.11	17.375	2.2	1.86707E-07	10	50	40	RC/1% dry
4-May	14.11	14.62	14.365	2.2	1.54362E-07	10	50	40	RC/1% dry
6-May	17.14	16.63	16.885	2.2	1.81441E-07	10	50	40	RC/1% dry
7-May	16.63	16.13	16.38	2.2	1.76015E-07	10	50	40	RC/1% dry
8-May	53.93	53.93	53.93	4.3	2.96497E-07	10	50	40	RC/1% dry
9-May	41.83	40.82	41.325	4.3	2.27197E-07	10	50	40	RC/1% dry
10-May	26.21	26.21	26.21	4.3	1.44097E-07	10	50	40	RC/1% dry
12-May	26.21	25.7	25.955	4.3	1.42696E-07	10	50	40	RC/1% dry
13-May	16.63	17.64	17.135	4.3	9.42049E-08	10	50	40	RC/1% dry
14-May	46.37	46.87	46.62	6.5	1.69557E-07	10	50	40	RC/1% dry
15-May	35.28	35.28	35.28	6.5	1.28314E-07	10	50	40	RC/1% dry
16-May	27.22	26.21	26.715	6.5	9.71627E-08	10	50	40	RC/1% dry
End	32.76	32.76	32.76	6.5	1.19148E-07	10	50	40	RC/1% dry
	32.76	32.76	32.76	6.5	1.19148E-07	10	50	40	RC/1% dry
Sample 2									
30-Apr									
1-May									
2-May	6.8	8.06	7.43	2.2	7.98406E-08	20	60	40	RC/1% dry
3-May	6.28	6.55	6.415	2.2	6.89337E-08	20	60	40	RC/1% dry

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
4-May	6.28	6.05	6.165	2.2	6.62473E-08	20	60	40	RC/1% dry
5-May	5.23	5.54	5.385	2.2	5.78657E-08	20	60	40	RC/1% dry
6-May	5.75	5.54	5.645	2.2	6.06595E-08	20	60	40	RC/1% dry
7-May	13.08	13.1	13.09	4.3	7.19663E-08	20	60	40	RC/1% dry
8-May	10.46	10.58	10.52	4.3	5.78369E-08	20	60	40	RC/1% dry
9-May	8.37	8.57	8.47	4.3	4.65664E-08	20	60	40	RC/1% dry
10-May	9.41	9.58	9.495	4.3	5.22017E-08	20	60	40	RC/1% dry
11-May	9.41	9.58	9.495	4.3	5.22017E-08	20	60	40	RC/1% dry
12-May	9.41	10.08	9.745	4.3	5.35761E-08	20	60	40	RC/1% dry
13-May	20.4	21.17	20.785	6.5	7.55952E-08	20	60	40	RC/1% dry
14-May	20.92	20.66	20.79	6.5	7.56134E-08	20	60	40	RC/1% dry
End	24.06	24.19	24.125	6.5	8.77429E-08	20	60	40	RC/1% dry
	24.06	23.69	23.875	6.5	8.68336E-08	20	60	40	RC/1% dry
Sample 3									
28-Apr									
29-Apr									
30-Apr	37.24	37.38	37.31	2.2	4.00922E-07	10	55	45	RC/1% dry
1-May	18.62	18.94	18.78	2.2	2.01804E-07	10	55	45	RC/1% dry
2-May	18.62	19.46	19.04	2.2	2.04598E-07	10	55	45	RC/1% dry
3-May	23.94	23.55	23.745	2.2	2.55157E-07	10	55	45	RC/1% dry
4-May	21.81	20.99	21.4	2.2	2.29958E-07	10	55	45	RC/1% dry
6-May	17.02	16.9	16.96	2.2	1.82247E-07	10	55	45	RC/1% dry
7-May	16.49	16.38	16.435	2.2	1.76606E-07	10	55	45	RC/1% dry
8-May	20.75	22.02	21.385	4.3	1.17571E-07	10	55	45	RC/1% dry
9-May	16.49	16.9	16.695	4.3	9.17859E-08	10	55	45	RC/1% dry
10-May	13.83	13.31	13.57	4.3	7.46052E-08	10	55	45	RC/1% dry
11-May	13.83	13.82	13.825	4.3	7.60072E-08	10	55	45	RC/1% dry
12-May	12.24	12.8	12.52	4.3	6.88325E-08	10	55	45	RC/1% dry
13-May	19.15	19.46	19.305	6.5	7.02125E-08	10	55	45	RC/1% dry
14-May	17.56	17.41	17.485	6.5	6.35931E-08	10	55	45	RC/1% dry
End	20.22	19.46	19.84	6.5	7.21583E-08	10	55	45	RC/1% dry
	19.68	19.46	19.57	6.5	7.11763E-08	10	55	45	RC/1% dry
Sample 5									
27-May	—								
28-May									
29-May	2.62	2.53	2.575	2.2	2.76702E-08	20	65	45	RC/St. Opt.
30-May	2.09	2.02	2.055	2.2	2.20824E-08	20	65	45	RC/St. Opt.
31-May	2.62	2.53	2.575	2.2	2.76702E-08	20	65	45	RC/St. Opt.
1-Jun	2.62	2.53	2.575	2.2	2.76702E-08	20	65	45	RC/St. Opt.
2-Jun	2.09	2.53	2.31	2.2	2.48226E-08	20	65	45	RC/St. Opt.
3-Jun	2.09	2.02	2.055	2.2	2.20824E-08	20	65	45	RC/St. Opt.
4-Jun	1.57	2.02	1.795	2.2	1.92886E-08	20	65	45	RC/St. Opt.
5-Jun	2.09	2.02	2.055	2.2	2.20824E-08	20	65	45	RC/St. Opt.
6-Jun	1.57	1.52	1.545	2.2	1.66021E-08	20	65	45	RC/St. Opt.

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
7-Jun	3.14	3.03	3.085	4.3	1.69607E-08	20	65	45	RC/St. Opt.
8-Jun	3.14	3.03	3.085	4.3	1.69607E-08	20	65	45	RC/St. Opt.
9-Jun	2.62	3.03	2.825	4.3	1.55313E-08	20	65	45	RC/St. Opt.
10-Jun	2.62	2.53	2.575	4.3	1.41568E-08	20	65	45	RC/St. Opt.
11-Jun	2.62	3.03	2.825	4.3	1.55313E-08	20	65	45	RC/St. Opt.
12-Jun	2.62	2.53	2.575	4.3	1.41568E-08	20	65	45	RC/St. Opt.
13-Jun	2.09	2.02	2.055	4.3	1.1298E-08	20	65	45	RC/St. Opt.
14-Jun	4.01	4.21	4.11	6.5	1.49481E-08	20	65	45	RC/St. Opt.
15-Jun	4.01	4.21	4.11	6.5	1.49481E-08	20	65	45	RC/St. Opt.
16-Jun	4.01	4.21	4.11	6.5	1.49481E-08	20	65	45	RC/St. Opt.
17-Jun	4.2	4.1	4.15	6.5	1.50936E-08	20	65	45	RC/St. Opt.
End	3.9	4	3.95	6.5	1.43662E-08	20	65	45	RC/St. Opt.
	3.8	3.9	3.85	6.5	1.40025E-08	20	65	45	RC/St. Opt.
Sample 6									
27-May									
28-May									
29-May	37.52	39.15	38.335	2.2	4.11937E-07	10	60	50	RC/St. Opt.
30-May	86.83	82.48	84.655	2.2	9.09678E-07	10	60	50	RC/St. Opt.
31-May	24.12	23.49	23.805	2.2	2.55802E-07	10	60	50	RC/St. Opt.
1-Jun	24.12	23.49	23.805	2.2	2.55802E-07	10	60	50	RC/St. Opt.
2-Jun	24.12	24.01	24.065	2.2	2.58596E-07	10	60	50	RC/St. Opt.
3-Jun	24.12	24.01	24.065	2.2	2.58596E-07	10	60	50	RC/St. Opt.
4-Jun	13.4	13.57	13.485	2.2	1.44906E-07	10	60	50	RC/St. Opt.
5-Jun	10.18	10.44	10.31	2.2	1.10788E-07	10	60	50	RC/St. Opt.
6-Jun	15.01	14.62	14.815	2.2	1.59198E-07	10	60	50	RC/St. Opt.
7-Jun	32.7	31.84	32.27	4.3	1.77414E-07	10	60	50	RC/St. Opt.
8-Jun	32.7	31.84	32.27	4.3	1.77414E-07	10	60	50	RC/St. Opt.
9-Jun	32.7	32.36	32.53	4.3	1.78844E-07	10	60	50	RC/St. Opt.
10-Jun	21.44	20.88	21.16	4.3	1.16334E-07	10	60	50	RC/St. Opt.
End	18.22	18.27	18.245	4.3	1.00307E-07	10	60	50	RC/St. Opt.
	13.94	13.57	13.755	4.3	7.56223E-08	10	60	50	RC/St. Opt.
Sample 9									
5-Jun									
6-Jun									
7-Jun	1.09	1.02	1.055	2.2	1.13367E-08	20	70	50	RC/St. Opt.
8-Jun	1.09	1.02	1.055	2.2	1.13367E-08	20	70	50	RC/St. Opt.
14-Jun	1.09	1.02	1.055	2.2	1.13367E-08	20	70	50	RC/St. Opt.
15-Jun	1.09	1.02	1.055	2.2	1.13367E-08	20	70	50	RC/St. Opt.
16-Jun	2	2.03	2.015	4.3	1.10781E-08	20	70	50	RC/St Opt.
17-Jun	2	1.9	1.95	4.3	1.07207E-08	20	70	50	RC/St. Opt.
18-Jun	1.8	1.8	1.8	4.3	9.89605E-09	20	70	50	RC/St. Opt.
End	1.8	1.9	1.85	4.3	1.01709E-08	20	70	50	RC/St. Opt.
	1.7	1.9	1.8	4.3	9.89605E-09	20	70	50	RC/St. Opt.

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
Sample10									
4-Jun									
5-Jun									
6-Jun	87.84	85.67	86.755	2.2	9.32244E-07	10	50	40	RC/3% dry
7-Jun	41.55	40.53	41.04	2.2	4.41004E-07	10	50	40	RC/3% dry
8-Jun	41.55	40.53	41.04	2.2	4.41004E-07	10	50	40	RC/3% dry
9-Jun	41.55	40.53	41.04	2.2	4.41004E-07	10	50	40	RC/3% dry
10-Jun	35.77	34.37	35.07	2.2	3.76852E-07	10	50	40	RC/3% dry
11-Jun	31.03	30.27	30.65	2.2	3.29356E-07	10	50	40	RC/3% dry
12-Jun	37.35	36.42	36.885	2.2	3.96356E-07	10	50	40	RC/3% dry
13-Jun	25.25	24.11	24.68	2.2	2.65204E-07	10	50	40	RC/3% dry
14-Jun	38.6	37.3	37.95	2.2	4.078E-07	10	50	40	RC/3% dry
15-Jun	38.6	37.3	37.95	2.2	4.078E-07	10	50	40	RC/3% dry
16-Jun	38.6	37.3	37.95	2.2	4.078E-07	10	50	40	RC/3% dry
17-Jun			0		#DIV/0!	10	50	40	RC/3% dry
18-Jun	36.82	35.4	36.11	4.3	1.98526E-07	10	50	40	RC/3% dry
19-Jun	35.24	33.86	34.55	4.3	1.89949E-07	10	50	40	RC/3% dry
20-Jun	35.49	30.43	32.96	4.3	1.81208E-07	10	50	40	RC/3% dry
21-Jun	25.48	25.04	25.26	4.3	1.38875E-07	10	50	40	RC/3% dry
END	25.25	24.11	24.68	4.3	1.35686E-07	10	50	40	RC/3% dry
	25.25	24.11	24.68	4.3	1.35686E-07	10	50	40	RC/3% dry
Sample 11									
17-Jun									
18-Jun									
19-Jun	1.1	1.2	1.15	2.2	1.23576E-08	10	50	40	RC/4% wet
20-Jun	1	1.2	1.1	2.2	1.18203E-08	10	50	40	RC/4% wet
21-Jun	1.3	0.8	1.05	2.2	1.1283E-08	10	50	40	RC/4% wet
28-Jun	1	1	1	2.2	1.07457E-08	10	50	40	RC/4% wet
29-Jun	1	1.5	1.25	2.2	1.34321E-08	10	50	40	RC/4% wet
30-Jun	1.53	1.63	1.58	4.3	8.68653E-09	10	50	40	RC/4% wet
1-Jul	1.9	1.9	1.9	4.3	1.04458E-08	10	50	40	RC/4% wet
2-Jul	1.9	1.9	1.9	4.3	1.04458E-08	10	50	40	RC/4% wet
3-Jul	1.7	1.9	1.8	4.3	9.89605E-09	10	50	40	RC/4% wet
4-Jul	2.4	3	2.7	6.5	9.81993E-09	10	50	40	RC/4% wet
5-Jul	3	3.1	3.05	6.5	1.10929E-08	10	50	40	RC/4% wet
6-Jul	2.4	2.6	2.5	6.5	9.09252E-09	10	50	40	RC/4% wet
7-Jul	2.4	2.5	2.45	6.5	8.91067E-09	10	50	40	RC/4% wet
End	2.4	2.5	2.45	6.5	8.91067E-09	10	50	40	RC/4% wet
	2.5	2.5	2.5	6.5	9.09252E-09	10	50	40	RC/4% wet
Sample 9A									
7-Jul									
8-Jul									
9-Jul	0.5	0.5	0.5	2.2	5.37286E-09	20	70	50	RC/St. opt.
10-Jul	0.6	0.8	0.7	2.2	7.522E-09	20	70	St. o	RC/St. opt.

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
11-Jul	0.6	0.8	0.7	2.2	7.522E-09	20	70	St. o	RC/St. opt.
12-Jul	0.6	0.7	0.65	2.2	6.98471E-09	20	70	St. o	RC/St. opt.
13-Jul	0.9	1.2	1.05	4.3	5.7727E-09	20	70	St. o	RC/St. opt.
14-Jul	1.1	1.3	1.2	4.3	6.59737E-09	20	70	St. o	RC/St. opt.
15-Jul	1.2	1.3	1.25	4.3	6.87226E-09	20	70	St. o	RC/St. opt.
16-Jul	1.1	1.3	1.2	4.3	6.59737E-09	20	70	St. o	RC/St. opt.
17-Jul	1.6	2.1	1.85	6.5	6.72847E-09	20	70	St. o	RC/St. opt.
18-Jul	1.8	1.9	1.85	6.5	6.72847E-09	20	70	St. o	RC/St. opt.
19-Jul	1.64	2.03	1.835	6.5	6.67391E-09	20	70	St. o	RC/St. opt.
End	1.64	1.52	1.58	6.5	5.74648E-09	20	70	St. o	RC/St. opt.
	2.19	2.03	2.11	6.5	7.67409E-09	20	70	St. o	RC/St. opt.
Sample 14									
30-Jun									
1-Jul									
2-Jul	143.82	147.97	145.9	2.2	1.56775E-06	10	50	40	RC/Mod dry
3-Jul	148.53	150.5	149.52	2.2	1.60664E-06	10	50	40	RC/Mod dry
4-Jul	100.41	103.53	101.97	2.2	1.09574E-06	10	50	40	RC/Mod dry
7-Jul	56.48	57.57	57.025	2.2	6.12774E-07	10	50	40	RC/Mod dry
8-Jul	89.43	90.4	89.915	2.2	9.66201E-07	10	50	40	RC/Mod dry
9-Jul	76.88	75.76	76.32	2.2	8.20113E-07	10	50	40	RC/Mod dry
10-Jul	81.07	81.81	81.44	2.2	8.75131E-07	10	50	40	RC/Mod dry
14-Jul	80.54	80.81	80.675	2.2	8.6691E-07	10	50	40	RC/Mod dry
14-Jul	80.02	80.3	80.16	2.2	8.61376E-07	10	50	40	RC/Mod dry
14-Jul	32.43	33.33	32.88	4.3	2.16921E-06	10	50	40	RC/Mod dry
14-Jul	19.35	20.2	19.775	4.3	1.30463E-06	10	50	40	RC/Mod dry
15-Jul	32.43	32.83	32.63	4.3	2.15272E-06	10	50	40	RC/Mod dry
15-Jul	21.97	22.73	22.35	4.3	1.47451E-06	10	50	40	RC/Mod dry
15-Jul	35.56	35.86	35.71	4.3	2.35592E-06	10	50	40	RC/Mod dry
15-Jul	29.81	29.29	29.55	4.3	1.94952E-06	10	50	40	RC/Mod dry
16-Jul	39.75	40.4	40.075	4.3	2.64389E-06	10	50	40	RC/Mod dry
16-Jul	32.95	33	32.975	4.3	2.17548E-06	10	50	40	RC/Mod dry
16-Jul	38.18	38.38	38.28	4.3	2.52547E-06	10	50	40	RC/Mod dry
16-Jul	34	34.34	34.17	4.3	2.25432E-06	10	50	40	RC/Mod dry
16-Jul	35.56	36.87	36.215	6.5	3.16114E-06	10	50	40	RC/Mod dry
16-Jul	32.95	33.84	33.395	6.5	2.91499E-06	10	50	40	RC/Mod dry
19-Jul	35.04	35.35	35.195	6.5	3.07211E-06	10	50	40	RC/Mod dry
19-Jul	32.43	31.82	32.125	6.5	2.80413E-06	10	50	40	RC/Mod dry
19-Jul	26.15	27.27	26.71	6.5	2.33147E-06	10	50	40	RC/Mod dry
19-Jul	30.86	31.31	31.085	6.5	2.71335E-06	10	50	40	RC/Mod dry
19-Jul	28.77	28.79	28.78	6.5	2.51216E-06	10	50	40	RC/Mod dry
19-Jul	28.24	28.28	28.26	6.5	2.46677E-06	10	50	40	RC/Mod dry
19-Jul	28.24	29.29	28.765	6.5	2.51085E-06	10	50	40	RC/Mod dry
19-Jul	26.67	26.26	26.465	6.5	2.31008E-06	10	50	40	RC/Mod dry
20-Jul	25.63	25.25	25.44	6.5	2.22061E-06	10	50	40	RC/Mod dry
20-Jul	28.24	29.29	28.765	6.5	2.51085E-06	10	50	40	RC/Mod dry

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
20-Jul	26.15	26.26	26.205	6.5	2.28739E-06	10	50	40	RC/Mod dry
20-Jul	26.67	26.77	26.72	6.5	2.33234E-06	10	50	40	RC/Mod dry
End	24.58	25.25	24.915	6.5	2.17479E-06	10	50	40	RC/Mod dry
	25.1	24.75	24.925	6.5	2.17566E-06	10	50	40	RC/Mod dry
Sample 6C									
17-Jul									
18-Jul									
19-Jul	2.5	3	2.75	2.2	2.95507E-08	10	60	50	RC/St. opt.
20-Jul	2.5	3	2.75	2.2	2.95507E-08	10	60	50	RC/St. opt.
22-Jul	2	2.5	2.25	2.2	2.41778E-08	10	60	50	RC/St. opt.
23-Jul	2	2.5	2.25	2.2	2.41778E-08	10	60	50	RC/St. opt.
24-Jul	4.5	5.5	5	4.3	2.7489E-08	10	60	50	RC/St. opt.
25-Jul	5.5	5.5	5.5	4.3	3.02379E-08	10	60	50	RC/St. opt.
26-Jul	4.9	5	4.95	4.3	2.72141E-08	10	60	50	RC/St. opt.
27-Jul	5	5.1	5.05	4.3	2.77639E-08	10	60	50	RC/St. opt.
28-Jul	7	9	8	6.5	2.90961E-08	10	60	50	RC/St. opt.
29-Jul	7.5	7.5	7.5	6.5	2.72776E-08	10	60	50	RC/St. opt.
End	7	7.5	7.25	6.5	2.63683E-08	10	60	50	RC/St. opt.
	7	7	7	6.5	2.54591E-08	10	60	50	RC/St. opt.
Sample 12A									
5-Jul									
6-Jul									
7-Jul	13.64	14.62	14.13	2.2	1.51837E-07	10	50	40	RC/Mod.opt
8-Jul	13.64	14.11	13.875	2.2	1.49097E-07	10	50	40	RC/Mod.opt
9-Jul	16.3	16.5	16.4	2.2	1.7623E-07	10	50	40	RC/Mod.opt
15-Jul	14.8	15.1	14.95	2.2	1.60648E-07	10	50	40	RC/Mod.opt
16-Jul	13.6	13.9	13.75	2.2	1.47754E-07	10	50	40	RC/Mod.opt
17-Jul	30.19	30.74	30.465	4.3	1.67491E-07	10	50	40	RC/Mod.opt
18-Jul	20.73	21.15	20.94	4.3	1.15124E-07	10	50	40	RC/Mod.opt
19-Jul	16.56	17.14	16.85	4.3	9.2638E-08	10	50	40	RC/Mod.opt
20-Jul	14.12	14.11	14.115	4.3	7.76015E-08	10	50	40	RC/Mod.opt
21-Jul	14.12	13.61	13.865	4.3	7.62271E-08	10	50	40	RC/Mod.opt
22-Jul	13.64	14.11	13.875	4.3	7.6282E-08	10	50	40	RC/Mod.opt
23-Jul	56.01	53.42	54.715	6.5	1.98999E-07	10	50	40	RC/Mod.opt
24-Jul	49.19	50.4	49.795	6.5	1.81105E-07	10	50	40	RC/Mod.opt
25-Jul	35.55	34.78	35.165	6.5	1.27895E-07	10	50	40	RC/Mod.opt
26-Jul	28.73	29.23	28.98	6.5	1.05401E-07	10	50	40	RC/Mod.opt
27-Jul	22.89	22.18	22.535	6.5	8.196E-08	10	50	40	RC/Mod.opt
28-Jul	19.48	19.15	19.315	6.5	7.02488E-08	10	50	40	RC/Mod.opt
End	18.02	18.14	18.08	6.5	6.57571E-08	10	50	40	RC/Mod.opt
	16.45	16.33	16.39	6.5	5.96106E-08	10	50	40	RC/Mod.opt
Sample 13A									
21-Jul									

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
22-Jul									
23-Jul	0.3	0.4	0.35	2.2	3.761E-09	10	50	40	RC/Mod.wet
24-Jul	0.3	0.3	0.3	2.2	3.22371E-09	10	50	40	RC/Mod.wet
25-Jul	0.3	0.4	0.35	2.2	3.761E-09	10	50	40	RC/Mod.wet
26-Jul	0.2	0.4	0.3	2.2	3.22371E-09	10	50	40	RC/Mod.wet
27-Jul	0.3	0.4	0.35	2.2	3.761E-09	10	50	40	RC/Mod.wet
28-Jul	0.3	0.3	0.3	2.2	3.22371E-09	10	50	40	RC/Mod.wet
4-Aug	0.3	0.4	0.35	2.2	3.761E-09	10	50	40	RC/Mod.wet
5-Aug	0.3	0.4	0.35	2.2	3.761E-09	10	50	40	RC/Mod.wet
6-Aug	0.6	0.7	0.65	4.3	3.57357E-09	10	50	40	RC/Mod.wet
7-Aug	0.5	0.6	0.55	4.3	3.02379E-09	10	50	40	RC/Mod.wet
9-Aug	0.5	0.6	0.55	4.3	3.02379E-09	10	50	40	RC/Mod.wet
10-Aug	0.5	0.6	0.55	4.3	3.02379E-09	10	50	40	RC/Mod.wet
11-Aug	0.9	1.2	1.05	6.5	3.81886E-09	10	50	40	RC/Mod.wet
12-Aug	1	1.2	1.1	6.5	4.00071E-09	10	50	40	RC/Mod.wet
END	0.9	1	0.95	6.5	3.45516E-09	10	50	40	RC/Mod.wet
	1	1.1	1.05	6.5	3.81886E-09	10	50	40	RC/Mod.wet
Sample 16									
7-Aug									
8-Aug									
9-Aug	23.89	25.35	24.62	2.2	2.64559E-07	10	50	40	RC/St. dry
10-Aug	39.1	39.04	39.07	4.3	2.14799E-07	10	50	40	RC/St. dry
12-Aug	38.55	39.55	39.05	4.3	2.14689E-07	10	50	40	RC/St. dry
13-Aug	102.63	104.95	103.79	6.5	3.77485E-07	10	50	40	RC/St. dry
15-Aug	103.17	101.91	102.54	6.5	3.72939E-07	10	50	40	RC/St. dry
16-Aug	95.03	95.32	95.175	6.5	3.46152E-07	10	50	40	RC/St. dry
17-Aug	58.1	60.33	59.215	6.5	2.15366E-07	10	50	40	RC/St. dry
18-Aug	63.53	64.39	63.96	6.5	2.32623E-07	10	50	40	RC/St. dry
19-Aug	59.73	61.35	60.54	6.5	2.20185E-07	10	50	40	RC/St. dry
20-Aug	74.39	75.54	74.965	6.5	2.72648E-07	10	50	40	RC/St. dry
24-Aug	66.25	65.91	66.08	6.5	2.40334E-07	10	50	40	RC/St. dry
25-Aug	61.36	60.33	60.845	6.5	2.21294E-07	10	50	40	RC/St. dry
26-Aug	52.13	51.92	52.025	6.5	1.89215E-07	10	50	40	RC/St. dry
27-Aug	46.7	46.14	46.42	6.5	1.6883E-07	10	50	40	RC/St. dry
END	46.16	48.16	47.16	6.5	1.71521E-07	10	50	40	RC/St. dry
	48.33	46.14	47.235	6.5	1.71794E-07	10	50	40	RC/St. dry
Sample 20									
19-Aug									
19-Aug									
19-Aug	29.57	30.1	29.835	2.2	9.23323E-05	10	50	40	Baseline Ash
19-Aug	26.4	25.87	26.135	2.2	8.08817E-05	10	50	40	Baseline Ash
19-Aug	23.23	23.23	23.23	2.2	7.18914E-05	10	50	40	Baseline Ash
19-Aug	20.59	20.06	20.325	2.2	6.29011E-05	10	50	40	Baseline Ash
19-Aug	30.1	29.57	29.835	2.2	9.23323E-05	10	50	40	Baseline Ash

Date	Total Outflow	T In
19-Aug	26.93	
19-Aug	23.23	
19-Aug	21.12	
19-Aug	30.62	
19-Aug	26.4	
19-Aug	23.23	
23-Aug	20.59	
23-Aug	97.68	
23-Aug	110.35	

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
Sample 19A									
11-Sep									
12-Sep									
13-Sep	4.53	5.2	4.865	6.5	1.76941E-08	10	50	40	RC/Mod dry
14-Sep	4.53	5.72	5.125	6.5	1.86397E-08	10	50	40	RC/Mod dry
End	4.53	5.2	4.865	6.5	1.76941E-08	10	50	40	RC/Mod dry
	4.4	4.8	4.6	6.5	1.67302E-08	10	50	40	RC/Mod dry
Sample 22									
9-Sep									
9-Sep									
9-Sep	68.43	68.36	68.395	2.2	0.000211666	10	50	40	Urea ash
9-Sep	71.68	71.45	71.565	2.2	0.000221477	10	50	40	Urea ash
9-Sep	69.5	69.9	69.7	2.2	0.000215705	10	50	40	Urea ash
9-Sep	70.59	70.42	70.505	2.2	0.000218196	10	50	40	Urea ash
9-Sep	71.13	70.93	71.03	2.2	0.000219821	10	50	40	Urea ash
10-Sep	71.13	71.44	71.285	2.2	0.00022061	10	50	40	Urea ash
10-Sep	70.88	70.91	70.895	2.2	0.000219403	10	50	40	Urea ash
10-Sep	70.05	70.93	70.49	2.2	0.00021815	10	50	40	Urea ash
10-Sep	70.05	69.39	69.72	2.2	0.000215767	10	50	40	Urea ash
10-Sep	72.76	72.47	72.615	2.2	0.000224726	10	50	40	Urea ash
10-Sep	72.22	71.45	71.835	2.2	0.000222312	10	50	40	Urea ash
10-Sep	125.98	126.95	126.47	4.3	0.000200241	10	50	40	Urea ash
10-Sep	126.52	126.96	126.74	4.3	0.000200676	10	50	40	Urea ash
13-Sep	126.52	127.47	127	4.3	0.00020108	10	50	40	Urea ash
13-Sep	123.8	124.9	124.35	4.3	0.000196892	10	50	40	Urea ash
13-Sep	116.2	119.25	117.73	4.3	0.000186402	10	50	40	Urea ash
13-Sep	117.29	118.22	117.76	4.3	0.000186449	10	50	40	Urea ash
13-Sep	117.29	118.22	117.76	4.3	0.000186449	10	50	40	Urea ash
13-Sep	117.29	118.22	117.76	4.3	0.000186449	10	50	40	Urea ash
13-Sep	106.98	107.43	107.21	6.5	0.000187155	10	50	40	Urea ash
13-Sep	108.61	108.98	108.8	6.5	0.00018993	10	50	40	Urea ash
13-Sep	109.69	110	109.85	6.5	0.000191764	10	50	40	Urea ash
14-Sep	109.69	110.5	110.1	6.5	0.0001922	10	50	40	Urea ash
14-Sep	108.6	108.97	108.79	6.5	0.000189913	10	50	40	Urea ash
14-Sep	108.6	107.94	108.27	6.5	0.000189014	10	50	40	Urea ash
14-Sep	109.69	108.98	109.34	6.5	0.000190873	10	50	40	Urea ash
End	108.6	107.94	108.27	6.5	0.000189014	10	50	40	Urea ash
	109.15	108.97	109.06	6.5	0.000190393	10	50	40	Urea ash
			0						
Sample 21									
21-Sep									
22-Sep	?								
23-Sep	1.9	2.3	2.1	6.5	7.63772E-09	10	50	40	AC/Mod. opt.
24-Sep	1.8	2.3	2.05	6.5	7.45587E-09	10	50	40	AC/Mod. opt.

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
25-Sep	1.8	2.2	2	6.5	7.27402E-09	10	50	40	AC/Mod. opt.
26-Sep	2	2.3	2.15	6.5	7.81957E-09	10	50	40	AC/Mod. opt.
27-Sep	2	2.2	2.1	6.5	7.63772E-09	10	50	40	AC/Mod. opt.
End	1.9	2.2	2.05	6.5	7.45587E-09	10	50	40	AC/Mod. opt.
	1.9	2.2	2.05	6.5	7.45587E-09	10	50	40	AC/Mod. opt.
Sample 24									
27-Sep									
27-Sep									
27-Sep	78.67	83	80.835	2.2	0.000125083	10	50	40	Ca ash(Col.6/29)
27-Sep	78.67	77	77.835	2.2	0.000120441	10	50	40	Ca ash(Col.6/29)
27-Sep	74.45	73.5	73.975	2.2	0.000114468	10	50	40	Ca ash(Col.6/29)
27-Sep	72.86	71.5	72.18	2.2	0.00011169	10	50	40	Ca ash(Col.6/29)
27-Sep	71.28	70	70.64	2.2	0.000109307	10	50	40	Ca ash(Col.6/29)
27-Sep	70.22	70	70.11	2.2	0.000108487	10	50	40	Ca ash(Col.6/29)
27-Sep	69.7	70	69.85	2.2	0.000108085	10	50	40	Ca ash(Col.6/29)
27-Sep	69.17	69	69.085	2.2	0.000106901	10	50	40	Ca ash(Col.6/29)
27-Sep	77.09	77	77.045	4.3	0.000121991	10	50	40	Ca ash(Col.6/29)
27-Sep	77.09	76.5	76.795	4.3	0.000121595	10	50	40	Ca ash(Col.6/29)
27-Sep	77.09	76.5	76.795	4.3	0.000121595	10	50	40	Ca ash(Col.6/29)
27-Sep	76.56	76.5	76.53	4.3	6.05876E-05	10	50	40	Ca ash(Col.6/29)
27-Sep	121.97	121.5	121.74	6.5	0.000127512	10	50	40	Ca ash(Col.6/29)
27-Sep	120.91	120.5	120.71	6.5	0.000126434	10	50	40	Ca ash(Col.6/29)
27-Sep	120.91	122	121.46	6.5	0.000127219	10	50	40	Ca ash(Col.6/29)
27-Sep	121.97	121.5	121.74	6.5	0.000127512	10	50	40	Ca ash(Col.6/29)
END	120.91	120	120.46	6.5	0.000126172	10	50	40	Ca ash(Col.6/29)
	119.86	119	119.43	6.5	0.000125098	10	50	40	Ca ash(Col.6/29)
Sample 25									
29-Sep									
29-Sep									
29-Sep	113.47	115	114.24	2.2	0.000176765	10	50	40	Ca ash(Col. 7/2)
29-Sep	112.5	113.5	113	2.2	0.000174854	10	50	40	Ca ash(Col. 7/2)
29-Sep	112.98	114	113.49	2.2	0.000175612	10	50	40	Ca ash(Col. 7/2)
29-Sep	112.01	113	112.51	2.2	0.000174088	10	50	40	Ca ash(Col. 7/2)
29-Sep	112.5	113	112.75	2.2	0.000174467	10	50	40	Ca ash(Col. 7/2)
29-Sep	111.04	111.5	111.27	2.2	0.000172177	10	50	40	Ca ash(Col. 7/2)
29-Sep	114.45	115	114.73	4.3	0.000181652	10	50	40	Ca ash(Col. 7/2)
29-Sep	113.96	115	114.48	4.3	0.000181264	10	50	40	Ca ash(Col. 7/2)
29-Sep	113.47	114.5	113.99	4.3	0.00018048	10	50	40	Ca ash(Col. 7/2)
29-Sep	113.47	115	114.24	4.3	0.000180876	10	50	40	Ca ash(Col. 7/2)
29-Sep	112.98	113.5	113.24	4.3	0.000179301	10	50	40	Ca ash(Col. 7/2)
29-Sep	112.98	114	113.49	4.3	0.000179696	10	50	40	Ca ash(Col. 7/2)
29-Sep	112.98	114	113.49	4.3	0.000179696	10	50	40	Ca ash(Col. 7/2)
29-Sep	111.52	112.5	112.01	4.3	0.000177353	10	50	40	Ca ash(Col. 7/2)
29-Sep	102.76	104	103.38	6.5	0.000180477	10	50	40	Ca ash(Col. 7/2)

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
29-Sep	103.24	104	103.62	6.5	0.000180896	10	50	40	Ca ash(Col. 7/2)
29-Sep	103.24	104	103.62	6.5	0.000180896	10	50	40	Ca ash(Col. 7/2)
29-Sep	104.22	105	104.61	6.5	0.000182624	10	50	40	Ca ash(Col. 7/2)
End	102.76	103.5	103.13	6.5	0.000180041	10	50	40	Ca ash(Col. 7/2)
	102.76	103.5	103.13	6.5	0.000180041	10	50	40	Ca ash(Col. 7/2)
Sample 28									
7-Oct									
7-Oct									
7-Oct	90.1	90.5	90.3	2.2	0.000139729	10	50	40	Base-Ash.cured
7-Oct	90.58	90.5	90.54	2.2	0.0001401	10	50	40	Base-Ash.cured
7-Oct	90.1	91	90.55	2.2	0.000140115	10	50	40	Base-Ash.cured
7-Oct	90.58	91	90.79	2.2	0.000140487	10	50	40	Base-Ash.cured
7-Oct	86.2	87	86.6	4.3	0.00013712	10	50	40	Base-Ash.cured
7-Oct	86.69	87	86.845	4.3	0.000137508	10	50	40	Base-Ash.cured
7-Oct	85.71	86	85.855	4.3	0.00013594	10	50	40	Base-Ash.cured
7-Oct	86.2	86.5	86.35	4.3	0.000136724	10	50	40	Base-Ash.cured
7-Oct	100.81	101.5	101.16	6.5	0.000132445	10	50	40	Base-Ash.cured
7-Oct	100.32	100.5	100.41	6.5	0.000131469	10	50	40	Base-Ash.cured
End	100.32	100.5	100.41	6.5	0.000131469	10	50	40	Base-Ash.cured
	99.84	100	99.92	6.5	0.000130828	10	50	40	Base-Ash.cured
Sample 29									
8-Oct									
8-Oct									
8-Oct	93.46	92	92.73	2.2	9.56592E-05	10	50	40	UreaAsh cured
8-Oct	93.46	92.5	92.98	2.2	9.59171E-05	10	50	40	UreaAsh cured
8-Oct	93.46	92.5	92.98	2.2	9.59171E-05	10	50	40	UreaAsh cured
8-Oct	92.4	91.5	91.95	2.2	9.48545E-05	10	50	40	UreaAsh cured
8-Oct	116.69	115	115.85	4.3	9.17126E-05	10	50	40	UreaAsh cured
8-Oct	116.69	115	115.85	4.3	9.17126E-05	10	50	40	UreaAsh cured
8-Oct	117.22	115	116.11	4.3	9.19224E-05	10	50	40	UreaAsh cured
8-Oct	116.69	115	115.85	4.3	9.17126E-05	10	50	40	UreaAsh cured
8-Oct	110.88	110	110.44	6.5	9.64011E-05	10	50	40	UreaAsh cured
8-Oct	94.51	93	93.755	6.5	9.82045E-05	10	50	40	UreaAsh cured
8-Oct	94.51	93	93.755	6.5	9.82045E-05	10	50	40	UreaAsh cured
End	93.98	93	93.49	6.5	9.79269E-05	10	50	40	UreaAsh cured
	93.98	93	93.49	6.5	9.79269E-05	10	50	40	UreaAsh cured
Sample 18A									
17-Oct									
18-Oct									
19-Oct	0.3	0.4	0.35	6.5	1.27295E-09	10	50	40	AC/Mod wet
20-Oct	0.3	0.4	0.35	6.5	1.27295E-09	10	50	40	AC/Mod wet
21-Oct	0.3	0.4	0.35	6.5	1.27295E-09	10	50	40	AC/Mod wet
End	0.3	0.4	0.35	6.5	1.27295E-09	10	50	40	AC/Mod wet

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
	0.4	0.5	0.45	6.5	1.63665E-09	10	50	40	AC/Mod wet
Sample 19A									
5-Oct									
6-Oct									
7-Oct	15.75	15.42	15.585	6.5	5.66828E-08	10	50	40	AC/Mod. dry
8-Oct	15.2	14.91	15.055	6.5	5.47552E-08	10	50	40	AC/Mod. dry
9-Oct	14.12	14.39	14.255	6.5	5.18456E-08	10	50	40	AC/Mod. dry
10-Oct	13.58	13.88	13.73	6.5	4.99361E-08	10	50	40	AC/Mod. dry
11-Oct	14.12	13.88	14	6.5	5.09181E-08	10	50	40	AC/Mod. dry
End	13.58	13.36	13.47	6.5	4.89905E-08	10	50	40	AC/Mod. dry
	13.58	13.36	13.47	6.5	4.89905E-08	10	50	40	AC/Mod. dry
Sample 23									
12-Oct									
13-Oct									
14-Oct	1	1.3	1.15	6.5	4.18256E-09	10	50	40	AC/$CaCl_2$ treat.
15-Oct	0.9	1.3	1.1	6.5	4.00071E-09	10	50	40	AC/$CaCl_2$ treat.
16-Oct	1	1.2	1.1	6.5	4.00071E-09	10	50	40	AC/$CaCl_2$ treat.
17-Oct	1	1.2	1.1	6.5	4.00071E-09	10	50	40	AC/$CaCl_2$ treat.
18-Oct	1.1	1.2	1.15	6.5	4.18256E-09	10	50	40	AC/$CaCl_2$ treat.
19-Oct	1.1	1.2	1.15	6.5	4.18256E-09	10	50	40	AC/$CaCl_2$ treat.
20-Oct	1.1	1.2	1.15	6.5	4.18256E-09	10	50	40	AC/$CaCl_2$ treat.
21-Oct	1	1.2	1.1	6.5	4.00071E-09	10	50	40	AC/$CaCl_2$ treat.
22-Oct	1.2	1.1	1.15	6.5	4.18256E-09	10	50	40	AC/$CaCl_2$ treat.
23-Oct	1	1.2	1.1	6.5	4.00071E-09	10	50	40	AC/$CaCl_2$ treat.
24-Oct	1	1.3	1.15	6.5	4.18256E-09	10	50	40	AC/$CaCl_2$ treat.
25-Oct	1	1.2	1.1	6.5	4.00071E-09	10	50	40	AC/$CaCl_2$ treat.
End	1	1.2	1.1	6.5	4.00071E-09	10	50	40	AC/$CaCl_2$ treat.
	1.1	1.2	1.15	6.5	4.18256E-09	10	50	40	AC/$CaCl_2$ treat.
Sample 15									
17-Sep									
18-Sep	? —								
19-Sep	1.1	0.9	1	6.5	3.63701E-09	10	50	40	AC/ St. opt.
20-Sep	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/ St. opt.
End	1.1	1	1.05	6.5	3.81886E-09	10	50	40	AC/ St. opt.
	1	1	1	6.5	3.63701E-09	10	50	40	AC/ St. opt.
Sample 17									
14-Sep									
15-Sep									
16-Sep	0.7	0.8	0.75	6.5	2.72776E-09	10	50	40	AC/ St. wet opt.
17-Sep	0.6	0.7	0.65	6.5	2.36406E-09	10	50	40	AC/ St. wet opt.

Date	Total	Total	Avg	Grad	Hydraulic	Effec	Confin	Back	Moist
	Outflow	Inflow	Flow	(psi)	Conductivity	Stress	Press	Pres	Cond
18-Sep	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/ St. wet opt.
19-Sep	0.6	0.7	0.65	6.5	2.36406E-09	10	50	40	AC/ St. wet opt.
End	0.7	0.7	0.7	6.5	2.54591E-09	10	50	40	AC/ St. wet opt.
	0.7	0.7	0.7	6.5	2.54591E-09	10	50	40	AC/ St. wet opt.
Sample 33									
3-Nov									
3-Nov									
3-Nov	69.12	66.94	68.03	2.2	7.31031E-07	10	50	40	Ca ash(S-10/20)
3-Nov	66.12	65.38	65.75	2.2	7.0653E-07	10	50	40	Ca ash(S-10/20)
3-Nov	66.96	65.9	66.43	2.2	7.13838E-07	10	50	40	Ca ash(S-10/20)
3-Nov	65.88	64.85	65.365	2.2	7.02393E-07	10	50	40	Ca ash(S-10/20)
4-Nov	63.72	63.81	63.765	2.2	6.852E-07	10	50	40	Ca ash(S-10/20)
4-Nov	64.8	63.28	64.04	2.2	6.88155E-07	10	50	40	Ca ash(S-10/20)
4-Nov	61.02	60.67	60.845	4.3	3.34514E-07	10	50	40	Ca ash(S-10/20)
4-Nov	61.02	60.15	60.585	4.3	3.33085E-07	10	50	40	Ca ash(S-10/20)
4-Nov	61.02	59.1	60.06	4.3	3.30198E-07	10	50	40	Ca ash(S-10/20)
4-Nov	61.02	59.1	60.06	4.3	3.30198E-07	10	50	40	Ca ash(S-10/20)
4-Nov	90.18	87.34	88.76	6.5	3.22821E-07	10	50	40	Ca ash(S-10/20)
5-Nov	91.06	88.91	89.985	6.5	3.27276E-07	10	50	40	Ca ash(S-10/20)
5-Nov	89.64	86.82	88.23	6.5	3.20893E-07	10	50	40	Ca ash(S-10/20)
5-Nov	88.02	86.82	87.42	6.5	3.17947E-07	10	50	40	Ca ash(S-10/20)
End	88.56	86.3	87.43	6.5	3.17984E-07	10	50	40	Ca ash(S-10/20)
	88.56	85.25	86.905	6.5	3.16074E-07	10	50	40	Ca ash(S-10/20)
Sample 27									
27-Oct									
28-Oct									
29-Oct	0.8	1	0.9	6.5	3.27331E-09	10	50	40	AC/.5M NaCl
30-Oct	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/.5M NaCl
31-Oct	0.7	0.9	0.8	6.5	2.90961E-09	10	50	40	AC/.5M NaCl
1-Nov	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/.5M NaCl
24-Nov	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/.5M NaCl
25-Nov	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/.5M NaCl
26-Nov	0.7	0.8	0.75	6.5	2.72776E-09	10	50	40	AC/tap water
27-Nov	0.7	0.8	0.75	6.5	2.72776E-09	10	50	40	AC/tap water
28-Nov	0.7	0.7	0.7	6.5	2.54591E-09	10	50	40	AC/tap water
29-Nov	0.7	0.9	0.8	6.5	2.90961E-09	10	50	40	AC/tap water
End	0.7	0.9	0.8	6.5	2.90961E-09	10	50	40	AC/tap water
	0.6	0.8	0.7	6.5	2.54591E-09	10	50	40	AC/tap water
Sample 31									
23-Nov									
24-Nov									
25-Nov	0.8	1	0.9	6.5	3.27331E-09	10	50	40	AC/Baseline Ext
26-Nov	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Baseline Ext

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
27-Nov	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Baseline Ext
End	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Baseline Ext
	0.8	1	0.9	6.5	3.27331E-09	10	50	40	AC/Baseline Ext
Sample 32									
20-Nov									
21-Nov									
22-Nov	0.7	0.8	0.75	6.5	2.72776E-09	10	50	40	AC/Ca sol(C-6/29)
23-Nov	0.7	0.8	0.75	6.5	2.72776E-09	10	50	40	AC/Ca sol(C-6/29)
24-Nov	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Ca sol(C-6/29)
25-Nov	0.7	0.8	0.75	6.5	2.72776E-09	10	50	40	AC/Ca sol(C-6/29)
26-Nov	0.8	0.7	0.75	6.5	2.72776E-09	10	50	40	AC/Ca sol(C-6/29)
27-Nov	0.7	0.8	0.75	6.5	2.72776E-09	10	50	40	AC/Ca sol(C-6/29)
28-Nov	0.7	0.7	0.7	6.5	2.54591E-09	10	50	40	AC/Ca sol(C-6/29)
End	0.7	0.8	0.75	6.5	2.72776E-09	10	50	40	AC/Ca sol(C-6/29)
	0.7	0.8	0.75	6.5	2.72776E-09	10	50	40	AC/Ca sol(C-6/29)
Sample 35									
15-Nov									
15-Nov									
15-Nov	128.63	128.4	128.52	2.2	7.36525E-05	10	50	40	Na(1) ash
15-Nov	123.38	122.67	123.03	2.2	9.51834E-05	10	50	40	Na(1) ash
15-Nov	130.2	130.5	130.35	2.2	0.000106159	10	50	40	Na(1) ash
15-Nov	115.5	115.36	115.43	2.2	0.000119076	10	50	40	Na(1) ash
15-Nov	120.75	121.1	120.93	2.2	0.000124745	10	50	40	Na(1) ash
15-Nov	123.3	124.76	124.03	2.2	0.000127948	10	50	40	Na(1) ash
15-Nov	91.35	91.35	91.35	4.3	0.000144641	10	50	40	Na(1) ash
15-Nov	93.45	92.92	93.185	4.3	0.000147546	10	50	40	Na(1) ash
15-Nov	95.55	94.48	95.015	4.3	0.000150444	10	50	40	Na(1) ash
15-Nov	96.6	96.05	96.325	4.3	0.000152518	10	50	40	Na(1) ash
16-Nov	96.6	98.14	97.37	4.3	0.000154173	10	50	40	Na(1) ash
16-Nov	99.23	98.66	98.945	4.3	0.000156666	10	50	40	Na(1) ash
16-Nov	91.88	90.83	91.355	6.5	0.000159484	10	50	40	Na(1) ash
16-Nov	92.4	91.35	91.875	6.5	0.000160392	10	50	40	Na(1) ash
16-Nov	92.4	91.35	91.875	6.5	0.000160392	10	50	40	Na(1) ash
16-Nov	92.93	91.87	92.4	6.5	0.000161309	10	50	40	Na(1) ash
End	92.93	91.87	92.4	6.5	0.000161309	10	50	40	Na(1) ash
	92.93	91.87	92.4	6.5	0.000161309	10	50	40	Na(1) ash
Sample37									
2-Dec									
2-Dec									
2-Dec	91.56	91	91.28	2.2	0.000176556	10	50	40	CaAsh(6/29)cured
2-Dec	108.6	108	108.3	2.2	0.000167582	10	50	40	CaAsh(6/29)cured
2-Dec	112.01	111	111.51	2.2	0.000172541	10	50	40	CaAsh(6/29)cured
2-Dec	111.04	110	110.52	2.2	0.000171017	10	50	40	CaAsh(6/29)cured

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
2-Dec	112.98	112	112.49	2.2	0.000174065	10	50	40	CaAsh(6/29)cured
2-Dec	111.04	109.5	110.27	4.3	0.000174598	10	50	40	CaAsh(6/29)cured
2-Dec	111.04	109.5	110.27	4.3	0.000174598	10	50	40	CaAsh(6/29)cured
2-Dec	111.04	110	110.52	4.3	0.000174994	10	50	40	CaAsh(6/29)cured
2-Dec	111.04	110	110.52	4.3	0.000174994	10	50	40	CaAsh(6/29)cured
2-Dec	110.55	109	109.78	4.3	0.000173814	10	50	40	CaAsh(6/29)cured
2-Dec	100.32	100	100.16	6.5	0.000174856	10	50	40	CaAsh(6/29)cured
2-Dec	101.78	100.5	101.14	6.5	0.000176567	10	50	40	CaAsh(6/29)cured
2-Dec	101.78	100	100.89	6.5	0.00017613	10	50	40	CaAsh(6/29)cured
End	100.81	100	100.41	6.5	0.000175283	10	50	40	CaAsh(6/29)cured
	100.81	100	100.41	6.5	0.000175283	10	50	40	CaAsh(6/29)cured
Sample 38									
1-Dec									
1-Dec									
1-Dec	105	104.4	104.7	2.2	0.000231444	10	50	40	CaAsh(7/2)cured
1-Dec	77.7	76.21	76.955	2.2	0.000238158	10	50	40	CaAsh(7/2)cured
1-Dec	78.75	77.26	78.005	2.2	0.000241407	10	50	40	CaAsh(7/2)cured
1-Dec	78.75	77.78	78.265	2.2	0.000242212	10	50	40	CaAsh(7/2)cured
1-Dec	79.28	77.78	78.53	2.2	0.000243032	10	50	40	CaAsh(7/2)cured
1-Dec	114.98	112.23	113.61	4.3	0.000224848	10	50	40	CaAsh(7/2)cured
1-Dec	113.93	112.23	113.08	4.3	0.000223809	10	50	40	CaAsh(7/2)cured
2-Dec	113.4	111.71	112.56	4.3	0.00022277	10	50	40	CaAsh(7/2)cured
2-Dec	112.35	111.71	112.03	4.3	0.000221731	10	50	40	CaAsh(7/2)cured
2-Dec	127.05	127.37	127.21	6.5	0.000222079	10	50	40	CaAsh(7/2)cured
2-Dec	126	125.28	125.64	6.5	0.000219338	10	50	40	CaAsh(7/2)cured
2-Dec	126.53	124.76	125.65	6.5	0.000219347	10	50	40	CaAsh(7/2)cured
End	126.53	124.76	125.65	6.5	0.000219347	10	50	40	CaAsh(7/2)cured
	126.53	124.24	125.39	6.5	0.000218893	10	50	40	CaAsh(7/2)cured
Sample 39									
8-Dec									
9-Dec									
9-Dec	61.78	64	62.89	2.2	2.70319E-06	10	50	40	Na(2) ash
10-Dec	104.02	105	104.51	2.2	7.70081E-06	10	50	40	Na(2) ash
10-Dec	126.72	125	125.86	2.2	1.29836E-05	10	50	40	Na(2) ash
10-Dec	89.23	91.5	90.365	2.2	1.03577E-05	10	50	40	Na(2) ash
13-Dec	89.76	90.5	90.13	2.2	1.16221E-05	10	50	40	Na(2) ash
13-Dec	71.81	71.5	71.655	2.2	1.05598E-05	10	50	40	Na(2) ash
13-Dec	111.94	114.5	113.22	4.3	1.49391E-05	10	50	40	Na(2) ash
13-Dec	124.08	123	123.54	4.3	1.63008E-05	10	50	40	Na(2) ash
13-Dec	123.55	122.5	123.03	4.3	1.73923E-05	10	50	40	Na(2) ash
14-Dec	125.14	124	124.57	4.3	1.93373E-05	10	50	40	Na(2) ash
14-Dec	117.74	118	117.87	4.3	2.07368E-05	10	50	40	Na(2) ash
14-Dec	124.61	124.5	124.56	6.5	2.37211E-05	10	50	40	Na(2) ash
14-Dec	118.8	118.5	118.65	6.5	2.48562E-05	10	50	40	Na(2) ash

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
14-Dec	98.21	99	98.605	6.5	2.58212E-05	10	50	40	Na(2) ash
End	113.52	113	113.26	6.5	2.57903E-05	10	50	40	Na(2) ash
	101.38	101.5	101.44	6.5	2.65636E-05	10	50	40	Na(2) ash
Sample 44									
20-Dec									
20-Dec									
21-Dec	100.85	100.5	100.68	2.2	9.44138E-06	10	50	40	Ca ash (10/20)
21-Dec	106.13	105.5	105.82	2.2	9.92341E-06	10	50	40	Ca ash (10/20)
22-Dec	92.4	93.5	92.95	2.2	9.58861E-06	10	50	40	Ca ash (10/20)
22-Dec	104.54	104	104.27	2.2	1.07564E-05	10	50	40	Ca ash (10/20)
22-Dec	116.16	117	116.58	4.3	1.02549E-05	10	50	40	Ca ash (10/20)
22-Dec	117.22	115.5	116.36	4.3	1.02356E-05	10	50	40	Ca ash (10/20)
23-Dec	116.16	115	115.58	4.3	1.0167E-05	10	50	40	Ca ash (10/20)
23-Dec	116.69	115.5	116.1	4.3	1.02123E-05	10	50	40	Ca ash (10/20)
23-Dec	113.52	112.5	113.01	6.5	9.86444E-06	10	50	40	Ca ash (10/20)
23-Dec	107.18	107	107.09	6.5	9.3477E-06	10	50	40	Ca ash (10/20)
End	107.18	106.5	106.84	6.5	9.32587E-06	10	50	40	Ca ash (10/20)
	115.1	113.5	114.3	6.5	9.20958E-06	10	50	40	Ca ash (10/20)
Sample 45									
6-Jan									
6-Jan									
6-Jan	116.69	117.5	117.1	2.2	0.000201323	10	50	40	Urea ash
6-Jan	114.05	114	114.03	2.2	0.000196045	10	50	40	Urea ash
6-Jan	111.41	110.5	110.96	2.2	0.000190766	10	50	40	Urea ash
6-Jan	108.77	108	108.39	2.2	0.000186348	10	50	40	Urea ash
6-Jan	122.5	121.5	122	4.3	0.000193171	10	50	40	Urea ash
6-Jan	123.02	122	122.51	4.3	0.000193978	10	50	40	Urea ash
6-Jan	123.55	123	123.28	4.3	0.00019519	10	50	40	Urea ash
6-Jan	123.55	123.5	123.53	4.3	0.000195586	10	50	40	Urea ash
6-Jan	111.94	111	111.47	6.5	0.0001946	10	50	40	Urea ash
6-Jan	111.94	110.5	111.22	6.5	0.000194164	10	50	40	Urea ash
End	110.88	110	110.44	6.5	0.000192802	10	50	40	Urea ash
	110.35	110	110.18	6.5	0.00019234	10	50	40	Urea ash
Sample 30									
13-Nov									
14-Nov									
15-Nov	0.8	1	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
16-Nov	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
17-Nov	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
18-Nov	0.7	1	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
19-Nov	0.7	0.8	0.75	6.5	2.72776E-09	10	50	40	AC/Urea Ext.-120
20-Nov	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
21-Nov	1	0.7	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
22-Nov	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
23-Nov	0.8	1.1	0.95	6.5	3.45516E-09	10	50	40	AC/Urea Ext.-120
24-Nov	0.7	1.1	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
25-Nov	0.3	0.3	0.3	6.5	1.0911E-09	10	50	40	AC/Urea Ext.-120
26-Nov	1	0.9	0.95	6.5	3.45516E-09	10	50	40	AC/Urea Ext.-120
27-Nov	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
28-Nov	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
29-Nov	0.8	1.1	0.95	6.5	3.45516E-09	10	50	40	AC/Urea Ext.-120
30-Nov	0.7	1.2	0.95	6.5	3.45516E-09	10	50	40	AC/Urea Ext.-120
1-Dec	0.8	1.2	1	6.5	3.63701E-09	10	50	40	AC/Urea Ext.-120
2-Dec	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
3-Dec	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
4-Dec	0.7	0.8	0.75	6.5	2.72776E-09	10	50	40	AC/Urea Ext.-120
7-Dec	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
8-Dec	0.7	0.8	0.75	6.5	2.72776E-09	10	50	40	AC/Urea Ext.-120
9-Dec	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
10-Dec	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
11-Dec	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
12-Dec	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
13-Dec	0.8	1	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
14-Dec	0.8	1.1	0.95	6.5	3.45516E-09	10	50	40	AC/Urea Ext.-120
15-Dec	0.8	1.1	0.95	6.5	3.45516E-09	10	50	40	AC/Urea Ext.-120
16-Dec	0.7	1	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
17-Dec	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
18-Dec	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
19-Dec	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
20-Dec	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
21-Dec	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
22-Dec	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
23-Dec	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
24-Dec	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
25-Dec	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
26-Dec	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
27-Dec	0.8	1.1	0.95	6.5	3.45516E-09	10	50	40	AC/Urea Ext.-120
28-Dec	0.8	1.2	1	6.5	3.63701E-09	10	50	40	AC/Urea Ext.-120
29-Dec	0.9	1.1	1	6.5	3.63701E-09	10	50	40	AC/Urea Ext.-120
30-Dec	0.8	1.1	0.95	6.5	3.45516E-09	10	50	40	AC/Urea Ext.-120
31-Dec	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
1-Jan	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
2-Jan	0.7	0.9	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
3-Jan	0.7	1.1	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
4-Jan	0.6	1	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
5-Jan	0.6	0.9	0.75	6.5	2.72776E-09	10	50	40	AC/Urea Ext.-120
6-Jan	0.7	0.9	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
7-Jan	0.7	0.8	0.75	6.5	2.72776E-09	10	50	40	AC/Urea Ext.-120
8-Jan	0.5	0.9	0.7	6.5	2.54591E-09	10	50	40	AC/Urea Ext.-120

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
9-Jan	0.4	0.8	0.6	6.5	2.18221E-09	10	50	40	AC/Urea Ext.-120
10-Jan	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
11-Jan	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
12-Jan	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
13-Jan	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
14-Jan	0.9	1	0.95	6.5	3.45516E-09	10	50	40	AC/Urea Ext.-120
15-Jan	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
16-Jan	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
17-Jan	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
18-Jan	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
19-Jan	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
20-Jan	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
21-Jan	0.7	1	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
22-Jan	0.8	0.7	0.75	6.5	2.72776E-09	10	50	40	AC/Urea Ext.-120
23-Jan	0.8	1.3	1.05	6.5	3.81886E-09	10	50	40	AC/Urea Ext.-120
24-Jan	1	0.8	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
25-Jan	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
26-Jan	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
27-Jan	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
28-Jan	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
29-Jan	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
30-Jan	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
31-Jan	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
1-Feb	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
2-Feb	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
3-Feb	0.5	1.1	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
4-Feb	1.1	0.7	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
5-Feb	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
6-Feb	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
7-Feb	0.9	1	0.95	6.5	3.45516E-09	10	50	40	AC/Urea Ext.-120
8-Feb	0.9	2	1.45	6.5	5.27366E-09	10	50	40	AC/Urea Ext.-120
9-Feb	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
10-Feb	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
11-Feb	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
12-Feb	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
13-Feb	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
14-Feb	1	1	1	6.5	3.63701E-09	10	50	40	AC/Urea Ext.-120
15-Feb	0.9	1	0.95	6.5	3.45516E-09	10	50	40	AC/Urea Ext.-120
16-Feb	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
17-Feb	1.2	1	1.1	6.5	4.00071E-09	10	50	40	AC/Urea Ext.-120
18-Feb	1.1	1	1.05	6.5	3.81886E-09	10	50	40	AC/Urea Ext.-120
19-Feb	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
20-Feb	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
21-Feb	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
22-Feb	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
23-Feb	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
24-Feb	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
25-Feb	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/Urea Ext.-120
26-Feb	0.7	0.9	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
27-Feb	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
28-Feb	0.9	0.7	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
End	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/Urea Ext.-120
	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/Urea Ext.-120
Sample 34									
12-Nov									
13-Nov									
14-Nov	52.92	50.73	51.825	2.2	1.38423E-07	10	50	40	AC/tap-H_2O W/D
15-Nov	30.24	29.81	30.025	2.2	8.01958E-08	10	50	40	AC/tap-H_2O W/D
16-Nov	30.24	29.29	29.765	2.2	7.95014E-08	10	50	40	AC/tap-H_2O W/D
17-Nov	30.24	29.81	30.025	2.2	8.01958E-08	10	50	40	AC/tap-H_2O W/D
18-Nov	24.3	23.01	23.655	2.2	6.31818E-08	10	50	40	AC/tap-H_2O W/D
19-Nov	17.82	17.78	17.8	2.2	4.75432E-08	10	50	40	AC/tap-H_2O W/D
20-Nov	21.06	20.92	20.99	2.2	5.60636E-08	10	50	40	AC/tap-H_2O W/D
21-Nov	25.38	24.06	24.72	2.2	6.60263E-08	10	50	40	AC/tap-H_2O W/D
22-Nov	21.06	20.4	20.73	2.2	5.53692E-08	10	50	40	AC/tap-H_2O W/D
14-Dec	21.06	20.4	20.73	2.2	5.53692E-08	10	50	40	AC/tap-H_2O W/D
15-Dec	21.06	20.4	20.73	2.2	5.53692E-08	10	50	40	AC/tap-H_2O W/D
16-Dec	3.78	3.66	3.72	2.2	9.936E-09	10	50	40	AC/tap-H_2O W/D
17-Dec	3.24	3.14	3.19	2.2	8.52039E-09	10	50	40	AC/tap-H_2O W/D
18-Dec	3.24	3.66	3.45	2.2	9.21484E-09	10	50	40	AC/tap-H_2O W/D
19-Dec	3.24	2.62	2.93	2.2	7.82594E-09	10	50	40	AC/tap-H_2O W/D
20-Dec	3.24	2.62	2.93	2.2	7.82594E-09	10	50	40	AC/tap-H_2O W/D
21-Dec	3.24	3.66	3.45	2.2	9.21484E-09	10	50	40	AC/tap-H_2O W/D
22-Dec	2.7	3.14	2.92	2.2	7.79923E-09	10	50	40	AC/tap-H_2O W/D
23-Dec	2.7	2.8	2.75	2.2	7.34516E-09	10	50	40	AC/tap-H_2O W/D
24-Dec	2.8	2.7	2.75	2.2	7.34516E-09	10	50	40	AC/tap-H_2O W/D
25-Dec	3.1	2.9	3	2.2	8.01291E-09	10	50	40	AC/tap-H_2O W/D
26-Dec	2.9	3	2.95	2.2	7.87936E-09	10	50	40	AC/tap-H_2O W/D
27-Dec	2.6	2.6	2.6	2.2	6.94452E-09	10	50	40	AC/tap-H_2O W/D
28-Dec	2.6	2.6	2.6	2.2	6.94452E-09	10	50	40	AC/tap-H_2O W/D
22-Jan	2.5	2.5	2.5	2.2	6.67742E-09	10	50	40	AC/tap-H_2O W/D
23-Jan	2.5	2.5	2.5	2.2	6.67742E-09	10	50	40	AC/tap-H_2O W/D
24-Jan	2.7	2.9	2.8	2.2	7.47871E-09	10	50	40	AC/tap-H_2O W/D
25-Jan	2.6	2.8	2.7	2.2	7.21161E-09	10	50	40	AC/tap-H_2O W/D
26-Jan	2.6	2.9	2.75	2.2	7.34516E-09	10	50	40	AC/tap-H_2O W/D
27-Jan	2.8	2.6	2.7	2.2	7.21161E-09	10	50	40	AC/tap-H_2O W/D
28-Jan	2.6	2.6	2.6	2.2	6.94452E-09	10	50	40	AC/tap-H_2O W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
16-Feb	2.5	2.5	2.5	2.2	6.67742E-09	10	50	40	AC/tap-H_2O W/D
17-Feb	2.7	2.5	2.6	2.2	6.94452E-09	10	50	40	AC/tap-H_2O W/D
18-Feb	1.1	1.1	1.1	2.2	2.93807E-09	10	50	40	AC/tap-H_2O W/D
19-Feb	3	3.2	3.1	2.2	8.28E-09	10	50	40	AC/tap-H_2O W/D
20-Feb	2.9	2.9	2.9	2.2	7.74581E-09	10	50	40	AC/tap-H_2O W/D
21-Feb	3.2	3.2	3.2	2.2	8.5471E-09	10	50	40	AC/tap-H_2O W/D
22-Feb	3	4.9	3.95	2.2	1.05503E-08	10	50	40	AC/tap-H_2O W/D
23-Feb	2.9	3	2.95	2.2	7.87936E-09	10	50	40	AC/tap-H_2O W/D
24-Feb	3.3	3.3	3.3	2.2	8.8142E-09	10	50	40	AC/tap-H_2O W/D
25-Feb	3.1	3.1	3.1	2.2	8.28E-09	10	50	40	AC/tap-H_2O W/D
26-Feb	2.8	2.9	2.85	2.2	7.61226E-09	10	50	40	AC/tap-H_2O W/D
27-Feb	2.8	2.7	2.75	2.2	7.34516E-09	10	50	40	AC/tap-H_2O W/D
End	2.7	2.7	2.7	2.2	7.21161E-09	10	50	40	AC/tap-H_2O W/D
	3.3	3.2	3.25	2.2	8.68065E-09	10	50	40	AC/tap-H_2O W/D
Sample 43									
15-Dec									
16-Dec									
17-Dec	4.87	5	4.935	2.2	1.28624E-08	10	50	40	AC/Na Ext F/T
18-Dec	2.92	3.5	3.21	2.2	8.36643E-09	10	50	40	AC/Na Ext F/T
19-Dec	2.92	3	2.96	2.2	7.71483E-09	10	50	40	AC/Na Ext F/T
20-Dec	2.44	2.5	2.47	2.2	6.43772E-09	10	50	40	AC/Na Ext F/T
21-Dec	1.95	2.5	2.225	2.2	5.79916E-09	10	50	40	AC/Na Ext F/T
22-Dec	1.95	2	1.975	2.2	5.14757E-09	10	50	40	AC/Na Ext F/T
23-Dec	1.7	1.8	1.75	2.2	4.56114E-09	10	50	40	AC/Na Ext F/T
24-Dec	1.4	1.7	1.55	2.2	4.03986E-09	10	50	40	AC/Na Ext F/T
25-Dec	1.3	1.5	1.4	2.2	3.64891E-09	10	50	40	AC/Na Ext F/T
26-Dec	1.5	1.7	1.6	2.2	4.17018E-09	10	50	40	AC/Na Ext F/T
27-Dec	1.5	1.7	1.6	2.2	4.17018E-09	10	50	40	AC/Na Ext F/T
28-Dec	1.4	1.7	1.55	2.2	4.03986E-09	10	50	40	AC/Na Ext F/T
29-Dec	1.5	1.7	1.6	2.2	4.17018E-09	10	50	40	AC/Na Ext F/T
30-Dec	1.6	1.6	1.6	2.2	4.17018E-09	10	50	40	AC/Na Ext F/T
31-Dec	1.2	1.2	1.2	2.2	3.12764E-09	10	50	40	AC/Na Ext F/T
1-Jan	1	1.1	1.05	2.2	2.73668E-09	10	50	40	AC/Na Ext F/T
2-Jan	1.1	1.1	1.1	2.2	2.867E-09	10	50	40	AC/Na Ext F/T
3-Jan	1.1	1.1	1.1	2.2	2.867E-09	10	50	40	AC/Na Ext F/T
12-Jan	1	1.1	1.05	2.2	2.73668E-09	10	50	40	AC/Na Ext F/T
13-Jan	1	1.1	1.05	2.2	2.73668E-09	10	50	40	AC/Na Ext F/T
14-Jan	0.5	1	0.75	2.2	1.95477E-09	10	50	40	AC/Na Ext F/T
15-Jan	0.5	0.5	0.5	2.2	1.30318E-09	10	50	40	AC/Na Ext F/T
16-Jan	0.6	0.9	0.75	2.2	1.95477E-09	10	50	40	AC/Na Ext F/T
17-Jan	0.7	0.8	0.75	2.2	1.95477E-09	10	50	40	AC/Na Ext F/T
22-Jan	0.6	0.8	0.7	2.2	1.82445E-09	10	50	40	AC/Na Ext F/T
23-Jan	0.7	0.8	0.75	2.2	1.95477E-09	10	50	40	AC/Na Ext F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
24-Jan	1	0.9	0.95	2.2	2.47604E-09	10	50	40	AC/Na Ext F/T
25-Jan	1.1	0.9	1	2.2	2.60636E-09	10	50	40	AC/Na Ext F/T
2-Feb	1	0.9	0.95	2.2	2.47604E-09	10	50	40	AC/Na Ext F/T
3-Feb	1	1	1	2.2	2.60636E-09	10	50	40	AC/Na Ext F/T
4-Feb	2	2	2	2.2	5.21273E-09	10	50	40	AC/Na Ext F/T
5-Feb	2	2	2	2.2	5.21273E-09	10	50	40	AC/Na Ext F/T
6-Feb	1.7	1.7	1.7	2.2	4.43082E-09	10	50	40	AC/Na Ext F/T
7-Feb	1.7	1.6	1.65	2.2	4.3005E-09	10	50	40	AC/Na Ext F/T
8-Feb	1.6	1.6	1.6	2.2	4.17018E-09	10	50	40	AC/Na Ext F/T
9-Feb	1.7	1.6	1.65	2.2	4.3005E-09	10	50	40	AC/Na Ext F/T
10-Feb	1.5	1.5	1.5	2.2	3.90954E-09	10	50	40	AC/Na Ext F/T
19-Feb	1.5	1.4	1.45	2.2	3.77923E-09	10	50	40	AC/Na Ext F/T
20-Feb	1.7	1.6	1.65	2.2	4.3005E-09	10	50	40	AC/Na Ext F/T
21-Feb	3.4	3.4	3.4	2.2	8.86163E-09	10	50	40	AC/Na Ext F/T
22-Feb	2.8	2.8	2.8	2.2	7.29782E-09	10	50	40	AC/Na Ext F/T
23-Feb	2.5	2.6	2.55	2.2	6.64623E-09	10	50	40	AC/Na Ext F/T
24-Feb	2.8	2.7	2.75	2.2	7.1675E-09	10	50	40	AC/Na Ext F/T
25-Feb	2.6	2.5	2.55	2.2	6.64623E-09	10	50	40	AC/Na Ext F/T
26-Feb	2.6	2.6	2.6	2.2	6.77654E-09	10	50	40	AC/Na Ext F/T
27-Feb	2.4	2.3	2.35	2.2	6.12495E-09	10	50	40	AC/Na Ext F/T
28-Feb	2.4	2.3	2.35	2.2	6.12495E-09	10	50	40	AC/Na Ext F/T
End	2.6	2.4	2.5	2.2	6.51591E-09	10	50	40	AC/Na Ext F/T
	2.4	2.3	2.35	2.2	6.12495E-09	10	50	40	AC/Na Ext F/T
Sample 42									
15-Dec									
16-Dec									
17-Dec	8.93	8.87	8.9	2.2	2.30898E-08	10	50	40	AC/Na Ext W/D
18-Dec	5.25	5.74	5.495	2.2	1.4256E-08	10	50	40	AC/Na Ext W/D
19-Dec	4.2	4.18	4.19	2.2	1.08704E-08	10	50	40	AC/Na Ext W/D
20-Dec	2.63	3.13	2.88	2.2	7.47177E-09	10	50	40	AC/Na Ext W/D
21-Dec	2.63	2.61	2.62	2.2	6.79724E-09	10	50	40	AC/Na Ext W/D
22-Dec	2.1	2.61	2.355	2.2	6.10973E-09	10	50	40	AC/Na Ext W/D
23-Dec	1.8	1.9	1.85	2.2	4.79958E-09	10	50	40	AC/Na Ext W/D
24-Dec	1.6	1.7	1.65	2.2	4.2807E-09	10	50	40	AC/Na Ext W/D
25-Dec	1.3	1.6	1.45	2.2	3.76183E-09	10	50	40	AC/Na Ext W/D
26-Dec	1.5	2.1	1.8	2.2	4.66986E-09	10	50	40	AC/Na Ext W/D
27-Dec	1.3	1.4	1.35	2.2	3.50239E-09	10	50	40	AC/Na Ext W/D
28-Dec	1.2	1.3	1.25	2.2	3.24296E-09	10	50	40	AC/Na Ext W/D
18-Jan	1.2	1.3	1.25	2.2	3.24296E-09	10	50	40	AC/Na Ext W/D
19-Jan	1.2	1.3	1.25	2.2	3.24296E-09	10	50	40	AC/Na Ext W/D
20-Jan	2.1	2.09	2.095	2.2	5.43519E-09	10	50	40	AC/Na Ext W/D
21-Jan	1.05	1.57	1.31	2.2	3.39862E-09	10	50	40	AC/Na Ext W/D
22-Jan	1.6	1.7	1.65	2.2	4.2807E-09	10	50	40	AC/Na Ext W/D
23-Jan	1.1	1.2	1.15	2.2	2.98352E-09	10	50	40	AC/Na Ext W/D
24-Jan	1.5	1.2	1.35	2.2	3.50239E-09	10	50	40	AC/Na Ext W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
25-Jan	1.5	1.2	1.35	2.2	3.50239E-09	10	50	40	AC/Na Ext W/D
26-Jan	1.5	1.2	1.35	2.2	3.50239E-09	10	50	40	AC/Na Ext W/D
27-Jan	1.3	1.3	1.3	2.2	3.37267E-09	10	50	40	AC/Na Ext W/D
28-Jan	1.3	1.3	1.3	2.2	3.37267E-09	10	50	40	AC/Na Ext W/D
29-Jan	1.1	1.1	1.1	2.2	2.8538E-09	10	50	40	AC/Na Ext W/D
30-Jan	1.4	1.4	1.4	2.2	3.63211E-09	10	50	40	AC/Na Ext W/D
31-Jan	1.3	1.2	1.25	2.2	3.24296E-09	10	50	40	AC/Na Ext W/D
17-Feb	1.3	1.2	1.25	2.2	3.24296E-09	10	50	40	AC/Na Ext W/D
18-Feb	1.3	1.2	1.25	2.2	3.24296E-09	10	50	40	AC/Na Ext W/D
19-Feb	1.2	1.6	1.4	2.2	3.63211E-09	10	50	40	AC/Na Ext W/D
20-Feb	1.2	1.2	1.2	2.2	3.11324E-09	10	50	40	AC/Na Ext W/D
21-Feb	1.2	1.1	1.15	2.2	2.98352E-09	10	50	40	AC/Na Ext W/D
22-Feb	1.2	1.1	1.15	2.2	2.98352E-09	10	50	40	AC/Na Ext W/D
23-Feb	1.1	1.1	1.1	2.2	2.8538E-09	10	50	40	AC/Na Ext W/D
13-Mar	1.3	1.2	1.25	2.2	3.24296E-09	10	50	40	AC/Na Ext W/D
14-Mar	1.2	1.1	1.15	2.2	2.98352E-09	10	50	40	AC/Na Ext W/D
15-Mar	2.1	2.09	2.095	2.2	5.43519E-09	10	50	40	AC/Na Ext W/D
16-Mar	1.58	1.57	1.575	2.2	4.08612E-09	10	50	40	AC/Na Ext W/D
17-Mar	1.1	1.1	1.1	2.2	2.8538E-09	10	50	40	AC/Na Ext W/D
18-Mar	1.1	1	1.05	2.2	2.72408E-09	10	50	40	AC/Na Ext W/D
19-Mar	1.1	1.1	1.1	2.2	2.8538E-09	10	50	40	AC/Na Ext W/D
20-Mar	1.1	1.1	1.1	2.2	2.8538E-09	10	50	40	AC/Na Ext W/D
21-Mar	1.2	1.1	1.15	2.2	2.98352E-09	10	50	40	AC/Na Ext W/D
End	1.1	1.1	1.1	2.2	2.8538E-09	10	50	40	AC/Na Ext W/D
	1.2	1.1	1.15	2.2	2.98352E-09	10	50	40	AC/Na Ext W/D
Sample 46									
2-Feb									
3-Feb									
4-Feb	3.6	3.4	3.5	2.2	9.20949E-09	10	50	40	AC/Ca Ext F/T
5-Feb	3.1	3.2	3.15	2.2	8.28854E-09	10	50	40	AC/Ca Ext F/T
6-Feb	3	3	3	2.2	7.89385E-09	10	50	40	AC/Ca Ext F/T
7-Feb	3.1	3.1	3.1	2.2	8.15698E-09	10	50	40	AC/Ca Ext F/T
8-Feb	3.1	3.1	3.1	2.2	8.15698E-09	10	50	40	AC/Ca Ext F/T
9-Feb	3	3	3	2.2	7.89385E-09	10	50	40	AC/Ca Ext F/T
10-Feb	3.1	3.2	3.15	2.2	8.28854E-09	10	50	40	AC/Ca Ext F/T
18-Feb	3.1	3.1	3.1	2.2	8.15698E-09	10	50	40	AC/Ca Ext F/T
19-Feb	3.2	3.2	3.2	2.2	8.4201E-09	10	50	40	AC/Ca Ext F/T
20-Feb	23.3	23.7	23.5	2.2	6.18351E-08	10	50	40	AC/Ca Ext F/T
21-Feb	23.76	23.5	23.63	2.2	6.21772E-08	10	50	40	AC/Ca Ext F/T
22-Feb	20.6	20.5	20.55	2.2	5.40729E-08	10	50	40	AC/Ca Ext F/T
23-Feb	15.84	16	15.92	2.2	4.189E-08	10	50	40	AC/Ca Ext F/T
24-Feb	15.9	15.8	15.85	2.2	4.17058E-08	10	50	40	AC/Ca Ext F/T
3-Mar	15	15	15	2.2	3.94692E-08	10	50	40	AC/Ca Ext F/T
4-Mar	16	16.1	16.05	2.2	4.22321E-08	10	50	40	AC/Ca Ext F/T
5-Mar	6.9	7.1	7	2.2	1.8419E-08	10	50	40	AC/Ca Ext F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
6-Mar	6.9	6.8	6.85	2.2	1.80243E-08	10	50	40	AC/Ca Ext F/T
7-Mar	6.86	7	6.93	2.2	1.82348E-08	10	50	40	AC/Ca Ext F/T
8-Mar	6.86	6.5	6.68	2.2	1.7577E-08	10	50	40	AC/Ca Ext F/T
9-Mar	6.86	6.5	6.68	2.2	1.7577E-08	10	50	40	AC/Ca Ext F/T
10-Mar	5.81	6.5	6.155	2.2	1.61955E-08	10	50	40	AC/Ca Ext F/T
11-Mar	6.34	6	6.17	2.2	1.6235E-08	10	50	40	AC/Ca Ext F/T
12-Mar	6.86	6	6.43	2.2	1.69191E-08	10	50	40	AC/Ca Ext F/T
13-Mar	5.7	5.7	5.7	2.2	1.49983E-08	10	50	40	AC/Ca Ext F/T
14-Mar	6.34	6	6.17	2.2	1.6235E-08	10	50	40	AC/Ca Ext F/T
31-Mar	5.81	6	5.905	2.2	1.55377E-08	10	50	40	AC/Ca Ext F/T
1-Apr	5.28	5.5	5.39	2.2	1.41826E-08	10	50	40	AC/Ca Ext F/T
2-Apr	9.5	9	9.25	2.2	2.43394E-08	10	50	40	AC/Ca Ext F/T
3-Apr	9.5	9	9.25	2.2	2.43394E-08	10	50	40	AC/Ca Ext F/T
4-Apr	8.45	8	8.225	2.2	2.16423E-08	10	50	40	AC/Ca Ext F/T
End	9.5	8	8.75	2.2	2.30237E-08	10	50	40	AC/Ca Ext F/T
	8.98	8	8.49	2.2	2.23396E-08	10	50	40	AC/Ca Ext F/T
Sample 48									
9-Mar									
9-Mar									
9-Mar	32.63	33.5	33.065	2.2	0.000132624	10	50	40	AC-25%fa/NaExt
9-Mar	30.19	32	31.095	2.2	0.000124722	10	50	40	AC-25%fa/NaExt
9-Mar	28.25	28	28.125	2.2	0.000112809	10	50	40	AC-25%fa/NaExt
15-Mar	27.27	28	27.635	2.2	0.000110844	10	50	40	AC-25%fa/NaExt
15-Mar	45.78	46	45.89	2.2	0.000184064	10	50	40	AC-25%fa/NaExt
15-Mar	47.73	48	47.865	2.2	0.000191986	10	50	40	AC-25%fa/NaExt
15-Mar	44.32	44.5	44.41	2.2	0.000178128	10	50	40	AC-25%fa/NaExt
15-Mar	41.39	41.5	41.445	2.2	0.000166236	10	50	40	AC-25%fa/NaExt
15-Mar	37.99	38	37.995	2.2	0.000152398	10	50	40	AC-25%fa/NaExt
18-Mar	37.5	37	37.25	2.2	0.00014941	10	50	40	AC-25%fa/NaExt
18-Mar	34.58	35	34.79	2.2	0.000139542	10	50	40	AC-25%fa/NaExt
18-Mar	40.42	40.5	40.46	2.2	0.000162285	10	50	40	AC-25%fa/NaExt
18-Mar	38.96	.39	38.98	2.2	0.000156349	10	50	40	AC-25%fa/NaExt
18-Mar	37.99	38	37.995	2.2	0.000152398	10	50	40	AC-25%fa/NaExt
18-Mar	37.99	38	37.995	2.2	0.000152398	10	50	40	AC-25%fa/NaExt
23-Mar	36.53	36.5	36.515	2.2	0.000146461	10	50	40	AC-25%fa/NaExt
23-Mar	33.6	33.5	33.55	2.2	0.000134569	10	50	40	AC-25%fa/NaExt
23-Mar	45.29	45	45.145	2.2	0.000181076	10	50	40	AC-25%fa/NaExt
23-Mar	42.86	42	42.43	2.2	0.000170186	10	50	40	AC-25%fa/NaExt
23-Mar	41.88	42	41.94	2.2	0.000168221	10	50	40	AC-25%fa/NaExt
23-Mar	39.93	40	39.965	2.2	0.000160299	10	50	40	AC-25%fa/NaExt
End	38.96	38.5	38.73	2.2	0.000155346	10	50	40	AC-25%fa/NaExt
	37.99	38	37.995	2.2	0.000152398	10	50	40	AC-25%fa/NaExt
Sample 40									
21-Dec									

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
22-Dec									
23-Dec	0.4	0.6	0.5	2.2	5.37286E-09	10	50	40	AC/CaExt/120day
24-Dec	0.3	0.5	0.4	2.2	4.29828E-09	10	50	40	AC/CaExt/120day
25-Dec	0.4	0.5	0.45	2.2	4.83557E-09	10	50	40	AC/CaExt/120day
26-Dec	0.3	0.5	0.4	2.2	4.29828E-09	10	50	40	AC/CaExt/120day
27-Dec	0.4	0.6	0.5	2.2	5.37286E-09	10	50	40	AC/CaExt/120day
28-Dec	0.3	0.6	0.45	2.2	4.83557E-09	10	50	40	AC/CaExt/120day
29-Dec	0.3	0.6	0.45	2.2	4.83557E-09	10	50	40	AC/CaExt/120day
30-Dec	0.3	0.6	0.45	2.2	4.83557E-09	10	50	40	AC/CaExt/120day
31-Dec	0.4	0.4	0.4	2.2	4.29828E-09	10	50	40	AC/CaExt/120day
1-Jan	0.4	0.5	0.45	2.2	4.83557E-09	10	50	40	AC/CaExt/120day
2-Jan	0.5	0.5	0.5	2.2	5.37286E-09	10	50	40	AC/CaExt/120day
3-Jan	0.5	0.4	0.45	2.2	4.83557E-09	10	50	40	AC/CaExt/120day
4-Jan	0.4	0.5	0.45	2.2	4.83557E-09	10	50	40	AC/CaExt/120day
5-Jan	0.4	0.5	0.45	2.2	4.83557E-09	10	50	40	AC/CaExt/120day
6-Jan	0.3	0.4	0.35	2.2	3.761E-09	10	50	40	AC/CaExt/120day
7-Jan	0.3	0.5	0.4	2.2	4.29828E-09	10	50	40	AC/CaExt/120day
8-Jan	0.3	0.4	0.35	2.2	3.761E-09	10	50	40	AC/CaExt/120day
9-Jan	0.6	1.3	0.95	4.3	5.22292E-09	10	50	40	AC/CaExt/120day
10-Jan	0.6	0.9	0.75	4.3	4.12335E-09	10	50	40	AC/CaExt/120day
11-Jan	0.6	0.8	0.7	4.3	3.84846E-09	10	50	40	AC/CaExt/120day
12-Jan	0.7	0.8	0.75	4.3	4.12335E-09	10	50	40	AC/CaExt/120day
13-Jan	0.7	0.8	0.75	4.3	4.12335E-09	10	50	40	AC/CaExt/120day
14-Jan	0.8	0.8	0.8	4.3	4.39824E-09	10	50	40	AC/CaExt/120day
15-Jan	0.7	0.8	0.75	4.3	4.12335E-09	10	50	40	AC/CaExt/120day
16-Jan	0.7	0.5	0.6	4.3	3.29868E-09	10	50	40	AC/CaExt/120day
17-Jan	0.7	0.8	0.75	4.3	4.12335E-09	10	50	40	AC/CaExt/120day
20-Jan	0.7	0.8	0.75	4.3	4.12335E-09	10	50	40	AC/CaExt/120day
21-Jan	0.6	0.8	0.7	4.3	3.84846E-09	10	50	40	AC/CaExt/120day
22-Jan	0.9	1.2	1.05	4.3	5.7727E-09	10	50	40	AC/CaExt/120day
23-Jan	0.4	1	0.7	4.3	3.84846E-09	10	50	40	AC/CaExt/120day
24-Jan	0.8	0.9	0.85	4.3	4.67313E-09	10	50	40	AC/CaExt/120day
25-Jan	0.8	0.6	0.7	4.3	3.84846E-09	10	50	40	AC/CaExt/120day
26-Jan	0.8	0.6	0.7	4.3	3.84846E-09	10	50	40	AC/CaExt/120day
27-Jan	0.7	0.7	0.7	4.3	3.84846E-09	10	50	40	AC/CaExt/120day
28-Jan	0.7	2.1	1.4	6.5	5.09181E-09	10	50	40	AC/CaExt/120day
29-Jan	1	1.5	1.25	6.5	4.54626E-09	10	50	40	AC/CaExt/120day
30-Jan	1	1.5	1.25	6.5	4.54626E-09	10	50	40	AC/CaExt/120day
31-Jan	1	1.2	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
1-Feb	1.1	1.3	1.2	6.5	4.36441E-09	10	50	40	AC/CaExt/120day
2-Feb	1.1	1.2	1.15	6.5	4.18256E-09	10	50	40	AC/CaExt/120day
3-Feb	1	1.5	1.25	6.5	4.54626E-09	10	50	40	AC/CaExt/120day
4-Feb	1.2	1.1	1.15	6.5	4.18256E-09	10	50	40	AC/CaExt/120day
5-Feb	1.2	1.2	1.2	6.5	4.36441E-09	10	50	40	AC/CaExt/120day
6-Feb	1.2	1.2	1.2	6.5	4.36441E-09	10	50	40	AC/CaExt/120day
7-Feb	1.2	1.3	1.25	6.5	4.54626E-09	10	50	40	AC/CaExt/120day

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
8-Feb	1.2	1.3	1.25	6.5	4.54626E-09	10	50	40	AC/CaExt/120day
9-Feb	1.1	1.2	1.15	6.5	4.18256E-09	10	50	40	AC/CaExt/120day
10-Feb	1.2	1.3	1.25	6.5	4.54626E-09	10	50	40	AC/CaExt/120day
11-Feb	1.1	1.2	1.15	6.5	4.18256E-09	10	50	40	AC/CaExt/120day
12-Feb	1.3	1.2	1.25	6.5	4.54626E-09	10	50	40	AC/CaExt/120day
13-Feb	1.1	2	1.55	6.5	5.63736E-09	10	50	40	AC/CaExt/120day
14-Feb	1.2	1.2	1.2	6.5	4.36441E-09	10	50	40	AC/CaExt/120day
15-Feb	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
16-Feb	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
17-Feb	1.2	1.2	1.2	6.5	4.36441E-09	10	50	40	AC/CaExt/120day
18-Feb	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
19-Feb	1.2	1.4	1.3	6.5	4.72811E-09	10	50	40	AC/CaExt/120day
20-Feb	1.2	1.1	1.15	6.5	4.18256E-09	10	50	40	AC/CaExt/120day
21-Feb	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
22-Feb	1.1	1.2	1.15	6.5	4.18256E-09	10	50	40	AC/CaExt/120day
23-Feb	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
24-Feb	1.2	1.2	1.2	6.5	4.36441E-09	10	50	40	AC/CaExt/120day
25-Feb	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
26-Feb	1	1.3	1.15	6.5	4.18256E-09	10	50	40	AC/CaExt/120day
27-Feb	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
28-Feb	1.1	1	1.05	6.5	3.81886E-09	10	50	40	AC/CaExt/120day
1-Mar	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
2-Mar	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
3-Mar	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
4-Mar	1.2	1.2	1.2	6.5	4.36441E-09	10	50	40	AC/CaExt/120day
5-Mar	1.6	1.1	1.35	6.5	4.90996E-09	10	50	40	AC/CaExt/120day
6-Mar	0.7	1.1	0.9	6.5	3.27331E-09	10	50	40	AC/CaExt/120day
7-Mar	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
8-Mar	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
9-Mar	1	1.1	1.05	6.5	3.81886E-09	10	50	40	AC/CaExt/120day
11-Mar	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
12-Mar	1	1	1	6.5	3.63701E-09	10	50	40	AC/CaExt/120day
13-Mar	1.4	1.4	1.4	6.5	5.09181E-09	10	50	40	AC/CaExt/120day
14-Mar	1.1	1.2	1.15	6.5	4.18256E-09	10	50	40	AC/CaExt/120day
15-Mar	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
16-Mar	1	1.1	1.05	6.5	3.81886E-09	10	50	40	AC/CaExt/120day
17-Mar	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
18-Mar	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
19-Mar	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
20-Mar	1	1.1	1.05	6.5	3.81886E-09	10	50	40	AC/CaExt/120day
21-Mar	1	1.2	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
22-Mar	1	1.2	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
23-Mar	0.9	1.1	1	6.5	3.63701E-09	10	50	40	AC/CaExt/120day
24-Mar	1	1.2	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day
25-Mar	1.1	1	1.05	6.5	3.81886E-09	10	50	40	AC/CaExt/120day
26-Mar	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/CaExt/120day

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
27-Mar	1.1	1	1.05	6.5	3.81886E-09	10	50	40	AC/CaExt/120day
28-Mar	1.1	1.3	1.2	6.5	4.36441E-09	10	50	40	AC/CaExt/120day
29-Mar	1	1.3	1.15	6.5	4.18256E-09	10	50	40	AC/CaExt/120day
30-Mar	1	1.3	1.15	6.5	4.18256E-09	10	50	40	AC/CaExt/120day
End	1.2	1.2	1.2	6.5	4.36441E-09	10	50	40	AC/CaExt/120day
	1	1.1	1.05	6.5	3.81886E-09	10	50	40	AC/CaExt/120day
Sample 41									
22-Dec									
23-Dec									
24-Dec	0.3	0.5	0.4	2.2	4.29828E-09	10	50	40	AC/NaExt/120day
25-Dec	0.1	0.6	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
26-Dec	0.2	0.5	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
27-Dec	0.1	0.6	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
28-Dec	0.2	0.5	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
29-Dec	0.2	0.5	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
30-Dec	0.2	0.5	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
31-Dec	0.2	0.5	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
1-Jan	0.2	0.5	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
2-Jan	0.2	0.5	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
3-Jan	0.2	0.5	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
4-Jan	0.2	0.5	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
5-Jan	0.2	0.5	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
6-Jan	0.2	0.5	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
7-Jan	0.3	0.5	0.4	2.2	4.29828E-09	10	50	40	AC/NaExt/120day
8-Jan	0.2	0.5	0.35	2.2	3.761E-09	10	50	40	AC/NaExt/120day
9-Jan	0.3	0.3	0.3	4.3	1.64934E-09	10	50	40	AC/NaExt/120day
10-Jan	0.2	0.4	0.3	4.3	1.64934E-09	10	50	40	AC/NaExt/120day
11-Jan	0.3	0.4	0.35	4.3	1.92423E-09	10	50	40	AC/NaExt/120day
12-Jan	0.2	0.4	0.3	4.3	1.64934E-09	10	50	40	AC/NaExt/120day
13-Jan	0.2	0.5	0.35	4.3	1.92423E-09	10	50	40	AC/NaExt/120day
14-Jan	0.1	0.5	0.3	4.3	1.64934E-09	10	50	40	AC/NaExt/120day
15-Jan	0.3	0.4	0.35	4.3	1.92423E-09	10	50	40	AC/NaExt/120day
16-Jan	0.2	0.4	0.3	4.3	1.64934E-09	10	50	40	AC/NaExt/120day
17-Jan	0.3	0.4	0.35	4.3	1.92423E-09	10	50	40	AC/NaExt/120day
18-Jan	0.2	0.4	0.3	4.3	1.64934E-09	10	50	40	AC/NaExt/120day
22-Jan	0.3	0.4	0.35	4.3	1.92423E-09	10	50	40	AC/NaExt/120day
23-Jan	0.4	0.6	0.5	4.3	2.7489E-09	10	50	40	AC/NaExt/120day
24-Jan	0.4	0.4	0.4	4.3	2.19912E-09	10	50	40	AC/NaExt/120day
25-Jan	0.4	0.4	0.4	4.3	2.19912E-09	10	50	40	AC/NaExt/120day
27-Jan	0.3	0.3	0.3	4.3	1.64934E-09	10	50	40	AC/NaExt/120day
28-Jan	0.3	0.4	0.35	4.3	1.92423E-09	10	50	40	AC/NaExt/120day
29-Jan	0.6	1.8	1.2	6.5	4.36441E-09	10	50	40	AC/NaExt/120day
30-Jan	0.6	1.6	1.1	6.5	4.00071E-09	10	50	40	AC/NaExt/120day
31-Jan	0.8	1.3	1.05	6.5	3.81886E-09	10	50	40	AC/NaExt/120day
1-Feb	0.9	1.3	1.1	6.5	4.00071E-09	10	50	40	AC/NaExt/120day

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
2-Feb	0.8	1.3	1.05	6.5	3.81886E-09	10	50	40	AC/NaExt/120day
3-Feb	0.6	1.6	1.1	6.5	4.00071E-09	10	50	40	AC/NaExt/120day
4-Feb	1	1.1	1.05	6.5	3.81886E-09	10	50	40	AC/NaExt/120day
5-Feb	0.9	1.2	1.05	6.5	3.81886E-09	10	50	40	AC/NaExt/120day
6-Feb	0.8	1.2	1	6.5	3.63701E-09	10	50	40	AC/NaExt/120day
7-Feb	0.9	1.2	1.05	6.5	3.81886E-09	10	50	40	AC/NaExt/120day
10-Feb	0.8	1.2	1	6.5	3.63701E-09	10	50	40	AC/NaExt/120day
11-Feb	0.8	1.2	1	6.5	3.63701E-09	10	50	40	AC/NaExt/120day
12-Feb	0.9	1.1	1	6.5	3.63701E-09	10	50	40	AC/NaExt/120day
13-Feb	0.9	2	1.45	6.5	5.27366E-09	10	50	40	AC/NaExt/120day
14-Feb	0.9	1.1	1	6.5	3.63701E-09	10	50	40	AC/NaExt/120day
15-Feb	0.8	1.2	1	6.5	3.63701E-09	10	50	40	AC/NaExt/120day
16-Feb	0.8	1.1	0.95	6.5	3.45516E-09	10	50	40	AC/NaExt/120day
18-Feb	0.8	1.1	0.95	6.5	3.45516E-09	10	50	40	AC/NaExt/120day
19-Feb	0.8	1.1	0.95	6.5	3.45516E-09	10	50	40	AC/NaExt/120day
20-Feb	1.1	1.1	1.1	6.5	4.00071E-09	10	50	40	AC/NaExt/120day
21-Feb	0.9	1.1	1	6.5	3.63701E-09	10	50	40	AC/NaExt/120day
22-Feb	0.8	1.1	0.95	6.5	3.45516E-09	10	50	40	AC/NaExt/120day
23-Feb	0.8	1.1	0.95	6.5	3.45516E-09	10	50	40	AC/NaExt/120day
24-Feb	0.9	1.1	1	6.5	3.63701E-09	10	50	40	AC/NaExt/120day
25-Feb	1	1.1	1.05	6.5	3.81886E-09	10	50	40	AC/NaExt/120day
26-Feb	0.7	1.1	0.9	6.5	3.27331E-09	10	50	40	AC/NaExt/120day
27-Feb	0.9	1.2	1.05	6.5	3.81886E-09	10	50	40	AC/NaExt/120day
28-Feb	0.9	1.1	1	6.5	3.63701E-09	10	50	40	AC/NaExt/120day
1-Mar	0.9	1	0.95	6.5	3.45516E-09	10	50	40	AC/NaExt/120day
2-Mar	0.9	1	0.95	6.5	3.45516E-09	10	50	40	AC/NaExt/120day
3-Mar	0.9	0.9	0.9	6.5	3.27331E-09	10	50	40	AC/NaExt/120day
4-Mar	0.9	1.1	1	6.5	3.63701E-09	10	50	40	AC/NaExt/120day
5-Mar	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/NaExt/120day
6-Mar	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/NaExt/120day
7-Mar	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/NaExt/120day
8-Mar	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/NaExt/120day
9-Mar	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/NaExt/120day
10-Mar	0.8	1	0.9	6.5	3.27331E-09	10	50	40	AC/NaExt/120day
11-Mar	0.8	1	0.9	6.5	3.27331E-09	10	50	40	AC/NaExt/120day
12-Mar	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/NaExt/120day
13-Mar	0.8	1	0.9	6.5	3.27331E-09	10	50	40	AC/NaExt/120day
14-Mar	0.9	1.1	1	6.5	3.63701E-09	10	50	40	AC/NaExt/120day
15-Mar	0.8	1	0.9	6.5	3.27331E-09	10	50	40	AC/NaExt/120day
16-Mar	0.8	1	0.9	6.5	3.27331E-09	10	50	40	AC/NaExt/120day
19-Mar	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/NaExt/120day
20-Mar	0.9	1	0.95	6.5	3.45516E-09	10	50	40	AC/NaExt/120day
21-Mar	1.2	0.9	1.05	6.5	3.81886E-09	10	50	40	AC/NaExt/120day
22-Mar	1.1	0.9	1	6.5	3.63701E-09	10	50	40	AC/NaExt/120day
23-Mar	1.1	0.9	1	6.5	3.63701E-09	10	50	40	AC/NaExt/120day
24-Mar	0.7	1	0.85	6.5	3.09146E-09	10	50	40	AC/NaExt/120day

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
25-Mar	0.7	0.9	0.8	6.5	2.90961E-09	10	50	40	AC/NaExt/120day
26-Mar	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/NaExt/120day
27-Mar	0.8	0.9	0.85	6.5	3.09146E-09	10	50	40	AC/NaExt/120day
28-Mar	0.7	0.9	0.8	6.5	2.90961E-09	10	50	40	AC/NaExt/120day
29-Mar	0.7	0.9	0.8	6.5	2.90961E-09	10	50	40	AC/NaExt/120day
30-Mar	0.6	0.9	0.75	6.5	2.72776E-09	10	50	40	AC/NaExt/120day
31-Mar	0.9	1	0.95	6.5	3.45516E-09	10	50	40	AC/NaExt/120day
1-Apr	0.6	1.1	0.85	6.5	3.09146E-09	10	50	40	AC/NaExt/120day
2-Apr	1	0.5	0.75	6.5	2.72776E-09	10	50	40	AC/NaExt/120day
3-Apr	1	0.97	0.985	6.5	3.58245E-09	10	50	40	AC/NaExt/120day
4-Apr	1	0.5	0.75	6.5	2.72776E-09	10	50	40	AC/NaExt/120day
5-Apr	0.5	0.97	0.735	6.5	2.6732E-09	10	50	40	AC/NaExt/120day
6-Apr	0.5	0.97	0.735	6.5	2.6732E-09	10	50	40	AC/NaExt/120day
7-Apr	0.5	1.46	0.98	6.5	3.56427E-09	10	50	40	AC/NaExt/120day
End	0.9	0.8	0.85	6.5	3.09146E-09	10	50	40	AC/NaExt/120day
	0.8	0.8	0.8	6.5	2.90961E-09	10	50	40	AC/NaExt/120day
Sample 50									
6-Apr									
6-Apr									
6-Apr	35.7	35.5	35.6	2.2	6.12076E-06	10	50	40	Ca ash(10/20)W/D
6-Apr	36.23	34.97	35.6	2.2	6.12076E-06	10	50	40	Ca ash(10/20)W/D
13-Apr	35.7	34.97	35.335	2.2	6.07519E-06	10	50	40	Ca ash(10/20)W/D
13-Apr	35.18	33.93	34.555	2.2	5.94109E-06	10	50	40	Ca ash(10/20)W/D
13-Apr	32.55	33.41	32.98	2.2	5.6703E-06	10	50	40	Ca ash(10/20)W/D
13-Apr	33.08	32.36	32.72	2.2	5.62559E-06	10	50	40	Ca ash(10/20)W/D
13-Apr	34.13	32.36	33.245	2.2	5.71586E-06	10	50	40	Ca ash(10/20)W/D
21-Apr	44.63	43.85	44.24	2.2	5.70468E-06	10	50	40	Ca ash(10/20)W/D
21-Apr	34.65	33.41	34.03	2.2	5.85082E-06	10	50	40	Ca ash(10/20)W/D
21-Apr	29.93	28.71	29.32	2.2	5.04103E-06	10	50	40	Ca ash(10/20)W/D
21-Apr	30.45	29.23	29.84	2.2	5.13043E-06	10	50	40	Ca ash(10/20)W/D
21-Apr	31.5	30.28	30.89	2.2	5.31096E-06	10	50	40	Ca ash(10/20)W/D
2-May	29.93	29.23	29.58	2.2	5.08573E-06	10	50	40	Ca ash(10/20)W/D
2-May	28.88	29.75	29.315	2.2	5.04017E-06	10	50	40	Ca ash(10/20)W/D
2-May	30.98	29.75	30.365	2.2	3.91552E-06	10	50	40	Ca ash(10/20)W/D
2-May	30.98	30.28	30.63	2.2	3.94969E-06	10	50	40	Ca ash(10/20)W/D
2-May	30.45	31.84	31.145	2.2	4.0161E-06	10	50	40	Ca ash(10/20)W/D
End	31.5	30.8	31.15	2.2	4.01675E-06	10	50	40	Ca ash(10/20)W/D
	32.03	30.8	31.415	2.2	4.05092E-06	10	50	40	Ca ash(10/20)W/D
Sample 51									
8-Apr									
8-Apr									
8-Apr	25.81	26.5	26.155	2.2	3.37265E-06	10	50	40	Na(2) ash W/D
8-Apr	41.4	39.5	40.45	2.2	5.21597E-06	10	50	40	Na(2) ash W/D
19-Apr	48.21	46.5	47.355	2.2	8.14181E-06	10	50	40	Na(2) ash W/D

Date	Total	Total	Avg	Grad	Hydraulic	Effec	Confin	Back	Moist
	Outflow	Inflow	Flow	(psi)	Conductivity	Stress	Press	Pres	Cond
19-Apr	43.34	42	42.67	2.2	1.10045E-05	10	50	40	Na(2) ash W/D
19-Apr	39.2	40	39.6	2.2	1.02127E-05	10	50	40	Na(2) ash W/D
19-Apr	49.49	49	49.245	2.2	1.27001E-05	10	50	40	Na(2) ash W/D
19-Apr	55.37	57.5	56.435	2.2	1.45544E-05	10	50	40	Na(2) ash W/D
27-Apr	69.09	69	69.045	2.2	1.78065E-05	10	50	40	Na(2) ash W/D
27-Apr	80.85	80.5	80.675	2.2	2.08058E-05	10	50	40	Na(2) ash W/D
27-Apr	70.07	70.5	70.285	2.2	2.71894E-05	10	50	40	Na(2) ash W/D
27-Apr	81.34	81.5	81.42	2.2	3.1497E-05	10	50	40	Na(2) ash W/D
27-Apr	85.26	85.5	85.38	2.2	3.30289E-05	10	50	40	Na(2) ash W/D
4-May	91.63	91.5	91.565	2.2	3.54215E-05	10	50	40	Na(2) ash W/D
4-May	95.55	96	95.775	2.2	3.70501E-05	10	50	40	Na(2) ash W/D
4-May	66.15	66	66.075	2.2	4.08973E-05	10	50	40	Na(2) ash W/D
4-May	68.6	68.5	68.55	2.2	4.24292E-05	10	50	40	Na(2) ash W/D
4-May	71.05	70.5	70.775	2.2	4.38064E-05	10	50	40	Na(2) ash W/D
End	75.46	75.5	75.48	2.2	4.49217E-05	10	50	40	Na(2) ash W/D
	74.97	75.5	75.235	2.2	4.65669E-05	10	50	40	Na(2) ash W/D
Sample 52									
11-Apr									
11-Apr									
11-Apr	54.9	55	54.95	2.2	7.1691E-05	10	50	40	AC-25%FA/Cax W/D
11-Apr	54.9	54.5	54.7	2.2	7.13648E-05	10	50	40	AC-25%FA/Cax W/D
11-Apr	54.38	53.5	53.94	2.2	7.03733E-05	10	50	40	AC-25%FA/Cax W/D
20-Apr	53.86	53.5	53.68	2.2	7.00341E-05	10	50	40	AC-25%FA/Cax W/D
20-Apr	50.16	49.5	49.83	2.2	6.50111E-05	10	50	40	AC-25%FA/Cax W/D
20-Apr	56.5	56.5	56.5	2.2	7.37132E-05	10	50	40	AC-25%FA/Cax W/D
20-Apr	58.08	57.5	57.79	2.2	7.53962E-05	10	50	40	AC-25%FA/Cax W/D
20-Apr	58.61	58	58.305	2.2	7.60681E-05	10	50	40	AC-25%FA/Cax W/D
3-May	60.19	59.5	59.845	2.2	7.80773E-05	10	50	40	AC-25%FA/Cax W/D
3-May	60.19	59.5	59.845	2.2	7.80773E-05	10	50	40	AC-25%FA/Cax W/D
3-May	44.35	44	44.175	2.2	5.76333E-05	10	50	40	AC-25%FA/Cax W/D
3-May	44.35	43.5	43.925	2.2	5.73071E-05	10	50	40	AC-25%FA/Cax W/D
3-May	44.35	43.5	43.925	2.2	5.73071E-05	10	50	40	AC-25%FA/Cax W/D
16-May	43.82	44	43.91	2.2	5.72875E-05	10	50	40	AC-25%FA/Cax W/D
16-May	44.35	43.5	43.925	2.2	5.73071E-05	10	50	40	AC-25%FA/Cax W/D
16-May	42.24	42.5	42.37	2.2	5.52784E-05	10	50	40	AC-25%FA/Cax W/D
16-May	43.82	43.5	43.66	2.2	5.69614E-05	10	50	40	AC-25%FA/Cax W/D
16-May	44.35	43.5	43.925	2.2	5.73071E-05	10	50	40	AC-25%FA/Cax W/D
End	43.82	43	43.41	2.2	5.66352E-05	10	50	40	AC-25%FA/Cax W/D
	44.35	43.5	43.925	2.2	5.73071E-05	10	50	40	AC-25%FA/Cax W/D
Sample 55									
10-May									
10-May									
10-May	53.55	67.34	60.445	2.2	9.35315E-05	10	50	40	Baseline FA/W/D
10-May	54.08	52.72	53.4	2.2	8.26302E-05	10	50	40	Baseline FA/W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
10-May	54.08	52.72	53.4	2.2	8.26302E-05	10	50	40	Baseline FA/W/D
20-May	98.18	96.57	97.375	2.2	7.53382E-05	10	50	40	Baseline FA/W/D
20-May	97.13	95.53	96.33	2.2	7.45297E-05	10	50	40	Baseline FA/W/D
20-May	59.33	57.94	58.635	2.2	8.24825E-05	10	50	40	Baseline FA/W/D
20-May	60.4	57.9	59.15	2.2	8.3207E-05	10	50	40	Baseline FA/W/D
27-May	58.8	58.98	58.89	2.2	8.28412E-05	10	50	40	Baseline FA/W/D
27-May	60.4	59	59.7	2.2	8.39807E-05	10	50	40	Baseline FA/W/D
27-May	55.65	53.77	54.71	2.2	8.46573E-05	10	50	40	Baseline FA/W/D
27-May	53.13	53.77	53.45	2.2	8.27076E-05	10	50	40	Baseline FA/W/D
27-May	55.65	54.29	54.97	2.2	8.50596E-05	10	50	40	Baseline FA/W/D
10-Jun	55.65	54.29	54.97	2.2	8.50596E-05	10	50	40	Baseline FA/W/D
10-Jun	55.65	53.77	54.71	2.2	8.46573E-05	10	50	40	Baseline FA/W/D
10-Jun	54.08	52.72	53.4	2.2	8.26302E-05	10	50	40	Baseline FA/W/D
10-Jun	54.6	52.72	53.66	2.2	8.30325E-05	10	50	40	Baseline FA/W/D
10-Jun	54.08	53.24	53.66	2.2	8.30325E-05	10	50	40	Baseline FA/W/D
20-Jun	55.13	53.24	54.185	2.2	8.38449E-05	10	50	40	Baseline FA/W/D
20-Jun	54.6	53.24	53.92	2.2	8.34349E-05	10	50	40	Baseline FA/W/D
20-Jun	55.65	54.29	54.97	2.2	8.50596E-05	10	50	40	Baseline FA/W/D
20-Jun	53.55	54.29	53.92	2.2	8.34349E-05	10	50	40	Baseline FA/W/D
20-Jun	56.18	54.81	55.495	2.2	8.5872E-05	10	50	40	Baseline FA/W/D
End	56.18	54.81	55.495	2.2	8.5872E-05	10	50	40	Baseline FA/W/D
	56.18	54.81	55.495	2.2	8.5872E-05	10	50	40	Baseline FA/W/D
Sample 56									
26-May									
26-May									
26-May	50.47	53	51.735	2.2	1.06738E-05	10	50	40	Ca Ash/ F/T
26-May	42.14	42.5	42.32	2.2	1.09142E-05	10	50	40	Ca Ash/ F/T
26-May	42.63	43	42.815	2.2	1.10419E-05	10	50	40	Ca Ash/ F/T
7-Jun	42.12	43	42.56	2.2	1.09761E-05	10	50	40	Ca Ash/ F/T
7-Jun	43.61	43.5	43.555	2.2	1.12327E-05	10	50	40	Ca Ash/ F/T
7-Jun	60.76	62	61.38	2.2	6.33189E-05	10	50	40	Ca Ash/ F/T
7-Jun	59.78	60	59.89	2.2	6.17818E-05	10	50	40	Ca Ash/ F/T
7-Jun	56.84	57	56.92	2.2	5.8718E-05	10	50	40	Ca Ash/ F/T
19-Jun	54.39	54.5	54.445	2.2	5.61648E-05	10	50	40	Ca Ash/ F/T
19-Jun	54.88	55	54.94	2.2	5.66755E-05	10	50	40	Ca Ash/ F/T
19-Jun	86.24	86	86.12	2.2	0.000133261	10	50	40	Ca Ash/ F/T
19-Jun	60.76	60.5	60.63	2.2	0.000134025	10	50	40	Ca Ash/ F/T
19-Jun	56.84	57	56.92	2.2	0.000125824	10	50	40	Ca Ash/ F/T
30-Jun	53.9	56	54.95	2.2	0.00012147	10	50	40	Ca Ash/ F/T
30-Jun	50.47	51.5	50.985	2.2	0.000112705	10	50	40	Ca Ash/ F/T
30-Jun	80.85	81	80.925	2.2	0.000250444	10	50	40	Ca Ash/ F/T
30-Jun	75.95	76.5	76.225	2.2	0.000235898	10	50	40	Ca Ash/ F/T
30-Jun	73.5	73.5	73.5	2.2	0.000227465	10	50	40	Ca Ash/ F/T
End	72.52	72	72.26	2.2	0.000223628	10	50	40	Ca Ash/ F/T
	69.58	69.5	69.54	2.2	0.00021521	10	50	40	Ca Ash/ F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
Sample 57									
25-May									
25-May									
25-May	33.79	34.5	34.145	2.2	2.51597E-06	10	50	40	Na Ash (2)/ F/T
25-May	53.33	52.5	52.915	2.2	5.45865E-06	10	50	40	Na Ash (2)/ F/T
25-May	76.03	76	76.015	2.2	1.30694E-05	10	50	40	Na Ash (2)/ F/T
9-Jun	30.62	32.5	31.56	2.2	1.62785E-05	10	50	40	Na Ash (2)/ F/T
9-Jun	38.54	38.5	38.52	2.2	1.98684E-05	10	50	40	Na Ash (2)/ F/T
9-Jun	60.72	60.5	60.61	2.2	3.75147E-05	10	50	40	Na Ash (2)/ F/T
9-Jun	63.89	63.5	63.695	2.2	3.94242E-05	10	50	40	Na Ash (2)/ F/T
9-Jun	58.08	57.5	57.79	2.2	4.47116E-05	10	50	40	Na Ash (2)/ F/T
19-Jun	65.47	65	65.235	2.2	5.04717E-05	10	50	40	Na Ash (2)/ F/T
19-Jun	73.39	72.5	72.945	2.2	5.64369E-05	10	50	40	Na Ash (2)/ F/T
19-Jun	61.78	62.5	62.14	2.2	6.41029E-05	10	50	40	Na Ash (2)/ F/T
19-Jun	44.35	44	44.175	2.2	6.83556E-05	10	50	40	Na Ash (2)/ F/T
19-Jun	45.41	45.5	45.455	2.2	7.03363E-05	10	50	40	Na Ash (2)/ F/T
30-Jun	46.99	47	46.995	2.2	7.27192E-05	10	50	40	Na Ash (2)/ F/T
30-Jun	48.58	48.5	48.54	2.2	7.51099E-05	10	50	40	Na Ash (2)/ F/T
30-Jun	50.69	51	50.845	2.2	5.24511E-05	10	50	40	Na Ash (2)/ F/T
30-Jun	53.33	53	53.165	2.2	5.48444E-05	10	50	40	Na Ash (2)/ F/T
30-Jun	55.97	55.5	55.735	2.2	5.74956E-05	10	50	40	Na Ash (2)/ F/T
End	59.14	59	59.07	2.2	6.09359E-05	10	50	40	Na Ash (2)/ F/T
	62.3	62	62.15	2.2	6.41132E-05	10	50	40	Na Ash (2)/ F/T
Sample 59									
29-Jun									
29-Jun									
29-Jun	59.8	59.41	59.605	2.2	1.0248E-05	10	50	40	$Na(CO_3)_2$ Ash
29-Jun	62.92	63.76	63.34	2.2	1.63352E-05	10	50	40	$Na(CO_3)_2$ Ash
29-Jun	87.36	88.39	87.875	2.2	3.02169E-05	10	50	40	$Na(CO_3)_2$ Ash
29-Jun	76.44	76.31	76.375	2.2	3.93938E-05	10	50	40	$Na(CO_3)_2$ Ash
29-Jun	82.68	83.08	82.88	2.2	4.2749E-05	10	50	40	$Na(CO_3)_2$ Ash
29-Jun	57.2	58.44	57.82	4.3	4.57752E-05	10	50	40	$Na(CO_3)_2$ Ash
29-Jun	60.32	60.38	60.35	4.3	4.77781E-05	10	50	40	$Na(CO_3)_2$ Ash
29-Jun	61.88	61.82	61.85	4.3	4.89657E-05	10	50	40	$Na(CO_3)_2$ Ash
29-Jun	63.44	63.76	63.6	4.3	5.03511E-05	10	50	40	$Na(CO_3)_2$ Ash
29-Jun	66.56	66.17	66.365	4.3	5.25401E-05	10	50	40	$Na(CO_3)_2$ Ash
29-Jun	51.48	52.16	51.82	6.5	5.42793E-05	10	50	40	$Na(CO_3)_2$ Ash
29-Jun	52.52	52.65	52.585	6.5	5.50806E-05	10	50	40	$Na(CO_3)_2$ Ash
29-Jun	53.56	53.61	53.585	6.5	5.61281E-05	10	50	40	$Na(CO_3)_2$ Ash
End	54.6	54.1	54.35	6.5	5.69294E-05	10	50	40	$Na(CO_3)_2$ Ash
	55.64	55.06	55.35	6.5	5.79768E-05	10	50	40	$Na(CO_3)_2$ Ash

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
Sample 47									
10-Mar									
11-Mar									
12-Mar	4.32	4.71	4.515	2.2	1.16261E-08	10	50	40	AC/CaExt/ W/D
13-Mar	3.2	3.2	3.2	2.2	8.23995E-09	10	50	40	AC/CaExt/ W/D
14-Mar	3	3.1	3.05	2.2	7.8537E-09	10	50	40	AC/CaExt/ W/D
15-Mar	2.9	2.9	2.9	2.2	7.46745E-09	10	50	40	AC/CaExt/ W/D
16-Mar	2.9	3	2.95	2.2	7.5962E-09	10	50	40	AC/CaExt/ W/D
17-Mar	3.3	3.2	3.25	2.2	8.3687E-09	10	50	40	AC/CaExt/ W/D
18-Mar	3	3	3	2.2	7.72495E-09	10	50	40	AC/CaExt/ W/D
19-Mar	2.8	2.8	2.8	2.2	7.20995E-09	10	50	40	AC/CaExt/ W/D
20-Mar	2.8	2.8	2.8	2.2	7.20995E-09	10	50	40	AC/CaExt/ W/D
21-Mar	3	2.9	2.95	2.2	7.5962E-09	10	50	40	AC/CaExt/ W/D
12-Apr	2.9	2.9	2.9	2.2	7.46745E-09	10	50	40	AC/CaExt/ W/D
13-Apr	2.9	2.9	2.9	2.2	7.46745E-09	10	50	40	AC/CaExt/ W/D
14-Apr	2.3	2.1	2.2	2.2	5.66496E-09	10	50	40	AC/CaExt/ W/D
15-Apr	2.2	2.3	2.25	2.2	5.79371E-09	10	50	40	AC/CaExt/ W/D
16-Apr	2.4	2.2	2.3	2.2	5.92246E-09	10	50	40	AC/CaExt/ W/D
17-Apr	2.5	2.3	2.4	2.2	6.17996E-09	10	50	40	AC/CaExt/ W/D
18-Apr	2.1	2.2	2.15	2.2	5.53621E-09	10	50	40	AC/CaExt/ W/D
19-Apr	2	2	2	2.2	5.14997E-09	10	50	40	AC/CaExt/ W/D
20-Apr	2	2	2	2.2	5.14997E-09	10	50	40	AC/CaExt/ W/D
21-Apr	2.3	2.2	2.25	2.2	5.79371E-09	10	50	40	AC/CaExt/ W/D
22-Apr	2.2	2	2.1	2.2	5.40747E-09	10	50	40	AC/CaExt/ W/D
23-Apr	2	2.1	2.05	2.2	5.27872E-09	10	50	40	AC/CaExt/ W/D
24-Apr	2	2.1	2.05	2.2	5.27872E-09	10	50	40	AC/CaExt/ W/D
25-Apr	2.2	2.1	2.15	2.2	5.53621E-09	10	50	40	AC/CaExt/ W/D
23-May	2	2	2	2.2	5.14997E-09	10	50	40	AC/CaExt/ W/D
24-May	2	2	2	2.2	5.14997E-09	10	50	40	AC/CaExt/ W/D
25-May	1.62	2.09	1.855	2.2	4.77659E-09	10	50	40	AC/CaExt/ W/D
26-May	2.4	2.2	2.3	2.2	5.92246E-09	10	50	40	AC/CaExt/ W/D
29-May	2.1	2.1	2.1	2.2	5.40747E-09	10	50	40	AC/CaExt/ W/D
30-May	2.1	2.1	2.1	2.2	5.40747E-09	10	50	40	AC/CaExt/ W/D
31-May	2.16	2.09	2.125	2.2	5.47184E-09	10	50	40	AC/CaExt/ W/D
1-Jun	2.16	2.09	2.125	2.2	5.47184E-09	10	50	40	AC/CaExt/ W/D
2-Jun	2.16	2.09	2.125	2.2	5.47184E-09	10	50	40	AC/CaExt/ W/D
3-Jun	2.16	2.09	2.125	2.2	5.47184E-09	10	50	40	AC/CaExt/ W/D
28-Jun	2.16	2.09	2.125	2.2	5.47184E-09	10	50	40	AC/CaExt/ W/D
29-Jun	2.16	2.09	2.125	2.2	5.47184E-09	10	50	40	AC/CaExt/ W/D
30-Jun	2	2.1	2.05	2.2	5.27872E-09	10	50	40	AC/CaExt/ W/D
1-Jul	1.9	2.1	2	2.2	5.14997E-09	10	50	40	AC/CaExt/ W/D
2-Jul	2.1	1.8	1.95	2.2	5.02122E-09	10	50	40	AC/CaExt/ W/D
3-Jul	1.7	1.8	1.75	2.2	4.50622E-09	10	50	40	AC/CaExt/ W/D
4-Jul	1.6	1.8	1.7	2.2	4.37747E-09	10	50	40	AC/CaExt/ W/D
5-Jul	1.7	1.8	1.75	2.2	4.50622E-09	10	50	40	AC/CaExt/ W/D
6-Jul	1.6	1.8	1.7	2.2	4.37747E-09	10	50	40	AC/CaExt/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
7-Jul	1.6	1.8	1.7	2.2	4.37747E-09	10	50	40	AC/CaExt/ W/D
8-Jul	2.1	2	2.05	2.2	5.27872E-09	10	50	40	AC/CaExt/ W/D
9-Jul	1.9	1.9	1.9	2.2	4.89247E-09	10	50	40	AC/CaExt/ W/D
10-Jul	1.8	1.8	1.8	2.2	4.63497E-09	10	50	40	AC/CaExt/ W/D
11-Jul	1.9	2.09	1.995	2.2	5.13709E-09	10	50	40	AC/CaExt/ W/D
12-Jul	1.9	2.09	1.995	2.2	5.13709E-09	10	50	40	AC/CaExt/ W/D
End	1.9	1.57	1.735	2.2	4.4676E-09	10	50	40	AC/CaExt/ W/D
	1.9	1.9	1.9	2.2	4.89247E-09	10	50	40	AC/CaExt/ W/D
Sample 49									
19-Mar									
20-Mar									
21-Mar	3.9	4	3.95	2.2	1.04227E-08	10	50	40	AC-$CaCl_2$//NaX/W-D
22-Mar	3.41	4	3.705	2.2	9.77626E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
23-Mar	3.41	4.5	3.955	2.2	1.04359E-08	10	50	40	AC-$CaCl_2$//NaX/W-D
24-Mar	2.92	4	3.46	2.2	9.12978E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
25-Mar	3.2	3	3.1	2.2	8.17986E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
26-Mar	3	2.5	2.75	2.2	7.25633E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
27-Mar	2.6	3	2.8	2.2	7.38826E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
28-Mar	2.4	2.5	2.45	2.2	6.46473E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
29-Mar	2.2	3	2.6	2.2	6.86053E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
23-Apr	2.2	2.5	2.35	2.2	6.20086E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
24-Apr	2.5	2.4	2.45	2.2	6.46473E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
25-Apr	1.1	1.3	1.2	2.2	3.1664E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
26-Apr	1.1	1.2	1.15	2.2	3.03447E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
27-Apr	1	1.3	1.15	2.2	3.03447E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
29-Apr	0.8	1.3	1.05	2.2	2.7706E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
30-Apr	1	0.9	0.95	2.2	2.50673E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
1-May	1.1	1.2	1.15	2.2	3.03447E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
2-May	1	1.1	1.05	2.2	2.7706E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
3-May	1	1.1	1.05	2.2	2.7706E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
4-May	1	1.1	1.05	2.2	2.7706E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
1-Jun	1	0.9	0.95	2.2	2.50673E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
2-Jun	1	1.1	1.05	2.2	2.7706E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
3-Jun	0.97	1	0.985	2.2	2.59909E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
4-Jun	0.97	1	0.985	2.2	2.59909E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
5-Jun	1.46	1.5	1.48	2.2	3.90523E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
6-Jun	1.1	1.1	1.1	2.2	2.90253E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
7-Jun	1.1	1	1.05	2.2	2.7706E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
8-Jun	1	1	1	2.2	2.63867E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
30-Jun	1.1	0.9	1	2.2	2.63867E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
1-Jul	1.1	1.2	1.15	2.2	3.03447E-09	10	50	40	AC-$CaCl_2$//NaX/W-D

Date	Total	Total	Avg	Grad	Hydraulic	Effec	Confin	Back	Moist
	Outflow	Inflow	Flow	(psi)	Conductivity	Stress	Press	Pres	Cond
2-Jul	0.49	1.5	0.995	2.2	2.62547E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
3-Jul	1.46	1.5	1.48	2.2	3.90523E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
4-Jul	0.97	1.5	1.235	2.2	3.25875E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
5-Jul	0.97	1.5	1.235	2.2	3.25875E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
6-Jul	1.46	1.5	1.48	2.2	3.90523E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
7-Jul	0.97	1	0.985	2.2	2.59909E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
8-Jul	1.1	1.3	1.2	2.2	3.1664E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
9-Jul	1	1.3	1.15	2.2	3.03447E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
10-Jul	1.3	1	1.15	2.2	3.03447E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
11-Jul	1.46	1.5	1.48	2.2	3.90523E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
12-Jul	1.46	1.5	1.48	2.2	3.90523E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
End	0.97	1	0.985	2.2	2.59909E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
	1.1	1.2	1.15	2.2	3.03447E-09	10	50	40	AC-$CaCl_2$//NaX/W-D
Sample 54									
22-Apr									
23-Apr									
24-Apr	5	6.33	5.665	2.2	6.19358E-08	10	50	40	AC/Ca Ash/ 120day
25-Apr	3.5	4.38	3.94	2.2	4.30763E-08	10	50	40	AC/Ca Ash/ 120day
26-Apr	3	4.38	3.69	2.2	4.0343E-08	10	50	40	AC/Ca Ash/ 120day
27-Apr	3	4.38	3.69	2.2	4.0343E-08	10	50	40	AC/Ca Ash/ 120day
28-Apr	2.6	4.2	3.4	2.2	3.71724E-08	10	50	40	AC/Ca Ash/ 120day
29-Apr	2.7	3	2.85	2.2	3.11592E-08	10	50	40	AC/Ca Ash/ 120day
30-Apr	3	3.6	3.3	2.2	3.60791E-08	10	50	40	AC/Ca Ash/ 120day
1-May	2.8	3.5	3.15	2.2	3.44392E-08	10	50	40	AC/Ca Ash/ 120day
2-May	2.7	3.4	3.05	2.2	3.33459E-08	10	50	40	AC/Ca Ash/ 120day
3-May	2.7	3.4	3.05	2.2	3.33459E-08	10	50	40	AC/Ca Ash/ 120day
4-May	2.7	3.3	3	2.2	3.27992E-08	10	50	40	AC/Ca Ash/ 120day
5-May	3	3.3	3.15	2.2	3.44392E-08	10	50	40	AC/Ca Ash/ 120day
6-May	5	6.3	5.65	4.3	3.16042E-08	10	50	40	AC/Ca Ash/ 120day
7-May	4.8	5.5	5.15	4.3	2.88074E-08	10	50	40	AC/Ca Ash/ 120day
8-May	5.5	5.84	5.67	4.3	3.17161E-08	10	50	40	AC/Ca Ash/ 120day
9-May	5	5.36	5.18	4.3	2.89752E-08	10	50	40	AC/Ca Ash/ 120day
10-May	5	5.36	5.18	4.3	2.89752E-08	10	50	40	AC/Ca Ash/ 120day
11-May	5	5.36	5.18	4.3	2.89752E-08	10	50	40	AC/Ca Ash/ 120day
12-May	4.8	5.1	4.95	4.3	2.76886E-08	10	50	40	AC/Ca Ash/ 120day
13-May	4.7	5.2	4.95	4.3	2.76886E-08	10	50	40	AC/Ca Ash/ 120day
14-May	4.7	5.2	4.95	4.3	2.76886E-08	10	50	40	AC/Ca Ash/ 120day
15-May	4.7	5.1	4.9	4.3	2.74089E-08	10	50	40	AC/Ca Ash/ 120day
16-May	4.5	4.87	4.685	4.3	2.62063E-08	10	50	40	AC/Ca Ash/ 120day
17-May	4.5	4.87	4.685	4.3	2.62063E-08	10	50	40	AC/Ca Ash/ 120day
20-May	4	4.87	4.435	4.3	2.48079E-08	10	50	40	AC/Ca Ash/ 120day
21-May	4.6	5.8	5.2	4.3	2.9087E-08	10	50	40	AC/Ca Ash/ 120day
22-May	4.2	5	4.6	4.3	2.57308E-08	10	50	40	AC/Ca Ash/ 120day

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
23-May	4.5	4.38	4.44	4.3	2.48359E-08	10	50	40	AC/Ca Ash/ 120day
24-May	4.5	4.38	4.44	4.3	2.48359E-08	10	50	40	AC/Ca Ash/ 120day
25-May	4	4.38	4.19	4.3	2.34374E-08	10	50	40	AC/Ca Ash/ 120day
26-May	4.1	4.5	4.3	4.3	2.40527E-08	10	50	40	AC/Ca Ash/ 120day
1-Jun	7.3	7.9	7.6	6.5	2.81232E-08	10	50	40	AC/Ca Ash/ 120day
2-Jun	7.2	7.8	7.5	6.5	2.77532E-08	10	50	40	AC/Ca Ash/ 120day
3-Jun	6.5	6.82	6.66	6.5	2.46448E-08	10	50	40	AC/Ca Ash/ 120day
4-Jun	7	7.31	7.155	6.5	2.64765E-08	10	50	40	AC/Ca Ash/ 120day
5-Jun	6.5	6.33	6.415	6.5	2.37382E-08	10	50	40	AC/Ca Ash/ 120day
6-Jun	6.2	6.4	6.3	6.5	2.33127E-08	10	50	40	AC/Ca Ash/ 120day
7-Jun	6.2	6.4	6.3	6.5	2.33127E-08	10	50	40	AC/Ca Ash/ 120day
8-Jun	6.2	6.4	6.3	6.5	2.33127E-08	10	50	40	AC/Ca Ash/ 120day
9-Jun	7	6.9	6.95	6.5	2.57179E-08	10	50	40	AC/Ca Ash/ 120day
10-Jun	6.3	6.8	6.55	6.5	2.42378E-08	10	50	40	AC/Ca Ash/ 120day
11-Jun	6.6	6.8	6.7	6.5	2.47928E-08	10	50	40	AC/Ca Ash/ 120day
12-Jun	5.7	6.4	6.05	6.5	2.23876E-08	10	50	40	AC/Ca Ash/ 120day
13-Jun	5.6	6.1	5.85	6.5	2.16475E-08	10	50	40	AC/Ca Ash/ 120day
14-Jun	5.6	5.9	5.75	6.5	2.12774E-08	10	50	40	AC/Ca Ash/ 120day
15-Jun	6.3	6.2	6.25	6.5	2.31276E-08	10	50	40	AC/Ca Ash/ 120day
16-Jun	6	6	6	6.5	2.22025E-08	10	50	40	AC/Ca Ash/ 120day
17-Jun	5.7	6	5.85	6.5	2.16475E-08	10	50	40	AC/Ca Ash/ 120day
18-Jun	5.6	6.1	5.85	6.5	2.16475E-08	10	50	40	AC/Ca Ash/ 120day
19-Jun	5.9	6.2	6.05	6.5	2.23876E-08	10	50	40	AC/Ca Ash/ 120day
20-Jun	5.8	6 1	5.95	6.5	2.20175E-08	10	50	40	AC/Ca Ash/ 120day
21-Jun	5.8	5.9	5.85	6.5	2.16475E-08	10	50	40	AC/Ca Ash/ 120day
22-Jun	6.4	5.8	6.1	6.5	2.25726E-08	10	50	40	AC/Ca Ash/ 120day
23-Jun	6.4	6.8	6.6	6.5	2.44228E-08	10	50	40	AC/Ca Ash/ 120day
25-Jun	6.5	6.8	6.65	6.5	2.46078E-08	10	50	40	AC/Ca Ash/ 120day
26-Jun	5.9	6.1	6	6.5	2.22025E-08	10	50	40	AC/Ca Ash/ 120day
27-Jun	6.5	6.33	6.415	6.5	2.37382E-08	10	50	40	AC/Ca Ash/ 120day
28-Jun	6	6.33	6.165	6.5	2.28131E-08	10	50	40	AC/Ca Ash/ 120day
29-Jun	6	6.33	6.165	6.5	2.28131E-08	10	50	40	AC/Ca Ash/ 120day
30-Jun	6.5	5.84	6.17	6.5	2.28316E-08	10	50	40	AC/Ca Ash/ 120day
1-Jul	5.5	6.33	5.915	6.5	2.1888E-08	10	50	40	AC/Ca Ash/ 120day
2-Jul	6	5.84	5.92	6.5	2.19065E-08	10	50	40	AC/Ca Ash/ 120day
3-Jul	5.5	5.84	5.67	6.5	2.09814E-08	10	50	40	AC/Ca Ash/ 120day
4-Jul	5.5	5.84	5.67	6.5	2.09814E-08	10	50	40	AC/Ca Ash/ 120day
5-Jul	5.5	5.84	5.67	6.5	2.09814E-08	10	50	40	AC/Ca Ash/ 120day
6-Jul	5.5	5.84	5.67	6.5	2.09814E-08	10	50	40	AC/Ca Ash/ 120day
7-Jul	5	5.36	5.18	6.5	1.91682E-08	10	50	40	AC/Ca Ash/ 120day
8-Jul	5.8	5.84	5.82	6.5	2.15365E-08	10	50	40	AC/Ca Ash/ 120day
9-Jul	5.1	5.8	5.45	6.5	2.01673E-08	10	50	40	AC/Ca Ash/ 120day
10-Jul	5.7	5.3	5.5	6.5	2.03523E-08	10	50	40	AC/Ca Ash/ 120day
11-Jul	6	5.84	5.92	6.5	2.19065E-08	10	50	40	AC/Ca Ash/ 120day
12-Jul	6	5.84	5.92	6.5	2.19065E-08	10	50	40	AC/Ca Ash/ 120day
13-Jul	5.5	5.36	5.43	6.5	2.00933E-08	10	50	40	AC/Ca Ash/ 120day

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
14-Jul	5.4	5.7	5.55	6.5	2.05373E-08	10	50	40	AC/Ca Ash/ 120day
15-Jul	5.4	5.5	5.45	6.5	2.01673E-08	10	50	40	AC/Ca Ash/ 120day
16-Jul	5.6	5.8	5.7	6.5	2.10924E-08	10	50	40	AC/Ca Ash/ 120day
17-Jul	5.5	5.67	5.585	6.5	2.06669E-08	10	50	40	AC/Ca Ash/ 120day
18-Jul	5.5	5.36	5.43	6.5	2.00933E-08	10	50	40	AC/Ca Ash/ 120day
19-Jul	5.5	5.36	5.43	6.5	2.00933E-08	10	50	40	AC/Ca Ash/ 120day
23-Jul	5.5	5.36	5.43	6.5	2.00933E-08	10	50	40	AC/Ca Ash/ 120day
24-Jul	5	5.36	5.18	6.5	1.91682E-08	10	50	40	AC/Ca Ash/ 120day
25-Jul	6	5.84	5.92	6.5	2.19065E-08	10	50	40	AC/Ca Ash/ 120day
26-Jul	5.5	5.84	5.67	6.5	2.09814E-08	10	50	40	AC/Ca Ash/ 120day
27-Jul	5.5	5.84	5.67	6.5	2.09814E-08	10	50	40	AC/Ca Ash/ 120day
28-Jul	5.5	5.36	5.43	6.5	2.00933E-08	10	50	40	AC/Ca Ash/ 120day
29-Jul	5.5	5.36	5.43	6.5	2.00933E-08	10	50	40	AC/Ca Ash/ 120day
30-Jul	5	4.87	4.935	6.5	1.82616E-08	10	50	40	AC/Ca Ash/ 120day
31-Jul	5.5	5.84	5.67	6.5	2.09814E-08	10	50	40	AC/Ca Ash/ 120day
1-Aug	5.5	5.36	5.43	6.5	2.00933E-08	10	50	40	AC/Ca Ash/ 120day
2-Aug	5.5	5.36	5.43	6.5	2.00933E-08	10	50	40	AC/Ca Ash/ 120day
3-Aug	5	5.36	5.18	6.5	1.91682E-08	10	50	40	AC/Ca Ash/ 120day
4-Aug	5.5	5.36	5.43	6.5	2.00933E-08	10	50	40	AC/Ca Ash/ 120day
5-Aug	5	5.36	5.18	6.5	1.91682E-08	10	50	40	AC/Ca Ash/ 120day
6-Aug	4.5	4.87	4.685	6.5	1.73365E-08	10	50	40	AC/Ca Ash/ 120day
7-Aug	5	4.87	4.935	6.5	1.82616E-08	10	50	40	AC/Ca Ash/ 120day
8-Aug	5.5	5.36	5.43	6.5	2.00933E-08	10	50	40	AC/Ca Ash/ 120day
9-Aug	5	4.87	4.935	6.5	1.82616E-08	10	50	40	AC/Ca Ash/ 120day
10-Aug	5	4.87	4.935	6.5	1.82616E-08	10	50	40	AC/Ca Ash/ 120day
11-Aug	5	4.87	4.935	6.6	1.79849E-08	10	50	40	AC/Ca Ash/ 120day
12-Aug	5	5.36	5.18	6.5	1.91682E-08	10	50	40	AC/Ca Ash/ 120day
13-Aug	4.5	4.87	4.685	6.5	1.73365E-08	10	50	40	AC/Ca Ash/ 120day
14-Aug	5	4.87	4.935	6.5	1.82616E-08	10	50	40	AC/Ca Ash/ 120day
15-Aug	4.5	4.87	4.685	6.5	1.73365E-08	10	50	40	AC/Ca Ash/ 120day
16-Aug	4.5	4.38	4.44	6.5	1.64299E-08	10	50	40	AC/Ca Ash/ 120day
End	4.5	4.38	4.44	6.5	1.64299E-08	10	50	40	AC/Ca Ash/ 120day
	4.5	4.38	4.44	6.5	1.64299E-08	10	50	40	AC/Ca Ash/ 120day
Sample 60									
8-Jul	—								
8-Jul	-								
8-Jul	67.73	65.25	66.49	2.2	5.27903E-05	10	50	40	AC-25%FA/NaEx/F-T
8-Jul	53.03	51.16	52.095	2.2	4.13613E-05	10	50	40	AC-25%FA/NaEx/F-T
8-Jul	53.55	51.68	52.615	2.2	4.17741E-05	10	50	40	AC-25%FA/NaEx/F-T
21-Jul	49.88	49.07	49.475	2.2	3.92811E-05	10	50	40	AC-25%FA/NaEx/F-T
21-Jul	48.83	46.98	47.905	2.2	3.80346E-05	10	50	40	AC-25%FA/NaEx/F-T
21-Jul	85.05	83	84.025	2.2	6.67124E-05	10	50	40	AC-25%FA/NaEx/F-T
21-Jul	63.53	62.64	63.085	2.2	5.00869E-05	10	50	40	AC-25%FA/NaEx/F-T
21-Jul	63.53	61.6	62.565	2.2	4.9674E-05	10	50	40	AC-25%FA/NaEx/F-T
29-Jul	61.43	60.03	60.73	2.2	4.82171E-05	10	50	40	AC-25%FA/NaEx/F-T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
29-Jul	61.43	59.51	60.47	2.2	4.80107E-05	10	50	40	AC-25%FA/NaEx/F-T
29-Jul	55.65	54.29	54.97	2.2	4.36439E-05	10	50	40	AC-25%FA/NaEx/F-T
29-Jul	54.6	53.24	53.92	2.2	4.28103E-05	10	50	40	AC-25%FA/NaEx/F-T
29-Jul	53.55	51.68	52.615	2.2	4.17741E-05	10	50	40	AC-25%FA/NaEx/F-T
9-Aug	53.03	51.16	52.095	2.2	4.13613E-05	10	50	40	AC-25%FA/NaEx/F-T
9-Aug	50.93	49.59	50.26	2.2	3.99044E-05	10	50	40	AC-25%FA/NaEx/F-T
9-Aug	70.88	69.43	70.155	2.2	5.57002E-05	10	50	40	AC-25%FA/NaEx/F-T
9-Aug	56.18	54.29	55.235	2.2	4.38543E-05	10	50	40	AC-25%FA/NaEx/F-T
9-Aug	55.65	53.24	54.445	2.2	4.32271E-05	10	50	40	AC-25%FA/NaEx/F-T
End	54.6	53.24	53.92	2.2	4.28103E-05	10	50	40	AC-25%FA/NaEx/F-T
	50.93	49.07	50	2.2	3.96979E-05	10	50	40	AC-25%FA/NaEx/F-T
Sample 61									
7-Jul									
7-Jul									
7-Jul	56.35	57.5	56.925	2.2	0.000176169	10	50	40	Baseline Ash/ F/T
7-Jul	56.84	57	56.92	2.2	0.000176154	10	50	40	Baseline Ash/ F/T
7-Jul	56.84	57	56.92	2.2	0.000176154	10	50	40	Baseline Ash/ F/T
21-Jul	55.86	56.5	56.18	2.2	0.000173864	10	50	40	Baseline Ash/ F/T
21-Jul	55.86	56.5	56.18	2.2	0.000173864	10	50	40	Baseline Ash/ F/T
21-Jul	65.66	65.5	65.58	2.2	0.000253693	10	50	40	Baseline Ash/ F/T
21-Jul	64.19	64	64.095	2.2	0.000247949	10	50	40	Baseline Ash/ F/T
21-Jul	64.19	63.5	63.845	2.2	0.000246982	10	50	40	Baseline Ash/ F/T
28-Jul	63.7	63.5	63.6	2.2	0.000246034	10	50	40	Baseline Ash/ F/T
28-Jul	63.21	63	63.105	2.2	0.000244119	10	50	40	Baseline Ash/ F/T
28-Jul	56.35	55.5	55.925	2.2	0.000216343	10	50	40	Baseline Ash/ F/T
28-Jul	55.37	55	55.185	2.2	0.000213481	10	50	40	Baseline Ash/ F/T
28-Jul	55.37	54.5	54.935	2.2	0.000212514	10	50	40	Baseline Ash/ F/T
4-Aug	54.88	54.5	54.69	2.2	0.000211566	10	50	40	Baseline Ash/ F/T
4-Aug	54.39	54.5	54.445	2.2	0.000210618	10	50	40	Baseline Ash/ F/T
4-Aug	68.11	68	68.055	2.2	0.000263268	10	50	40	Baseline Ash/ F/T
4-Aug	68.6	68	68.3	2.2	0.000264216	10	50	40	Baseline Ash/ F/T
4-Aug	69.09	69	69.045	2.2	0.000267098	10	50	40	Baseline Ash/ F/T
End	68.6	68.5	68.55	2.2	0.000265183	10	50	40	Baseline Ash/ F/T
	69.09	68.5	68.795	2.2	0.00026613	10	50	40	Baseline Ash/ F/T
Sample 66									
1-Aug									
1-Aug									
1-Aug	77.76	76.36	77.06	2.2	5.83149E-05	10	50	40	AC-25%FA/CaExt/F/T
1-Aug	50.76	48.64	49.7	2.2	3.76103E-05	10	50	40	AC-25%FA/CaExt/F/T
1-Aug	46.44	44.98	45.71	2.2	3.45909E-05	10	50	40	AC-25%FA/CaExt/F/T
8-Aug	44.28	42.36	43.32	2.2	3.27822E-05	10	50	40	AC-25%FA/CaExt/F/T
8-Aug	37.8	36.09	36.945	2.2	2.7958E-05	10	50	40	AC-25%FA/CaExt/F/T
8-Aug	56.7	54.92	55.81	2.2	4.2234E-05	10	50	40	AC-25%FA/CaExt/F/T
8-Aug	58.86	55.96	57.41	2.2	4.34448E-05	10	50	40	AC-25%FA/CaExt/F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
8-Aug	57.24	55.96	56.6	2.2	4.28318E-05	10	50	40	AC-25%FA/CaExt/F/T
29-Aug	57.24	55.44	56.34	2.2	4.26351E-05	10	50	40	AC-25%FA/CaExt/F/T
29-Aug	55.08	53.35	54.215	2.2	4.1027E-05	10	50	40	AC-25%FA/CaExt/F/T
29-Aug	86.4	83.16	84.78	2.2	6.41569E-05	10	50	40	AC-25%FA/CaExt/F/T
29-Aug	72.36	70.61	71.485	2.2	5.4096E-05	10	50	40	AC-25%FA/CaExt/F/T
29-Aug	72.9	70.61	71.755	2.2	5.43003E-05	10	50	40	AC-25%FA/CaExt/F/T
21-Sep	73.98	71.65	72.815	2.2	5.51025E-05	10	50	40	AC-25%FA/CaExt/F/T
21-Sep	73.44	70.61	72.025	2.2	5.45046E-05	10	50	40	AC-25%FA/CaExt/F/T
21-Sep	76.68	75.31	75.995	2.2	5.75089E-05	10	50	40	AC-25%FA/CaExt/F/T
21-Sep	76.68	73.74	75.21	2.2	5.69149E-05	10	50	40	AC-25%FA/CaExt/F/T
21-Sep	77.22	74.79	76.005	2.2	5.75165E-05	10	50	40	AC-25%FA/CaExt/F/T
End	76.68	73.74	75.21	2.2	5.69149E-05	10	50	40	AC-25%FA/CaExt/F/T
	72.9	70.08	71.49	2.2	5.40998E-05	10	50	40	AC-25%FA/CaExt/F/T
Sample 53A									
19-Jul									
20-Jul									
21-Jul	0.2	0.4	0.3	2.2	3.22371E-09	10	50	40	AC/Na ash
23-Jul	0.3	0.3	0.3	2.2	3.22371E-09	10	50	40	AC/Na ash
24-Jul	0.2	0.2	0.2	2.2	2.14914E-09	10	50	40	AC/Na ash
25-Jul	0.3	0.3	0.3	2.2	3.22371E-09	10	50	40	AC/Na ash
26-Jul	0.3	0.3	0.3	2.2	3.22371E-09	10	50	40	AC/Na ash
28-Jul	0.2	0.3	0.25	2.2	2.68643E-09	10	50	40	AC/Na ash
29-Jul	0.3	0.5	0.4	2.2	4.29828E-09	10	50	40	AC/Na ash
30-Jul	0.4	0.3	0.35	2.2	3.761E-09	10	50	40	AC/Na ash
31-Jul	0.3	0.3	0.3	2.2	3.22371E-09	10	50	40	AC/Na ash
1-Aug	0.3	0.4	0.35	2.2	3.761E-09	10	50	40	AC/Na ash
2-Aug	0.3	0.4	0.35	2.2	3.761E-09	10	50	40	AC/Na ash
3-Aug	0.3	0.4	0.35	2.2	3.761E-09	10	50	40	AC/Na ash
4-Aug	0.4	0.1	0.25	2.2	2.68643E-09	10	50	40	AC/Na ash
5-Aug	0.4	0.2	0.3	2.2	3.22371E-09	10	50	40	AC/Na ash
9-Aug	0.4	0.2	0.3	2.2	3.22371E-09	10	50	40	AC/Na ash
10-Aug	0.4	0.2	0.3	2.2	3.22371E-09	10	50	40	AC/Na ash
11-Aug	0.5	0.3	0.4	2.2	4.29828E-09	10	50	40	AC/Na ash
12-Aug	0.3	0.8	0.55	2.2	5.91014E-09	10	50	40	AC/Na ash
16-Aug	0.5	0.2	0.35	2.2	3.761E-09	10	50	40	AC/Na ash
17-Aug	0.3	0.5	0.4	2.2	4.29828E-09	10	50	40	AC/Na ash
18-Aug	0.5	0.1	0.3	2.2	3.22371E-09	10	50	40	AC/Na ash
19-Aug	0.5	0	0.25	2.2	2.68643E-09	10	50	40	AC/Na ash
20-Aug	0.5	0.1	0.3	2.2	3.22371E-09	10	50	40	AC/Na ash
21-Aug	0.4	0.6	0.5	2.2	5.37286E-09	10	50	40	AC/Na ash
22-Aug	1.2	1.4	1.3	4.3	7.14715E-09	10	50	40	AC/Na ash
23-Aug	1.1	1.4	1.25	4.3	6.87226E-09	10	50	40	AC/Na ash
24-Aug	1.1	1.3	1.2	4.3	6.59737E-09	10	50	40	AC/Na ash
25-Aug	1	1.3	1.15	4.3	6.32248E-09	10	50	40	AC/Na ash
26-Aug	1.3	0.6	0.95	4.3	5.22292E-09	10	50	40	AC/Na ash

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
27-Aug	1	1.3	1.15	4.3	6.32248E-09	10	50	40	AC/Na ash
28-Aug	1.1	1	1.05	4.3	5.7727E-09	10	50	40	AC/Na ash
29-Aug	1.1	1	1.05	4.3	5.7727E-09	10	50	40	AC/Na ash
30-Aug	1	1	1	4.3	5.49781E-09	10	50	40	AC/Na ash
31-Aug	1	1	1	4.3	5.49781E-09	10	50	40	AC/Na ash
1-Sep	1.3	1.1	1.2	4.3	6.59737E-09	10	50	40	AC/Na ash
2-Sep	1.2	1.1	1.15	4.3	6.32248E-09	10	50	40	AC/Na ash
3-Sep	1.1	1.3	1.2	4.3	6.59737E-09	10	50	40	AC/Na ash
4-Sep	1	1.3	1.15	4.3	6.32248E-09	10	50	40	AC/Na ash
5-Sep	1.1	1.1	1.1	4.3	6.04759E-09	10	50	40	AC/Na ash
6-Sep	1.1	1.1	1.1	4.3	6.04759E-09	10	50	40	AC/Na ash
7-Sep	1	1	1	4.3	5.49781E-09	10	50	40	AC/Na ash
8-Sep	1	1	1	4.3	5.49781E-09	10	50	40	AC/Na ash
9-Sep	1.4	0.8	1.1	4.3	6.04759E-09	10	50	40	AC/Na ash
10-Sep	1.1	1.5	1.3	4.3	7.14715E-09	10	50	40	AC/Na ash
11-Sep	1.2	0.9	1.05	4.3	5.7727E-09	10	50	40	AC/Na ash
12-Sep	1.2	1.1	1.15	4.3	6.32248E-09	10	50	40	AC/Na ash
13-Sep	1.1	1	1.05	4.3	5.7727E-09	10	50	40	AC/Na ash
14-Sep	1	1	1	4.3	5.49781E-09	10	50	40	AC/Na ash
15-Sep	1.2	0.9	1.05	4.3	5.7727E-09	10	50	40	AC/Na ash
16-Sep	1.1	0.8	0.95	4.3	5.22292E-09	10	50	40	AC/Na ash
17-Sep	1.1	1.2	1.15	4.3	6.32248E-09	10	50	40	AC/Na ash
18-Sep	1.1	1.1	1.1	4.3	6.04759E-09	10	50	40	AC/Na ash
19-Sep	1.2	1.1	1.15	4.3	6.32248E-09	10	50	40	AC/Na ash
20-Sep	1.2	1.1	1.15	4.3	6.32248E-09	10	50	40	AC/Na ash
21-Sep	1.2	1	1.1	4.3	6.04759E-09	10	50	40	AC/Na ash
22-Sep	1.2	1.1	1.15	4.3	6.32248E-09	10	50	40	AC/Na ash
23-Sep	1.1	1.2	1.15	4.3	6.32248E-09	10	50	40	AC/Na ash
24-Sep	1.1	2.9	2	4.3	1.09956E-08	10	50	40	AC/Na ash
25-Sep	1	1.3	1.15	4.3	6.32248E-09	10	50	40	AC/Na ash
26-Sep	1.3	1	1.15	4.3	6.32248E-09	10	50	40	AC/Na ash
27-Sep	1.2	0.9	1.05	4.3	5.7727E-09	10	50	40	AC/Na ash
28-Sep	1.3	0.9	1.1	4.3	6.04759E-09	10	50	40	AC/Na ash
29-Sep	1.9	2.7	2.3	6.5	8.36512E-09	10	50	40	AC/Na ash
30-Sep	1.8	2.3	2.05	6.5	7.45587E-09	10	50	40	AC/Na ash
1-Oct	2.1	1.3	1.7	6.5	6.18292E-09	10	50	40	AC/Na ash
2-Oct	2.1	2.5	2.3	6.5	8.36512E-09	10	50	40	AC/Na ash
3-Oct	2	1.8	1.9	6.5	6.91032E-09	10	50	40	AC/Na ash
4-Oct	1.9	1.8	1.85	6.5	6.72847E-09	10	50	40	AC/Na ash
5-Oct	1.9	1.8	1.85	6.5	6.72847E-09	10	50	40	AC/Na ash
6-Oct	2	1.8	1.9	6.5	6.91032E-09	10	50	40	AC/Na ash
7-Oct	1.9	1.8	1.85	6.5	6.72847E-09	10	50	40	AC/Na ash
8-Oct	1.8	2.1	1.95	6.5	7.09217E-09	10	50	40	AC/Na ash
9-Oct	2.2	2.1	2.15	6.5	7.81957E-09	10	50	40	AC/Na ash
10-Oct	1.9	1.8	1.85	6.5	6.72847E-09	10	50	40	AC/Na ash
11-Oct	1.9	1.8	1.85	6.5	6.72847E-09	10	50	40	AC/Na ash

Date	Total	Total	Avg	Grad	Hydraulic	Effec	Confin	Back	Moist
	Outflow	Inflow	Flow	(psi)	Conductivity	Stress	Press	Pres	Cond
12-Oct	1.9	1.8	1.85	6.5	6.72847E-09	10	50	40	AC/Na ash
13-Oct	1.8	1.8	1.8	6.5	6.54662E-09	10	50	40	AC/Na ash
14-Oct	1.8	2	1.9	6.5	6.91032E-09	10	50	40	AC/Na ash
15-Oct	2.1	1.7	1.9	6.5	6.91032E-09	10	50	40	AC/Na ash
16-Oct	2.1	1.7	1.9	6.5	6.91032E-09	10	50	40	AC/Na ash
17-Oct	1.8	2.1	1.95	6.5	7.09217E-09	10	50	40	AC/Na ash
18-Oct	1.8	2.1	1.95	6.5	7.09217E-09	10	50	40	AC/Na ash
19-Oct	1.8	2.1	1.95	6.5	7.09217E-09	10	50	40	AC/Na ash
20-Oct	1.9	1.6	1.75	6.5	6.36477E-09	10	50	40	AC/Na ash
21-Oct	2.1	1.8	1.95	6.5	7.09217E-09	10	50	40	AC/Na ash
22-Oct	1.8	2.2	2	6.5	7.27402E-09	10	50	40	AC/Na ash
23-Oct	2.1	1.4	1.75	6.5	6.36477E-09	10	50	40	AC/Na ash
24-Oct	1.8	2.1	1.95	6.5	7.09217E-09	10	50	40	AC/Na ash
25-Oct	1.8	2.1	1.95	6.5	7.09217E-09	10	50	40	AC/Na ash
26-Oct	1.8	2	1.9	6.5	6.91032E-09	10	50	40	AC/Na ash
27-Oct	1.9	1.3	1.6	6.5	5.81922E-09	10	50	40	AC/Na ash
28-Oct	1.7	2.1	1.9	6.5	6.91032E-09	10	50	40	AC/Na ash
30-Oct	1.5	2.4	1.95	6.5	7.09217E-09	10	50	40	AC/Na ash
31-Oct	1.7	1.5	1.6	6.5	5.81922E-09	10	50	40	AC/Na ash
End	2.18	1.02	1.6	6.5	5.81922E-09	10	50	40	AC/Na ash
	2.18	1.02	1.6	6.5	5.81922E-09	10	50	40	AC/Na ash
Sample 62									
13-Jul									
14-Jul									
15-Jul	1.6	2.2	1.9	2.2	5.02399E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
16-Jul	1.6	1.8	1.7	2.2	4.49515E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
17-Jul	1.3	1.9	1.6	2.2	4.23073E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
18-Jul	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
19-Jul	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
20-Jul	1.58	1.5	1.54	2.2	4.07207E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
21-Jul	1.58	1.5	1.54	2.2	4.07207E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
22-Jul	1.58	1.5	1.54	2.2	4.07207E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
23-Jul	1.58	1.5	1.54	2.2	4.07207E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
24-Jul	1.58	1.5	1.54	2.2	4.07207E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
25-Jul	1.58	2	1.79	2.2	4.73312E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
4-Aug	1.58	1.5	1.54	2.2	4.07207E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
5-Aug	1.06	1.5	1.28	2.2	3.38458E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
6-Aug	4	5.5	4.75	2.2	1.256E-08	10	50	40	AC-$CaCl_2$/NaExt/ F/T
7-Aug	3.7	4	3.85	2.2	1.01802E-08	10	50	40	AC-$CaCl_2$/NaExt/ F/T
8-Aug	3.1	3.4	3.25	2.2	8.59366E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
9-Aug	3.1	3.3	3.2	2.2	8.46145E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
10-Aug	3.1	3.3	3.2	2.2	8.46145E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
12-Aug	2.8	2.9	2.85	2.2	7.53598E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
13-Aug	2.3	2.7	2.5	2.2	6.61051E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
14-Aug	2	2.2	2.1	2.2	5.55283E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
15-Aug	1.8	1.8	1.8	2.2	4.75957E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
16-Aug	1.7	1.8	1.75	2.2	4.62736E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
17-Aug	1.7	1.8	1.75	2.2	4.62736E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
18-Aug	2	1.9	1.95	2.2	5.1562E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
19-Aug	1.9	1.8	1.85	2.2	4.89178E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
20-Aug	1.7	1.8	1.75	2.2	4.62736E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
21-Aug	1.6	1.7	1.65	2.2	4.36294E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
22-Aug	1.5	1.6	1.55	2.2	4.09852E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
3-Sep	1.5	1.5	1.5	2.2	3.96631E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
4-Sep	1.5	1.5	1.5	2.2	3.96631E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
5-Sep	2.11	3	2.555	2.2	6.75594E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
6-Sep	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
7-Sep	1.58	2	1.79	2.2	4.73312E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
8-Sep	1.58	2	1.79	2.2	4.73312E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
9-Sep	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
10-Sep	1.58	2.5	2.04	2.2	5.39417E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
11-Sep	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
12-Sep	1.58	2	1.79	2.2	4.73312E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
13-Sep	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
14-Sep	1.58	1.5	1.54	2.2	4.07207E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
15-Sep	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
16-Sep	1.58	1.5	1.54	2.2	4.07207E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
27-Sep	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
28-Sep	1.58	1.5	1.54	2.2	4.07207E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
29-Sep	8.98	9	8.99	2.2	2.37714E-08	10	50	40	AC-$CaCl_2$/NaExt/ F/T
1-Oct	7.8	8.1	7.95	2.2	2.10214E-08	10	50	40	AC-$CaCl_2$/NaExt/ F/T
2-Oct	6.8	6.6	6.7	2.2	1.77162E-08	10	50	40	AC-$CaCl_2$/NaExt/ F/T
4-Oct	7.4	7	7.2	2.2	1.90383E-08	10	50	40	AC-$CaCl_2$/NaExt/ F/T
5-Oct	7.4	6	6.7	2.2	1.77162E-08	10	50	40	AC-$CaCl_2$/NaExt/ F/T
6-Oct	6.6	6.2	6.4	2.2	1.69229E-08	10	50	40	AC-$CaCl_2$/NaExt/ F/T
7-Oct	5.6	5.7	5.65	2.2	1.49397E-08	10	50	40	AC-$CaCl_2$/NaExt/ F/T
8-Oct	4.8	5	4.9	2.2	1.29566E-08	10	50	40	AC-$CaCl_2$/NaExt/ F/T
9-Oct	5.6	5.3	5.45	2.2	1.44109E-08	10	50	40	AC-$CaCl_2$/NaExt/ F/T
10-Oct	3.17	3	3.085	2.2	8.15737E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
13-Oct	2.64	2.5	2.57	2.2	6.7956E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
14-Oct	2.64	2.5	2.57	2.2	6.7956E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
15-Oct	2.11	3	2.555	2.2	6.75594E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
16-Oct	1.58	2.5	2.04	2.2	5.39417E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
17-Oct	2.11	2.5	2.305	2.2	6.09489E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
18-Oct	2.11	2.5	2.305	2.2	6.09489E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
19-Oct	2.64	2.5	2.57	2.2	6.7956E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
20-Oct	2.64	2.5	2.57	2.2	6.7956E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
21-Oct	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
22-Oct	2.11	2.5	2.305	2.2	6.09489E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
23-Oct	2.64	2	2.32	2.2	6.13455E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
24-Oct	2.11	2.5	2.305	2.2	6.09489E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
25-Oct	2.11	2.5	2.305	2.2	6.09489E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
26-Oct	1.58	2	1.79	2.2	4.73312E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
27-Oct	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
28-Oct	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
29-Oct	1.58	2.5	2.04	2.2	5.39417E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
30-Oct	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
31-Oct	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
End	2.11	2	2.055	2.2	5.43384E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
	2.11	1.5	1.805	2.2	4.77279E-09	10	50	40	AC-$CaCl_2$/NaExt/ F/T
Sample 67									
18-Oct									
18-Oct									
18-Oct	110.25	109.1	109.68	2.2	0.000169709	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
18-Oct	118.65	116.93	117.79	2.2	0.000182266	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
18-Oct	123.38	122.15	122.77	2.2	0.000189964	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
19-Oct	122.85	121.63	122.24	2.2	0.000189152	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
19-Oct	124.95	123.71	124.33	2.2	0.000192386	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
19-Oct	103.43	105.44	104.44	4.3	0.000206699	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
19-Oct	107.63	105.97	106.8	4.3	0.00021138	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
19-Oct	109.2	108.05	108.63	4.3	0.000214992	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
19-Oct	110.25	108.58	109.42	4.3	0.000216555	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
19-Oct	111.83	110.66	111.25	4.3	0.000220177	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
19-Oct	125.48	125.28	125.38	6.5	0.000218884	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
19-Oct	127.05	125.8	126.43	6.5	0.000220708	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
19-Oct	86.1	84.56	85.33	6.5	0.000223449	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
20-Oct	86.63	85.09	85.86	6.5	0.000224837	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
20-Oct	87.68	86.13	86.905	6.5	0.000227574	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
End	83.48	84.04	83.76	6.5	0.000219338	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
	84	81.95	82.975	6.5	0.000217282	10	50	40	RC/$Na(CO_3)_2$-Urea Ash
Sample 65									
26-Jul									
27-Jul									
28-Jul	1.46	1.5	1.48	2.2	3.50227E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
29-Jul	1.95	2	1.975	2.2	4.67364E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
30-Jul	1.46	1.5	1.48	2.2	3.50227E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
31-Jul	1.46	2	1.73	2.2	4.09387E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
1-Aug	1.95	2	1.975	2.2	4.67364E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
2-Aug	1.46	1.5	1.48	2.2	3.50227E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
3-Aug	1.46	1.5	1.48	2.2	3.50227E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
4-Aug	1.46	2	1.73	2.2	4.09387E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
5-Aug	1.95	1.5	1.725	2.2	4.08204E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
6-Aug	1.46	1.5	1.48	2.2	3.50227E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
7-Aug	1.6	1.6	1.6	2.2	3.78624E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
8-Aug	1.7	1.7	1.7	2.2	4.02288E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
9-Aug	1.7	1.7	1.7	2.2	4.02288E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
10-Aug	1.7	1.6	1.65	2.2	3.90456E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
11-Aug	1.5	1.6	1.55	2.2	3.66792E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
12-Aug	1.7	1.9	1.8	2.2	4.25952E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
13-Aug	1.6	1.6	1.6	2.2	3.78624E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
14-Aug	1.5	1.7	1.6	2.2	3.78624E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
15-Aug	1.5	1.5	1.5	2.2	3.5496E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
16-Aug	1.4	1.5	1.45	2.2	3.43128E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
27-Aug	1.4	1.5	1.45	2.2	3.43128E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
28-Aug	1.5	1.4	1.45	2.2	3.43128E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
29-Aug	10.23	10	10.115	2.2	2.39361E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
30-Aug	9.25	9.5	9.375	2.2	2.2185E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
31-Aug	8.77	9	8.885	2.2	2.10255E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
1-Sep	8.77	8.5	8.635	2.2	2.04339E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
2-Sep	8.28	8.5	8.39	2.2	1.98541E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
3-Sep	7.79	7.5	7.645	2.2	1.80911E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
4-Sep	4.38	7.5	5.94	2.2	1.40564E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
5-Sep	7.79	7	7.395	2.2	1.74995E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
6-Sep	7.79	7	7.395	2.2	1.74995E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
7-Sep	7.31	6.5	6.905	2.2	1.634E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
8-Sep	7.31	6.5	6.905	2.2	1.634E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
9-Sep	8.5	8.5	8.5	2.2	2.01144E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
10-Sep	7.79	8.5	8.145	2.2	1.92743E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
11-Sep	7.79	7.5	7.645	2.2	1.80911E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
27-Sep	7.79	6.5	7.145	2.2	1.69079E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
28-Sep	7.31	6.5	6.905	2.2	1.634E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
29-Sep	2.44	3	2.72	2.2	6.43661E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
30-Sep	2.7	2.8	2.75	2.2	6.5076E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
1-Oct	2.6	2.6	2.6	2.2	6.15264E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
2-Oct	2.4	2.6	2.5	2.2	5.916E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
3-Oct	2.3	2.6	2.45	2.2	5.79768E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
5-Oct	2.3	2.6	2.45	2.2	5.79768E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
6-Oct	2.2	2	2.1	2.2	4.96944E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
7-Oct	2.9	2.9	2.9	2.2	6.86256E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
8-Oct	2.5	2.7	2.6	2.2	6.15264E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
9-Oct	2.4	2.5	2.45	2.2	5.79768E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
10-Oct	2.92	2.5	2.71	2.2	6.41295E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
11-Oct	2.44	2.5	2.47	2.2	5.84501E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
12-Oct	2.44	2.5	2.47	2.2	5.84501E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
13-Oct	2.44	2.5	2.47	2.2	5.84501E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
14-Oct	2.44	2.5	2.47	2.2	5.84501E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
15-Oct	2.44	2.5	2.47	2.2	5.84501E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
16-Oct	2.44	2.5	2.47	2.2	5.84501E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
17-Oct	2.44	2.5	2.47	2.2	5.84501E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
18-Oct	1.95	2.5	2.225	2.2	5.26524E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
8-Nov	1.95	2.5	2.225	2.2	5.26524E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
9-Nov	2.44	2	2.22	2.2	5.25341E-09	10	50	40	AC-$CaCl_2$/CaExt/ F/T
10-Nov	8.77	10.5	9.635	2.2	2.28003E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
11-Nov	8.28	10	9.14	2.2	2.16289E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
12-Nov	8.28	10.5	9.39	2.2	2.22205E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
13-Nov	9.25	9	9.125	2.2	2.15934E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
14-Nov	9.74	9.5	9.62	2.2	2.27648E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
15-Nov	9.74	9.5	9.62	2.2	2.27648E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
16-Nov	9.74	9.5	9.62	2.2	2.27648E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
17-Nov	9.74	10	9.87	2.2	2.33564E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
18-Nov	8.4	8.5	8.45	2.2	1.99961E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
19-Nov	8.7	8.5	8.6	2.2	2.0351E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
20-Nov	8.5	8.4	8.45	2.2	1.99961E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
21-Nov	8.77	9	8.885	2.2	2.10255E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
22-Nov	8.77	8.5	8.635	2.2	2.04339E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
23-Nov	8.77	8.5	8.635	2.2	2.04339E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
24-Nov	7.79	8	7.895	2.2	1.86827E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
25-Nov	7.31	7.5	7.405	2.2	1.75232E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
26-Nov	7.79	8	7.895	2.2	1.86827E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
27-Nov	7.79	7.5	7.645	2.2	1.80911E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
28-Nov	7.31	7	7.155	2.2	1.69316E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
End	6.82	7	6.91	2.2	1.63518E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
	6.33	6.5	6.415	2.2	1.51805E-08	10	50	40	AC-$CaCl_2$/CaExt/ F/T
Sample 58									
1-Jul									
2-Jul									

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
3-Jul	7.79	8	7.895	2.2	2.11602E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
4-Jul	7.31	8	7.655	2.2	2.05169E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
5-Jul	7.79	7.5	7.645	2.2	2.04901E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
7-Jul	7.31	7.5	7.405	2.2	1.98469E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
8-Jul	7.31	7.5	7.405	2.2	1.98469E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
9-Jul	7.1	7.4	7.25	2.2	1.94314E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
10-Jul	6.7	6.4	6.55	2.2	1.75553E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
11-Jul	7.79	8	7.895	2.2	2.11602E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
12-Jul	7.79	7.5	7.645	2.2	2.04901E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
13-Jul	7.31	7.5	7.405	2.2	1.98469E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
14-Jul	7.31	7.5	7.405	2.2	1.98469E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
15-Jul	6.82	7	6.91	2.2	1.85202E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
16-Jul	7.79	7	7.395	2.2	1.98201E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
17-Jul	6.81	7	6.905	2.2	1.85068E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
18-Jul	7.79	7.5	7.645	2.2	2.04901E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
19-Jul	7.31	7.5	7.405	2.2	1.98469E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
20-Jul	7.31	7	7.155	2.2	1.91768E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
21-Jul	6.82	7.5	7.16	2.2	1.91902E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
22-Jul	6.82	7	6.91	2.2	1.85202E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
23-Aug	6.33	6.5	6.415	2.2	1.71935E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
24-Aug	5.84	6	5.92	2.2	1.58668E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
25-Aug	7.79	8.5	8.145	2.2	2.18302E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
26-Aug	7.79	7.5	7.645	2.2	2.04901E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
27-Aug	7.31	7.5	7.405	2.2	1.98469E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
28-Aug	6.82	7	6.91	2.2	1.85202E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
29-Aug	6.82	6.5	6.66	2.2	1.78501E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
30-Aug	6.33	6.5	6.415	2.2	1.71935E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
31-Aug	6.33	6.5	6.415	2.2	1.71935E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
1-Sep	5.84	6	5.92	2.2	1.58668E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
2-Sep	5.84	6	5.92	2.2	1.58668E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
3-Sep	6.82	7	6.91	2.2	1.85202E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
8-Sep	6.33	6.5	6.415	2.2	1.71935E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
9-Sep	5.36	4.5	4.93	2.2	1.32134E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
10-Sep	6.33	7	6.665	2.2	1.78635E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
11-Sep	6.33	6.5	6.415	2.2	1.71935E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
12-Sep	5.84	6	5.92	2.2	1.58668E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
13-Sep	5.84	6	5.92	2.2	1.58668E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
13-Oct	5.84	6	5.92	2.2	1.58668E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
14-Oct	5.84	5	5.42	2.2	1.45267E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
15-Oct	4.87	5	4.935	2.2	1.32268E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
16-Oct	4.87	5	4.935	2.2	1.32268E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
17-Oct	4.38	5	4.69	2.2	1.25701E-08	10	50	40	AC-CaCl2/CaExt/ W/D
18-Oct	4.38	5	4.69	2.2	1.25701E-08	10	50	40	AC-CaCl2/CaExt/ W/D
19-Oct	4.38	4.5	4.44	2.2	1.19001E-08	10	50	40	AC-CaCl2/CaExt/ W/D
20-Oct	4.38	4	4.19	2.2	1.123E-08	10	50	40	AC-CaCl2/CaExt/ W/D
21-Oct	4.38	4.5	4.44	2.2	1.19001E-08	10	50	40	AC-CaCl2/CaExt/ W/D
22-Oct	4.38	4.5	4.44	2.2	1.19001E-08	10	50	40	AC-CaCl2/CaExt/ W/D
23-Oct	3.9	4	3.95	2.2	1.05868E-08	10	50	40	AC-CaCl2/CaExt/ W/D
24-Oct	4.87	5	4.935	2.2	1.32268E-08	10	50	40	AC-CaCl2/CaExt/ W/D
25-Oct	4.38	4.5	4.44	2.2	1.19001E-08	10	50	40	AC-CaCl2/CaExt/ W/D
26-Oct	4.38	4.5	4.44	2.2	1.19001E-08	10	50	40	AC-CaCl2/CaExt/ W/D
27-Oct	4.38	4.5	4.44	2.2	1.19001E-08	10	50	40	AC-CaCl2/CaExt/ W/D
28-Oct	3.9	4.5	4.2	2.2	1.12568E-08	10	50	40	AC-CaCl2/CaExt/ W/D
29-Oct	3.9	4	3.95	2.2	1.05868E-08	10	50	40	AC-CaCl2/CaExt/ W/D
30-Oct	3.41	3.5	3.455	2.2	9.26008E-09	10	50	40	AC-CaCl2/CaExt/ W/D
31-Oct	3.9	3.5	3.7	2.2	9.91673E-09	10	50	40	AC-CaCl2/CaExt/ W/D
29-Nov	3.41	3.5	3.455	2.2	9.26008E-09	10	50	40	AC-CaCl2/CaExt/ W/D
30-Nov	3.41	3.5	3.455	2.2	9.26008E-09	10	50	40	AC-CaCl2/CaExt/ W/D
1-Dec	4.38	4.5	4.44	2.2	1.19001E-08	10	50	40	AC-CaCl2/CaExt/ W/D
2-Dec	4.38	4.5	4.44	2.2	1.19001E-08	10	50	40	AC-CaCl2/CaExt/ W/D
6-Dec	3.9	4.5	4.2	2.2	1.12568E-08	10	50	40	AC-CaCl2/CaExt/ W/D
7-Dec	3.9	3.5	3.7	2.2	9.91673E-09	10	50	40	AC-CaCl2/CaExt/ W/D
8-Dec	4.38	4	4.19	2.2	1.123E-08	10	50	40	AC-CaCl2/CaExt/ W/D
9-Dec	3.9	4	3.95	2.2	1.05868E-08	10	50	40	AC-CaCl2/CaExt/ W/D
10-Dec	3.9	4	3.95	2.2	1.05868E-08	10	50	40	AC-CaCl2/CaExt/ W/D
11-Dec	3.9	4	3.95	2.2	1.05868E-08	10	50	40	AC-CaCl2/CaExt/ W/D
12-Dec	3.9	4	3.95	2.2	1.05868E-08	10	50	40	AC-CaCl2/CaExt/ W/D
13-Dec	3.41	3.5	3.455	2.2	9.26008E-09	10	50	40	AC-CaCl2/CaExt/ W/D
14-Dec	3.9	3.5	3.7	2.2	9.91673E-09	10	50	40	AC-CaCl2/CaExt/ W/D
15-Dec	3.41	3	3.205	2.2	8.59003E-09	10	50	40	AC-CaCl2/CaExt/ W/D
16-Dec	3.41	4	3.705	2.2	9.93013E-09	10	50	40	AC-CaCl2/CaExt/ W/D
17-Dec	3.41	3.5	3.455	2.2	9.26008E-09	10	50	40	AC-CaCl2/CaExt/ W/D
18-Dec	3.41	3.5	3.455	2.2	9.26008E-09	10	50	40	AC-CaCl2/CaExt/ W/D
19-Dec	3.41	3.5	3.455	2.2	9.26008E-09	10	50	40	AC-CaCl2/CaExt/ W/D
20-Dec	3.41	3	3.205	2.2	8.59003E-09	10	50	40	AC-CaCl2/CaExt/ W/D
21-Dec	3.41	3.5	3.455	2.2	9.26008E-09	10	50	40	AC-CaCl2/CaExt/ W/D
22-Dec	4.38	4	4.19	2.2	1.123E-08	10	50	40	AC-CaCl2/CaExt/ W/D
23-Dec	3.9	4	3.95	2.2	1.05868E-08	10	50	40	AC-CaCl2/CaExt/ W/D
24-Dec	3.41	4	3.705	2.2	9.93013E-09	10	50	40	AC-CaCl2/CaExt/ W/D
25-Dec	3.9	4	3.95	2.2	1.05868E-08	10	50	40	AC-CaCl2/CaExt/ W/D
26-Dec	3.9	3.5	3.7	2.2	9.91673E-09	10	50	40	AC-CaCl2/CaExt/ W/D
27-Dec	4.38	4.5	4.44	2.2	1.19001E-08	10	50	40	AC-CaCl2/CaExt/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
28-Dec	4.38	4.5	4.44	2.2	1.19001E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
29-Dec	3.9	4	3.95	2.2	1.05868E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
30-Dec	3.9	4	3.95	2.2	1.05868E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
31-Dec	3.9	4	3.95	2.2	1.05868E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
1-Jan	3.9	4	3.95	2.2	1.05868E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
2-Jan	3.9	4	3.95	2.2	1.05868E-08	10	50	40	AC-$CaCl_2$/CaExt/ W/D
End	3.41	3.5	3.455	2.2	9.26008E-09	10	50	40	AC-$CaCl_2$/CaExt/ W/D
	3.41	3.5	3.455	2.2	9.26008E-09	10	50	40	AC-$CaCl_2$/CaExt/ W/D
Sample 63									
29-Jul									
30-Jul									
31-Jul	0.1	0.2	0.15	2.2	1.83959E-09	10	50	40	AC/Na Ash(2)/ W/D
1-Aug	0	0.5	0.25	2.2	3.06598E-09	10	50	40	AC/Na Ash(2)/ W/D
3-Aug	0.1	0.3	0.2	2.2	2.45279E-09	10	50	40	AC/Na Ash(2)/ W/D
4-Aug	0	0.4	0.2	2.2	2.45279E-09	10	50	40	AC/Na Ash(2)/ W/D
5-Aug	0.1	0.3	0.2	2.2	2.45279E-09	10	50	40	AC/Na Ash(2)/ W/D
6-Aug	0.1	0.2	0.15	2.2	1.83959E-09	10	50	40	AC/Na Ash(2)/ W/D
7-Aug	0.3	0	0.15	2.2	1.83959E-09	10	50	40	AC/Na Ash(2)/ W/D
8-Aug	0.1	0.3	0.2	2.2	2.45279E-09	10	50	40	AC/Na Ash(2)/ W/D
3-Sep	0.2	0.2	0.2	2.2	2.45279E-09	10	50	40	AC/Na Ash(2)/ W/D
4-Sep	0.1	0.2	0.15	2.2	1.83959E-09	10	50	40	AC/Na Ash(2)/ W/D
5-Sep	0.4	0.6	0.5	2.2	6.13197E-09	10	50	40	AC/Na Ash(2)/ W/D
6-Sep	0.4	0.5	0.45	2.2	5.51877E-09	10	50	40	AC/Na Ash(2)/ W/D
7-Sep	0.4	0.5	0.45	2.2	5.51877E-09	10	50	40	AC/Na Ash(2)/ W/D
9-Sep	0.3	0.5	0.4	2.2	4.90557E-09	10	50	40	AC/Na Ash(2)/ W/D
10-Sep	0.3	0.6	0.45	2.2	5.51877E-09	10	50	40	AC/Na Ash(2)/ W/D
11-Sep	0.4	0.4	0.4	2.2	4.90557E-09	10	50	40	AC/Na Ash(2)/ W/D
12-Sep	0.4	0.6	0.5	2.2	6.13197E-09	10	50	40	AC/Na Ash(2)/ W/D
13-Sep	0.4	0.6	0.5	2.2	6.13197E-09	10	50	40	AC/Na Ash(2)/ W/D
14-Sep	0.4	0.6	0.5	2.2	6.13197E-09	10	50	40	AC/Na Ash(2)/ W/D
15-Sep	0.4	0.4	0.4	2.2	4.90557E-09	10	50	40	AC/Na Ash(2)/ W/D
17-Sep	0.5	0.5	0.5	2.2	6.13197E-09	10	50	40	AC/Na Ash(2)/ W/D
18-Sep	0.4	0.6	0.5	2.2	6.13197E-09	10	50	40	AC/Na Ash(2)/ W/D
19-Sep	0.5	0.6	0.55	2.2	6.74516E-09	10	50	40	AC/Na Ash(2)/ W/D
21-Sep	0.5	0.5	0.5	2.2	6.13197E-09	10	50	40	AC/Na Ash(2)/ W/D
24-Sep	0.4	0.5	0.45	2.2	5.51877E-09	10	50	40	AC/Na Ash(2)/ W/D
25-Sep	0.4	0.6	0.5	2.2	6.13197E-09	10	50	40	AC/Na Ash(2)/ W/D
26-Sep	0.4	0.5	0.45	2.2	5.51877E-09	10	50	40	AC/Na Ash(2)/ W/D
27-Sep	0.5	0.5	0.5	2.2	6.13197E-09	10	50	40	AC/Na Ash(2)/ W/D
28-Sep	0.5	0.5	0.5	2.2	6.13197E-09	10	50	40	AC/Na Ash(2)/ W/D
29-Sep	0.5	0.5	0.5	2.2	6.13197E-09	10	50	40	AC/Na Ash(2)/ W/D
30-Sep	0.5	0.7	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
1-Oct	0.4	0.4	0.4	2.2	4.90557E-09	10	50	40	AC/Na Ash(2)/ W/D
2-Oct	0.6	0.8	0.7	2.2	8.58475E-09	10	50	40	AC/Na Ash(2)/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
3-Oct	0.6	0.7	0.65	2.2	7.97156E-09	10	50	40	AC/Na Ash(2)/ W/D
4-Oct	0.6	0.7	0.65	2.2	7.97156E-09	10	50	40	AC/Na Ash(2)/ W/D
10-Nov	0.6	0.6	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
11-Nov	0.6	0.6	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
12-Nov	0.6	0.6	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
13-Nov	0.3	0.5	0.4	2.2	4.90557E-09	10	50	40	AC/Na Ash(2)/ W/D
14-Nov	0.6	0.7	0.65	2.2	7.97156E-09	10	50	40	AC/Na Ash(2)/ W/D
16-Nov	0.6	0.6	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
17-Nov	0.6	0.7	0.65	2.2	7.97156E-09	10	50	40	AC/Na Ash(2)/ W/D
18-Nov	0.6	0.6	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
19-Nov	0.5	0.7	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
20-Nov	0.6	0.6	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
21-Nov	0.7	0.8	0.75	2.2	9.19795E-09	10	50	40	AC/Na Ash(2)/ W/D
22-Nov	0.6	0.8	0.7	2.2	8.58475E-09	10	50	40	AC/Na Ash(2)/ W/D
23-Nov	0.6	0.8	0.7	2.2	8.58475E-09	10	50	40	AC/Na Ash(2)/ W/D
24-Nov	0.6	0.8	0.7	2.2	8.58475E-09	10	50	40	AC/Na Ash(2)/ W/D
25-Nov	0.6	0.5	0.55	2.2	6.74516E-09	10	50	40	AC/Na Ash(2)/ W/D
26-Nov	0.6	0.9	0.75	2.2	9.19795E-09	10	50	40	AC/Na Ash(2)/ W/D
27-Nov	0.6	0.8	0.7	2.2	8.58475E-09	10	50	40	AC/Na Ash(2)/ W/D
28-Nov	0.6	0.7	0.65	2.2	7.97156E-09	10	50	40	AC/Na Ash(2)/ W/D
29-Nov	0.6	0.7	0.65	2.2	7.97156E-09	10	50	40	AC/Na Ash(2)/ W/D
30-Nov	0.6	0.6	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
1-Dec	0.6	0.7	0.65	2.2	7.97156E-09	10	50	40	AC/Na Ash(2)/ W/D
2-Dec	0.6	0.6	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
3-Dec	0.5	0.7	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
4-Dec	0.6	0.5	0.55	2.2	6.74516E-09	10	50	40	AC/Na Ash(2)/ W/D
5-Dec	0.6	0.6	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
6-Dec	0.5	0.7	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
7-Dec	0.6	0.6	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
8-Dec	0.8	0.8	0.8	2.2	9.81115E-09	10	50	40	AC/Na Ash(2)/ W/D
9-Dec	0.6	0.9	0.75	2.2	9.19795E-09	10	50	40	AC/Na Ash(2)/ W/D
10-Dec	0.7	0.9	0.8	2.2	9.81115E-09	10	50	40	AC/Na Ash(2)/ W/D
11-Dec	0.6	0.6	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
12-Dec	0.7	0.7	0.7	2.2	8.58475E-09	10	50	40	AC/Na Ash(2)/ W/D
13-Dec	0.6	0.7	0.65	2.2	7.97156E-09	10	50	40	AC/Na Ash(2)/ W/D
12-Jan	0.7	0.7	0.7	2.2	8.58475E-09	10	50	40	AC/Na Ash(2)/ W/D
13-Jan	0.6	0.6	0.6	2.2	7.35836E-09	10	50	40	AC/Na Ash(2)/ W/D
14-Jan	1.06	1.06	1.06	2.2	1.29998E-08	10	50	40	AC/Na Ash(2)/ W/D
15-Jan	1.06	1.06	1.06	2.2	1.29998E-08	10	50	40	AC/Na Ash(2)/ W/D
16-Jan	1.06	1.06	1.06	2.2	1.29998E-08	10	50	40	AC/Na Ash(2)/ W/D
17-Jan	0.53	1.06	0.795	2.2	9.74983E-09	10	50	40	AC/Na Ash(2)/ W/D
18-Jan	0.53	1.06	0.795	2.2	9.74983E-09	10	50	40	AC/Na Ash(2)/ W/D
20-Jan	0.53	0.53	0.53	2.2	6.49989E-09	10	50	40	AC/Na Ash(2)/ W/D
21-Jan	0.53	1.58	1.055	2.2	1.29385E-08	10	50	40	AC/Na Ash(2)/ W/D
22-Jan	0.53	1.06	0.795	2.2	9.74983E-09	10	50	40	AC/Na Ash(2)/ W/D
23-Jan	1.06	1.06	1.06	2.2	1.29998E-08	10	50	40	AC/Na Ash(2)/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
24-Jan	0.53	0.53	0.53	2.2	6.49989E-09	10	50	40	AC/Na Ash(2)/ W/D
25-Jan	1.06	0.53	0.795	2.2	9.74983E-09	10	50	40	AC/Na Ash(2)/ W/D
26-Jan	0.53	1.06	0.795	2.2	9.74983E-09	10	50	40	AC/Na Ash(2)/ W/D
27-Jan	0.53	1.06	0.795	2.2	9.74983E-09	10	50	40	AC/Na Ash(2)/ W/D
28-Jan	0.7	0.9	0.8	2.2	9.81115E-09	10	50	40	AC/Na Ash(2)/ W/D
29-Jan	0.8	0.7	0.75	2.2	9.19795E-09	10	50	40	AC/Na Ash(2)/ W/D
30-Jan	0.7	0.9	0.8	2.2	9.81115E-09	10	50	40	AC/Na Ash(2)/ W/D
31-Jan	0.7	0.8	0.75	2.2	9.19795E-09	10	50	40	AC/Na Ash(2)/ W/D
1-Feb	0.8	0.7	0.75	2.2	9.19795E-09	10	50	40	AC/Na Ash(2)/ W/D
2-Feb	0.7	0.7	0.7	2.2	8.58475E-09	10	50	40	AC/Na Ash(2)/ W/D
3-Feb	0.7	0.7	0.7	2.2	8.58475E-09	10	50	40	AC/Na Ash(2)/ W/D
4-Feb	0.7	0.8	0.75	2.2	9.19795E-09	10	50	40	AC/Na Ash(2)/ W/D
5-Feb	0.7	1	0.85	2.2	1.04243E-08	10	50	40	AC/Na Ash(2)/ W/D
6-Feb	0.7	0.7	0.7	2.2	8.58475E-09	10	50	40	AC/Na Ash(2)/ W/D
End	0.7	0.6	0.65	2.2	7.97156E-09	10	50	40	AC/Na Ash(2)/ W/D
	0.7	0.7	0.7	2.2	8.58475E-09	10	50	40	AC/Na Ash(2)/ W/D
Sample 64									
14-Jul									
15-Jul									
16-Jul	2.6	6.2	4.4	2.2	5.83836E-08	10	50	40	AC/Ca Ash/ W/D
17-Jul	2.5	4	3.25	2.2	4.31243E-08	10	50	40	AC/Ca Ash/ W/D
18-Jul	2.3	4	3.15	2.2	4.17974E-08	10	50	40	AC/Ca Ash/ W/D
19-Jul	2.2	4	3.1	2.2	4.11339E-08	10	50	40	AC/Ca Ash/ W/D
20-Jul	2.2	3.9	3.05	2.2	4.04705E-08	10	50	40	AC/Ca Ash/ W/D
21-Jul	2.7	4.3	3.5	2.2	4.64415E-08	10	50	40	AC/Ca Ash/ W/D
22-Jul	2.4	3.9	3.15	2.2	4.17974E-08	10	50	40	AC/Ca Ash/ W/D
23-Jul	2.2	3.5	2.85	2.2	3.78167E-08	10	50	40	AC/Ca Ash/ W/D
24-Jul	2.4	2.8	2.6	2.2	3.44994E-08	10	50	40	AC/Ca Ash/ W/D
25-Jul	2.4	3.6	3	2.2	3.9807E-08	10	50	40	AC/Ca Ash/ W/D
26-Jul	2.4	3.5	2.95	2.2	3.91436E-08	10	50	40	AC/Ca Ash/ W/D
27-Jul	2.4	3.5	2.95	2.2	3.91436E-08	10	50	40	AC/Ca Ash/ W/D
28-Jul	1.9	3.3	2.6	2.2	3.44994E-08	10	50	40	AC/Ca Ash/ W/D
29-Jul	2.4	3	2.7	2.2	3.58263E-08	10	50	40	AC/Ca Ash/ W/D
30-Jul	2.3	2.9	2.6	2.2	3.44994E-08	10	50	40	AC/Ca Ash/ W/D
31-Jul	2.1	3.1	2.6	2.2	3.44994E-08	10	50	40	AC/Ca Ash/ W/D
1-Aug	1.9	3	2.45	2.2	3.25091E-08	10	50	40	AC/Ca Ash/ W/D
2-Aug	1.9	2.9	2.4	2.2	3.18456E-08	10	50	40	AC/Ca Ash/ W/D
3-Aug	1.8	2.7	2.25	2.2	2.98553E-08	10	50	40	AC/Ca Ash/ W/D
4-Aug	2.4	2.6	2.5	2.2	3.31725E-08	10	50	40	AC/Ca Ash/ W/D
5-Aug	2.1	2.9	2.5	2.2	3.31725E-08	10	50	40	AC/Ca Ash/ W/D
6-Aug	1.9	2.7	2.3	2.2	3.05187E-08	10	50	40	AC/Ca Ash/ W/D
7-Aug	1.9	2.6	2.25	2.2	2.98553E-08	10	50	40	AC/Ca Ash/ W/D
8-Aug	1.8	2.5	2.15	2.2	2.85284E-08	10	50	40	AC/Ca Ash/ W/D
1-Sep	1.8	2.5	2.15	2.2	2.85284E-08	10	50	40	AC/Ca Ash/ W/D
2-Sep	1.8	2.5	2.15	2.2	2.85284E-08	10	50	40	AC/Ca Ash/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
3-Sep	1.7	3.1	2.4	2.2	3.18456E-08	10	50	40	AC/Ca Ash/ W/D
4-Sep	1.5	2.8	2.15	2.2	2.85284E-08	10	50	40	AC/Ca Ash/ W/D
5-Sep	1.5	2.4	1.95	2.2	2.58746E-08	10	50	40	AC/Ca Ash/ W/D
6-Sep	1.4	2.3	1.85	2.2	2.45477E-08	10	50	40	AC/Ca Ash/ W/D
7-Sep	1.4	2.3	1.85	2.2	2.45477E-08	10	50	40	AC/Ca Ash/ W/D
8-Sep	1.4	2	1.7	2.2	2.25573E-08	10	50	40	AC/Ca Ash/ W/D
9-Sep	1.8	2.5	2.15	2.2	2.85284E-08	10	50	40	AC/Ca Ash/ W/D
10-Sep	1.5	2.5	2	2.2	2.6538E-08	10	50	40	AC/Ca Ash/ W/D
11-Sep	1.6	2	1.8	2.2	2.38842E-08	10	50	40	AC/Ca Ash/ W/D
12-Sep	1.4	2.2	1.8	2.2	2.38842E-08	10	50	40	AC/Ca Ash/ W/D
13-Sep	1.3	2.1	1.7	2.2	2.25573E-08	10	50	40	AC/Ca Ash/ W/D
14-Sep	1.3	2.1	1.7	2.2	2.25573E-08	10	50	40	AC/Ca Ash/ W/D
15-Sep	1.4	1.8	1.6	2.2	2.12304E-08	10	50	40	AC/Ca Ash/ W/D
16-Sep	1.1	1.7	1.4	2.2	1.85766E-08	10	50	40	AC/Ca Ash/ W/D
17-Sep	1.3	1.9	1.6	2.2	2.12304E-08	10	50	40	AC/Ca Ash/ W/D
18-Sep	1.2	1.9	1.55	2.2	2.0567E-08	10	50	40	AC/Ca Ash/ W/D
19-Sep	1.5	1.9	1.7	2.2	2.25573E-08	10	50	40	AC/Ca Ash/ W/D
20-Sep	1.4	1.9	1.65	2.2	2.18939E-08	10	50	40	AC/Ca Ash/ W/D
21-Sep	1.4	1.9	1.65	2.2	2.18939E-08	10	50	40	AC/Ca Ash/ W/D
22-Sep	1.2	2	1.6	2.2	2.12304E-08	10	50	40	AC/Ca Ash/ W/D
23-Sep	1.2	1.8	1.5	2.2	1.99035E-08	10	50	40	AC/Ca Ash/ W/D
24-Sep	1.3	1.5	1.4	2.2	1.85766E-08	10	50	40	AC/Ca Ash/ W/D
25-Sep	1.1	1.7	1.4	2.2	1.85766E-08	10	50	40	AC/Ca Ash/ W/D
26-Sep	1.3	1.8	1.55	2.2	2.0567E-08	10	50	40	AC/Ca Ash/ W/D
27-Sep	1.3	1.7	1.5	2.2	1.99035E-08	10	50	40	AC/Ca Ash/ W/D
28-Sep	1.3	1.7	1.5	2.2	1.99035E-08	10	50	40	AC/Ca Ash/ W/D
29-Sep	1.2	1.6	1.4	2.2	1.85766E-08	10	50	40	AC/Ca Ash/ W/D
30-Sep	1.1	1.6	1.35	2.2	1.79132E-08	10	50	40	AC/Ca Ash/ W/D
1-Oct	1.1	1.5	1.3	2.2	1.72497E-08	10	50	40	AC/Ca Ash/ W/D
2-Oct	1.2	2	1.6	2.2	2.12304E-08	10	50	40	AC/Ca Ash/ W/D
3-Oct	1.1	1.5	1.3	2.2	1.72497E-08	10	50	40	AC/Ca Ash/ W/D
4-Oct	1.1	1.5	1.3	2.2	1.72497E-08	10	50	40	AC/Ca Ash/ W/D
10-Nov	1	1.5	1.25	2.2	1.65863E-08	10	50	40	AC/Ca Ash/ W/D
11-Nov	0.9	1.4	1.15	2.2	1.52594E-08	10	50	40	AC/Ca Ash/ W/D
12-Nov	0.2	0.3	0.25	2.2	3.31725E-09	10	50	40	AC/Ca Ash/ W/D
13-Nov	0.2	0.2	0.2	2.2	2.6538E-09	10	50	40	AC/Ca Ash/ W/D
14-Nov	0.2	0.2	0.2	2.2	2.6538E-09	10	50	40	AC/Ca Ash/ W/D
16-Nov	0.2	0.2	0.2	2.2	2.6538E-09	10	50	40	AC/Ca Ash/ W/D
17-Nov	0.2	0.2	0.2	2.2	2.6538E-09	10	50	40	AC/Ca Ash/ W/D
18-Nov	0.2	0.3	0.25	2.2	3.31725E-09	10	50	40	AC/Ca Ash/ W/D
19-Nov	0.1	0.2	0.15	2.2	1.99035E-09	10	50	40	AC/Ca Ash/ W/D
20-Nov	0	0.2	0.1	2.2	1.3269E-09	10	50	40	AC/Ca Ash/ W/D
21-Nov	0	0.2	0.1	2.2	1.3269E-09	10	50	40	AC/Ca Ash/ W/D
22-Nov	0.1	0.2	0.15	2.2	1.99035E-09	10	50	40	AC/Ca Ash/ W/D
23-Nov	0	0.2	0.1	2.2	1.3269E-09	10	50	40	AC/Ca Ash/ W/D
25-Nov	0	0.2	0.1	2.2	1.3269E-09	10	50	40	AC/Ca Ash/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
26-Nov	0.2	0.2	0.2	2.2	2.6538E-09	10	50	40	AC/Ca Ash/ W/D
27-Nov	0	0.2	0.1	2.2	1.3269E-09	10	50	40	AC/Ca Ash/ W/D
28-Nov	0	0.1	0.05	2.2	6.6345E-10	10	50	40	AC/Ca Ash/ W/D
29-Nov	0	0.2	0.1	2.2	1.3269E-09	10	50	40	AC/Ca Ash/ W/D
30-Nov	0	0.1	0.05	2.2	6.6345E-10	10	50	40	AC/Ca Ash/ W/D
1-Dec	0	0.2	0.1	2.2	1.3269E-09	10	50	40	AC/Ca Ash/ W/D
2-Dec	0	0.1	0.05	2.2	6.6345E-10	10	50	40	AC/Ca Ash/ W/D
6-Dec	0	0.1	0.05	2.2	6.6345E-10	10	50	40	AC/Ca Ash/ W/D
7-Dec	0.1	0.1	0.1	2.2	1.3269E-09	10	50	40	AC/Ca Ash/ W/D
9-Dec	0	0.1	0.05	2.2	6.6345E-10	10	50	40	AC/Ca Ash/ W/D
10-Dec	0.1	0.2	0.15	2.2	1.99035E-09	10	50	40	AC/Ca Ash/ W/D
12-Dec	0	0	0	2.2	0	10	50	40	AC/Ca Ash/ W/D
13-Dec	0	0.1	0.05	2.2	6.6345E-10	10	50	40	AC/Ca Ash/ W/D
11-Jan	0	0.1	0.05	2.2	6.6345E-10	10	50	40	AC/Ca Ash/ W/D
12-Jan	0	0.1	0.05	2.2	6.6345E-10	10	50	40	AC/Ca Ash/ W/D
13-Jan	0	0	0	2.2	0	10	50	40	AC/Ca Ash/ W/D
14-Jan	0	0	0	2.2	0	10	50	40	AC/Ca Ash/ W/D
15-Jan	0	0.1	0.05	2.2	6.6345E-10	10	50	40	AC/Ca Ash/ W/D
16-Jan	0	0	0	2.2	0	10	50	40	AC/Ca Ash/ W/D
17-Jan	0	0.1	0.05	2.2	6.6345E-10	10	50	40	AC/Ca Ash/ W/D
18-Jan	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
19-Jan	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
20-Jan	0	0.1	0.05	4.3	3.3944E-10	10	50	40	AC/Ca Ash/ W/D
21-Jan	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
22-Jan	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
23-Jan	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
24-Jan	0	0.1	0.05	4.3	3.3944E-10	10	50	40	AC/Ca Ash/ W/D
25-Jan	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
27-Jan	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
28-Jan	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
29-Jan	0	0.1	0.05	4.3	3.3944E-10	10	50	40	AC/Ca Ash/ W/D
30-Jan	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
31-Jan	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
1-Feb	0	0.1	0.05	4.3	3.3944E-10	10	50	40	AC/Ca Ash/ W/D
2-Feb	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
3-Feb	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
4-Feb	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
5-Feb	0	0.1	0.05	4.3	3.3944E-10	10	50	40	AC/Ca Ash/ W/D
6-Feb	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
End	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
End Clay #2	0	0	0	4.3	0	10	50	40	AC/Ca Ash/ W/D
Sample 69									
13-Oct									
14-Oct									
15-Oct	18.9	17.78	18.34	2.2	4.6819E-08	10	50	40	RC/NaExt/ F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
16-Oct	19.98	19.35	19.665	2.2	5.02015E-08	10	50	40	RC/NaExt/ F/T
17-Oct	14.04	13.6	13.82	2.2	3.52802E-08	10	50	40	RC/NaExt/ F/T
18-Oct	12.96	12.03	12.495	2.2	3.18976E-08	10	50	40	RC/NaExt/ F/T
19-Oct	12.42	12.55	12.485	2.2	3.18721E-08	10	50	40	RC/NaExt/ F/T
20-Oct	12.96	11.51	12.235	2.2	3.12339E-08	10	50	40	RC/NaExt/ F/T
22-Oct	22.14	20.4	21.27	2.2	5.42988E-08	10	50	40	RC/NaExt/ F/T
23-Oct	20.52	19.35	19.935	2.2	5.08907E-08	10	50	40	RC/NaExt/ F/T
24-Oct	22.14	21.44	21.79	2.2	5.56262E-08	10	50	40	RC/NaExt/ F/T
25-Oct	21.6	20.92	21.26	2.2	5.42732E-08	10	50	40	RC/NaExt/ F/T
26-Oct	21.6	20.92	21.26	2.2	5.42732E-08	10	50	40	RC/NaExt/ F/T
27-Oct	16.74	16.74	16.74	2.2	4.27344E-08	10	50	40	RC/NaExt/ F/T
28-Oct	14.58	13.6	14.09	2.2	3.59694E-08	10	50	40	RC/NaExt/ F/T
29-Oct	12.42	12.55	12.485	2.2	3.18721E-08	10	50	40	RC/NaExt/ F/T
30-Oct	10.8	10.46	10.63	2.2	2.71366E-08	10	50	40	RC/NaExt/ F/T
31-Oct	11.88	10.98	11.43	2.2	2.91789E-08	10	50	40	RC/NaExt/ F/T
10-Nov	15.12	14.12	14.62	2.2	3.73224E-08	10	50	40	RC/NaExt/ F/T
11-Nov	14.58	13.6	14.09	2.2	3.59694E-08	10	50	40	RC/NaExt/ F/T
12-Nov	17.64	17.5	17.57	2.2	4.48533E-08	10	50	40	RC/NaExt/ F/T
13-Nov	15.19	15	15.095	2.2	3.8535E-08	10	50	40	RC/NaExt/ F/T
14-Nov	13.72	13.5	13.61	2.2	3.47441E-08	10	50	40	RC/NaExt/ F/T
15-Nov	13.72	13.5	13.61	2.2	3.47441E-08	10	50	40	RC/NaExt/ F/T
16-Nov	13.23	13.5	13.365	2.2	3.41186E-08	10	50	40	RC/NaExt/ F/T
17-Nov	10.78	10.5	10.64	2.2	2.71621E-08	10	50	40	RC/NaExt/ F/T
18-Nov	12.74	12.5	12.62	2.2	3.22168E-08	10	50	40	RC/NaExt/ F/T
22-Nov	11.76	11.5	11.63	2.2	2.96894E-08	10	50	40	RC/NaExt/ F/T
23-Nov	10.29	10.5	10.395	2.2	2.65367E-08	10	50	40	RC/NaExt/ F/T
24-Nov	11.76	12	11.88	2.2	3.03277E-08	10	50	40	RC/NaExt/ F/T
25-Nov	11.27	11	11.135	2.2	2.84258E-08	10	50	40	RC/NaExt/ F/T
26-Nov	11.76	11.5	11.63	2.2	2.96894E-08	10	50	40	RC/NaExt/ F/T
27-Nov	11.27	11.5	11.385	2.2	2.9064E-08	10	50	40	RC/NaExt/ F/T
28-Nov	10.29	10	10.145	2.2	2.58985E-08	10	50	40	RC/NaExt/ F/T
10-Dec	9.8	10	9.9	2.2	2.5273E-08	10	50	40	RC/NaExt/ F/T
11-Dec	9.8	10	9.9	2.2	2.5273E-08	10	50	40	RC/NaExt/ F/T
12-Dec	37.73	36.5	37.115	2.2	9.47484E-08	10	50	40	RC/NaExt/ F/T
13-Dec	35.77	35.5	35.635	2.2	9.09702E-08	10	50	40	RC/NaExt/ F/T
14-Dec	34.3	35	34.65	2.2	8.84557E-08	10	50	40	RC/NaExt/ F/T
15-Dec	32.83	32.5	32.665	2.2	8.33883E-08	10	50	40	RC/NaExt/ F/T
16-Dec	32.83	33	32.915	2.2	8.40265E-08	10	50	40	RC/NaExt/ F/T
17-Dec	27.93	28	27.965	2.2	7.139E-08	10	50	40	RC/NaExt/ F/T
18-Dec	24.5	24	24.25	2.2	6.19062E-08	10	50	40	RC/NaExt/ F/T
19-Dec	22.54	22	22.27	2.2	5.68516E-08	10	50	40	RC/NaExt/ F/T
20-Dec	28.91	29	28.955	2.2	7.39173E-08	10	50	40	RC/NaExt/ F/T
21-Dec	27.93	27	27.465	2.2	7.01136E-08	10	50	40	RC/NaExt/ F/T
22-Dec	24.01	24	24.005	2.2	6.12808E-08	10	50	40	RC/NaExt/ F/T
23-Dec	31.85	31.5	31.675	2.2	8.0861E-08	10	50	40	RC/NaExt/ F/T
24-Dec	28.91	29	28.955	2.2	7.39173E-08	10	50	40	RC/NaExt/ F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
25-Dec	29.89	29.5	29.695	2.2	7.58064E-08	10	50	40	RC/NaExt/ F/T
26-Dec	29.4	29	29.2	2.2	7.45427E-08	10	50	40	RC/NaExt/ F/T
27-Dec	29.89	30	29.945	2.2	7.64446E-08	10	50	40	RC/NaExt/ F/T
28-Dec	29.4	29	29.2	2.2	7.45427E-08	10	50	40	RC/NaExt/ F/T
29-Dec	28.91	28.5	28.705	2.2	7.32791E-08	10	50	40	RC/NaExt/ F/T
30-Dec	24.5	24.5	24.5	2.2	6.25444E-08	10	50	40	RC/NaExt/ F/T
31-Dec	31.85	32	31.925	2.2	8.14992E-08	10	50	40	RC/NaExt/ F/T
1-Jan	27.44	27.5	27.47	2.2	7.01263E-08	10	50	40	RC/NaExt/ F/T
2-Jan	28.91	28.5	28.705	2.2	7.32791E-08	10	50	40	RC/NaExt/ F/T
3-Jan	26.95	27	26.975	2.2	6.88627E-08	10	50	40	RC/NaExt/ F/T
18-Jan	27.44	27	27.22	2.2	6.94881E-08	10	50	40	RC/NaExt/ F/T
19-Jan	28.42	28.5	28.46	2.2	7.26536E-08	10	50	40	RC/NaExt/ F/T
20-Jan	53.9	54	53.95	2.2	1.37725E-07	10	50	40	RC/NaExt/ F/T
21-Jan	51.45	51	51.225	2.2	1.30769E-07	10	50	40	RC/NaExt/ F/T
22-Jan	53.9	53.5	53.7	2.2	1.37087E-07	10	50	40	RC/NaExt/ F/T
23-Jan	51.45	51	51.225	2.2	1.30769E-07	10	50	40	RC/NaExt/ F/T
24-Jan	41.16	41.5	41.33	2.2	1.05509E-07	10	50	40	RC/NaExt/ F/T
25-Jan	51.45	50	50.725	2.2	1.29492E-07	10	50	40	RC/NaExt/ F/T
26-Jan	39.69	40.5	40.095	2.2	1.02356E-07	10	50	40	RC/NaExt/ F/T
27-Jan	51.45	51.5	51.475	2.2	1.31407E-07	10	50	40	RC/NaExt/ F/T
28-Jan	50.96	47.5	49.23	2.2	1.25676E-07	10	50	40	RC/NaExt/ F/T
29-Jan	52.43	52.5	52.465	2.2	1.33934E-07	10	50	40	RC/NaExt/ F/T
30-Jan	48.02	48.5	48.26	2.2	1.232E-07	10	50	40	RC/NaExt/ F/T
31-Jan	47.53	47	47.265	2.2	1.2066E-07	10	50	40	RC/NaExt/ F/T
1-Feb	47.53	47	47.265	2.2	1.2066E-07	10	50	40	RC/NaExt/ F/T
2-Feb	53.9	53.5	53.7	2.2	1.37087E-07	10	50	40	RC/NaExt/ F/T
End	43.61	43.5	43.555	2.2	1.11189E-07	10	50	40	RC/NaExt/ F/T
	51.94	54.5	53.22	2.2	1.35862E-07	10	50	40	RC/NaExt/ F/T
Sample 71									
11-Nov									
12-Nov									
13-Nov	5.45	6.12	5.785	2.2	6.21639E-08	10	50	40	RC/Urea Ext/120 day
14-Nov	3.82	4.08	3.95	2.2	4.24456E-08	10	50	40	RC/Urea Ext/120 day
15-Nov	2.73	3.57	3.15	2.2	3.3849E-08	10	50	40	RC/Urea Ext/120 day
16-Nov	2.73	3.57	3.15	2.2	3.3849E-08	10	50	40	RC/Urea Ext/120 day
18-Nov	2.73	3.06	2.895	2.2	3.11088E-08	10	50	40	RC/Urea Ext/120 day
19-Nov	2.5	2.6	2.55	2.2	2.74016E-08	10	50	40	RC/Urea Ext/120 day
20-Nov	3.2	2.7	2.95	2.2	3.16998E-08	10	50	40	RC/Urea Ext/120 day
21-Nov	2.73	3.57	3.15	2.2	3.3849E-08	10	50	40	RC/Urea Ext/120 day
22-Nov	2.73	3.06	2.895	2.2	3.11088E-08	10	50	40	RC/Urea Ext/120 day
23-Nov	2.73	3.06	2.895	2.2	3.11088E-08	10	50	40	RC/Urea Ext/120 day
24-Nov	2.18	2.55	2.365	2.2	2.54136E-08	10	50	40	RC/Urea Ext/120 day
25-Nov	2.18	2.04	2.11	2.2	2.26734E-08	10	50	40	RC/Urea Ext/120 day
26-Nov	2.18	2.55	2.365	2.2	2.54136E-08	10	50	40	RC/Urea Ext/120 day
27-Nov	1.64	2.04	1.84	2.2	1.97721E-08	10	50	40	RC/Urea Ext/120 day

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
28-Nov	1.64	2.04	1.84	2.2	1.97721E-08	10	50	40	RC/Urea Ext/120 day
29-Nov	2.18	2.04	2.11	2.2	2.26734E-08	10	50	40	RC/Urea Ext/120 day
30-Nov	2.18	2.04	2.11	2.2	2.26734E-08	10	50	40	RC/Urea Ext/120 day
1-Dec	1.64	1.53	1.585	2.2	1.7032E-08	10	50	40	RC/Urea Ext/120 day
2-Dec	2.18	2.04	2.11	2.2	2.26734E-08	10	50	40	RC/Urea Ext/120 day
3-Dec	1.64	2.04	1.84	2.2	1.97721E-08	10	50	40	RC/Urea Ext/120 day
4-Dec	1.64	1.53	1.585	2.2	1.7032E-08	10	50	40	RC/Urea Ext/120 day
5-Dec	2.18	2.04	2.11	2.2	2.26734E-08	10	50	40	RC/Urea Ext/120 day
6-Dec	1.64	2.04	1.84	2.2	1.97721E-08	10	50	40	RC/Urea Ext/120 day
7-Dec	1.64	1.53	1.585	2.2	1.7032E-08	10	50	40	RC/Urea Ext/120 day
8-Dec	1.64	1.53	1.585	2.2	1.7032E-08	10	50	40	RC/Urea Ext/120 day
9-Dec	2.73	3.57	3.15	4.3	1.73181E-08	10	50	40	RC/Urea Ext/120 day
10-Dec	2.73	3.06	2.895	4.3	1.59161E-08	10	50	40	RC/Urea Ext/120 day
11-Dec	3.27	3.06	3.165	4.3	1.74006E-08	10	50	40	RC/Urea Ext/120 day
12-Dec	3.27	3.06	3.165	4.3	1.74006E-08	10	50	40	RC/Urea Ext/120 day
13-Dec	2.73	3.06	2.895	4.3	1.59161E-08	10	50	40	RC/Urea Ext/120 day
14-Dec	2.73	3.06	2.895	4.3	1.59161E-08	10	50	40	RC/Urea Ext/120 day
15-Dec	2.73	3.06	2.895	4.3	1.59161E-08	10	50	40	RC/Urea Ext/120 day
16-Dec	3.27	3.06	3.165	4.3	1.74006E-08	10	50	40	RC/Urea Ext/120 day
17-Dec	2.18	3.06	2.62	4.3	1.44042E-08	10	50	40	RC/Urea Ext/120 day
18-Dec	2.73	2.55	2.64	4.3	1.45142E-08	10	50	40	RC/Urea Ext/120 day
19-Dec	3.27	3.06	3.165	4.3	1.74006E-08	10	50	40	RC/Urea Ext/120 day
20-Dec	2.73	2.55	2.64	4.3	1.45142E-08	10	50	40	RC/Urea Ext/120 day
21-Dec	2.73	2.55	2.64	4.3	1.45142E-08	10	50	40	RC/Urea Ext/120 day
22-Dec	2.18	3.06	2.62	4.3	1.44042E-08	10	50	40	RC/Urea Ext/120 day
23-Dec	2.73	2.55	2.64	4.3	1.45142E-08	10	50	40	RC/Urea Ext/120 day
24-Dec	3.27	3.06	3.165	4.3	1.74006E-08	10	50	40	RC/Urea Ext/120 day
25-Dec	3.27	3.06	3.165	4.3	1.74006E-08	10	50	40	RC/Urea Ext/120 day
26-Dec	3.27	3.06	3.165	4.3	1.74006E-08	10	50	40	RC/Urea Ext/120 day
27-Dec	2.73	3.06	2.895	4.3	1.59161E-08	10	50	40	RC/Urea Ext/120 day
28-Dec	2.18	3.06	2.62	4.3	1.44042E-08	10	50	40	RC/Urea Ext/120 day
29-Dec	3.27	3.06	3.165	4.3	1.74006E-08	10	50	40	RC/Urea Ext/120 day
30-Dec	2.73	3.06	2.895	4.3	1.59161E-08	10	50	40	RC/Urea Ext/120 day
31-Dec	3.27	2.55	2.91	4.3	1.59986E-08	10	50	40	RC/Urea Ext/120 day
1-Jan	2.73	3.06	2.895	4.3	1.59161E-08	10	50	40	RC/Urea Ext/120 day
2-Jan	2.73	3.06	2.895	4.3	1.59161E-08	10	50	40	RC/Urea Ext/120 day
3-Jan	2.18	2.55	2.365	4.3	1.30023E-08	10	50	40	RC/Urea Ext/120 day
5-Jan	2.73	2.55	2.64	4.3	1.45142E-08	10	50	40	RC/Urea Ext/120 day
6-Jan	3.27	3.06	3.165	4.3	1.74006E-08	10	50	40	RC/Urea Ext/120 day
7-Jan	5.94	4.59	5.265	6.5	1.91489E-08	10	50	40	RC/Urea Ext/120 day
8-Jan	4.4	5.1	4.75	6.5	1.72758E-08	10	50	40	RC/Urea Ext/120 day
9-Jan	4.91	4.59	4.75	6.5	1.72758E-08	10	50	40	RC/Urea Ext/120 day
10-Jan	4.4	4.59	4.495	6.5	1.63484E-08	10	50	40	RC/Urea Ext/120 day
11-Jan	4.91	4.08	4.495	6.5	1.63484E-08	10	50	40	RC/Urea Ext/120 day
12-Jan	4.91	5.1	5.005	6.5	1.82032E-08	10	50	40	RC/Urea Ext/120 day
13-Jan	4.4	4.08	4.24	6.5	1.54209E-08	10	50	40	RC/Urea Ext/120 day

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
14-Jan	4.91	4.59	4.75	6.5	1.72758E-08	10	50	40	RC/Urea Ext/120 day
15-Jan	4.91	4.59	4.75	6.5	1.72758E-08	10	50	40	RC/Urea Ext/120 day
16-Jan	4.91	4.59	4.75	6.5	1.72758E-08	10	50	40	RC/Urea Ext/120 day
17-Jan	4.4	4.59	4.495	6.5	1.63484E-08	10	50	40	RC/Urea Ext/120 day
18-Jan	4.4	5.1	4.75	6.5	1.72758E-08	10	50	40	RC/Urea Ext/120 day
19-Jan	3.82	4.08	3.95	6.5	1.43662E-08	10	50	40	RC/Urea Ext/120 day
20-Jan	4.4	4.08	4.24	6.5	1.54209E-08	10	50	40	RC/Urea Ext/120 day
21-Jan	3.82	4.08	3.95	6.5	1.43662E-08	10	50	40	RC/Urea Ext/120 day
22-Jan	4.4	4.08	4.24	6.5	1.54209E-08	10	50	40	RC/Urea Ext/120 day
23-Jan	4.4	4.59	4.495	6.5	1.63484E-08	10	50	40	RC/Urea Ext/120 day
24-Jan	4.4	4.59	4.495	6.5	1.63484E-08	10	50	40	RC/Urea Ext/120 day
25-Jan	4.4	4.08	4.24	6.5	1.54209E-08	10	50	40	RC/Urea Ext/120 day
26-Jan	4.4	4.08	4.24	6.5	1.54209E-08	10	50	40	RC/Urea Ext/120 day
27-Jan	4.4	4.59	4.495	6.5	1.63484E-08	10	50	40	RC/Urea Ext/120 day
28-Jan	4.36	4.08	4.22	6.5	1.53482E-08	10	50	40	RC/Urea Ext/120 day
29-Jan	4.36	4.08	4.22	6.5	1.53482E-08	10	50	40	RC/Urea Ext/120 day
30-Jan	3.27	4.08	3.675	6.5	1.3366E-08	10	50	40	RC/Urea Ext/120 day
31-Jan	4.36	4.08	4.22	6.5	1.53482E-08	10	50	40	RC/Urea Ext/120 day
1-Feb	4.36	4.08	4.22	6.5	1.53482E-08	10	50	40	RC/Urea Ext/120 day
2-Feb	4.36	3.57	3.965	6.5	1.44207E-08	10	50	40	RC/Urea Ext/120 day
3-Feb	4.36	4.08	4.22	6.5	1.53482E-08	10	50	40	RC/Urea Ext/120 day
4-Feb	3.82	4.59	4.205	6.5	1.52936E-08	10	50	40	RC/Urea Ext/120 day
5-Feb	3.82	4.08	3.95	6.5	1.43662E-08	10	50	40	RC/Urea Ext/120 day
6-Feb	4.36	4.08	4.22	6.5	1.53482E-08	10	50	40	RC/Urea Ext/120 day
7-Feb	4.36	3.57	3.965	6.5	1.44207E-08	10	50	40	RC/Urea Ext/120 day
8-Feb	3.82	3.57	3.695	6.5	1.34388E-08	10	50	40	RC/Urea Ext/120 day
9-Feb	3.5	4	3.75	6.5	1.36388E-08	10	50	40	RC/Urea Ext/120 day
10-Feb	3.5	3.7	3.6	6.5	1.30932E-08	10	50	40	RC/Urea Ext/120 day
11-Feb	3.5	3.6	3.55	6.5	1.29114E-08	10	50	40	RC/Urea Ext/120 day
12-Feb	4	3.8	3.9	6.5	1.41843E-08	10	50	40	RC/Urea Ext/120 day
13-Feb	4	4	4	6.5	1.4548E-08	10	50	40	RC/Urea Ext/120 day
14-Feb	3.9	3.8	3.85	6.5	1.40025E-08	10	50	40	RC/Urea Ext/120 day
15-Feb	3.8	3.8	3.8	6.5	1.38206E-08	10	50	40	RC/Urea Ext/120 day
16-Feb	4.1	3.9	4	6.5	1.4548E-08	10	50	40	RC/Urea Ext/120 day
17-Feb	3.7	3.9	3.8	6.5	1.38206E-08	10	50	40	RC/Urea Ext/120 day
18-Feb	3.5	3.8	3.65	6.5	1.32751E-08	10	50	40	RC/Urea Ext/120 day
19-Feb	4	3.7	3.85	6.5	1.40025E-08	10	50	40	RC/Urea Ext/120 day
20-Feb	3.7	3.6	3.65	6.5	1.32751E-08	10	50	40	RC/Urea Ext/120 day
21-Feb	3.6	3.6	3.6	6.5	1.30932E-08	10	50	40	RC/Urea Ext/120 day
22-Feb	3.5	3.5	3.5	6.5	1.27295E-08	10	50	40	RC/Urea Ext/120 day
23-Feb	3.8	3.9	3.85	6.5	1.40025E-08	10	50	40	RC/Urea Ext/120 day
24-Feb	3.5	3.6	3.55	6.5	1.29114E-08	10	50	40	RC/Urea Ext/120 day
25-Feb	3.5	3.5	3.5	6.5	1.27295E-08	10	50	40	RC/Urea Ext/120 day
26-Feb	3.7	3.2	3.45	6.5	1.25477E-08	10	50	40	RC/Urea Ext/120 day
27-Feb	3.7	3.7	3.7	6.5	1.34569E-08	10	50	40	RC/Urea Ext/120 day
28-Feb	3.4	3.6	3.5	6.5	1.27295E-08	10	50	40	RC/Urea Ext/120 day

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
1-Mar	3.3	3.4	3.35	6.5	1.2184E-08	10	50	40	RC/Urea Ext/120 day
2-Mar	3.6	3.5	3.55	6.5	1.29114E-08	10	50	40	RC/Urea Ext/120 day
8-Mar	3.6	3.5	3.55	6.5	1.29114E-08	10	50	40	RC/Urea Ext/120 day
9-Mar	3.4	3.4	3.4	6.5	1.23658E-08	10	50	40	RC/Urea Ext/120 day
10-Mar	3.82	4.08	3.95	6.5	1.43662E-08	10	50	40	RC/Urea Ext/120 day
11-Mar	4.1	3.8	3.95	6.5	1.43662E-08	10	50	40	RC/Urea Ext/120 day
12-Mar	4	4.1	4.05	6.5	1.47299E-08	10	50	40	RC/Urea Ext/120 day
13-Mar	3.9	3.9	3.9	6.5	1.41843E-08	10	50	40	RC/Urea Ext/120 day
14-Mar	3.8	3.7	3.75	6.5	1.36388E-08	10	50	40	RC/Urea Ext/120 day
End	3.5	3.7	3.6	6.5	1.30932E-08	10	50	40	RC/Urea Ext/120 day
	4.1	3.7	3.9	6.5	1.41843E-08	10	50	40	RC/Urea Ext/120 day
Sample 75A									
24-Jan									
25-Jan									
26-Jan	8.28	7	7.64	2.2	2.06882E-08	10	50	40	RC/NaCl Sol. Permeate
27-Jan	6.33	7	6.665	2.2	1.80481E-08	10	50	40	RC/NaCl Sol. Permeate
28-Jan	6.33	6	6.165	2.2	1.66941E-08	10	50	40	RC/NaCl Sol. Permeate
29-Jan	5.36	6	5.68	2.2	1.53808E-08	10	50	40	RC/NaCl Sol. Permeate
30-Jan	5.36	5.5	5.43	2.2	1.47038E-08	10	50	40	RC/NaCl Sol. Permeate
31-Jan	5.36	5.5	5.43	2.2	1.47038E-08	10	50	40	RC/NaCl Sol. Permeate
1-Feb	5.36	5	5.18	2.2	1.40268E-08	10	50	40	RC/NaCl Sol. Permeate
2-Feb	5.84	5.5	5.67	2.2	1.53537E-08	10	50	40	RC/NaCl Sol. Permeate
3-Feb	5.84	5.5	5.67	2.2	1.53537E-08	10	50	40	RC/NaCl Sol. Permeate
4-Feb	4.87	5.5	5.185	2.2	1.40404E-08	10	50	40	RC/NaCl Sol. Permeate
5-Feb	4.87	5	4.935	2.2	1.33634E-08	10	50	40	RC/NaCl Sol. Permeate
6-Feb	4.87	4.5	4.685	2.2	1.26864E-08	10	50	40	RC/NaCl Sol. Permeate
7-Feb	4.38	4.5	4.44	2.2	1.2023E-08	10	50	40	RC/NaCl Sol. Permeate
8-Feb	4.38	4.5	4.44	2.2	1.2023E-08	10	50	40	RC/NaCl Sol. Permeate
9-Feb	4.38	4.5	4.44	2.2	1.2023E-08	10	50	40	RC/NaCl Sol. Permeate
10-Feb	3.9	4.5	4.2	2.2	1.13731E-08	10	50	40	RC/NaCl Sol. Permeate
11-Feb	4.38	3.5	3.94	2.2	1.06691E-08	10	50	40	RC/NaCl Sol. Permeate
12-Feb	4.6	4.6	4.6	2.2	1.24563E-08	10	50	40	RC/NaCl Sol. Permeate
13-Feb	6	6	6	2.2	1.62473E-08	10	50	40	RC/NaCl Sol. Permeate
14-Feb	5.8	5.8	5.8	2.2	1.57057E-08	10	50	40	RC/NaCl Sol. Permeate
15-Feb	5.6	5.6	5.6	2.2	1.51642E-08	10	50	40	RC/NaCl Sol. Permeate
16-Feb	5	4.9	4.95	2.2	1.3404E-08	10	50	40	RC/NaCl Sol. Permeate
17-Feb	4.5	4.5	4.5	2.2	1.21855E-08	10	50	40	RC/NaCl Sol. Permeate
18-Feb	4.7	4.6	4.65	2.2	1.25917E-08	10	50	40	RC/NaCl Sol. Permeate
19-Feb	4.3	4.3	4.3	2.2	1.16439E-08	10	50	40	RC/NaCl Sol. Permeate
20-Feb	9	8.9	8.95	4.3	1.23996E-08	10	50	40	RC/NaCl Sol. Permeate
21-Feb	8.2	8.1	8.15	4.3	1.12913E-08	10	50	40	RC/NaCl Sol. Permeate
22-Feb	6.7	7.1	6.9	4.3	9.55947E-09	10	50	40	RC/NaCl Sol. Permeate
23-Feb	8.7	8.8	8.75	4.3	1.21225E-08	10	50	40	RC/NaCl Sol. Permeate
24-Feb	7.7	7.7	7.7	4.3	1.06678E-08	10	50	40	RC/NaCl Sol. Permeate
25-Feb	8.4	8.3	8.35	4.3	1.15683E-08	10	50	40	RC/NaCl Sol. Permeate

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
26-Feb	7.2	7.9	7.55	4.3	1.046E-08	10	50	40	RC/NaCl Sol. Permeate
27-Feb	7	6.7	6.85	4.3	9.4902E-09	10	50	40	RC/NaCl Sol. Permeate
28-Feb	9	9	9	4.3	1.24689E-08	10	50	40	RC/NaCl Sol. Permeate
1-Mar	8.7	8.4	8.55	4.3	1.18454E-08	10	50	40	RC/NaCl Sol. Permeate
2-Mar	8.5	8.5	8.5	4.3	1.17762E-08	10	50	40	RC/NaCl Sol. Permeate
3-Mar	8.5	8.5	8.5	4.3	1.17762E-08	10	50	40	RC/NaCl Sol. Permeate
4-Mar	7.9	7.9	7.9	4.3	1.09449E-08	10	50	40	RC/NaCl Sol. Permeate
5-Mar	8.5	8.4	8.45	4.3	1.17069E-08	10	50	40	RC/NaCl Sol. Permeate
6-Mar	8.28	8.5	8.39	4.3	1.16238E-08	10	50	40	RC/NaCl Sol. Permeate
7-Mar	7.79	8	7.895	4.3	1.0938E-08	10	50	40	RC/NaCl Sol. Permeate
8-Mar	7.79	8	7.895	4.3	1.0938E-08	10	50	40	RC/NaCl Sol. Permeate
9-Mar	7.79	7.5	7.645	4.3	1.05916E-08	10	50	40	RC/NaCl Sol. Permeate
10-Mar	8.77	8.5	8.635	4.3	1.19632E-08	10	50	40	RC/NaCl Sol. Permeate
11-Mar	8.28	8.5	8.39	4.3	1.16238E-08	10	50	40	RC/NaCl Sol. Permeate
12-Mar	13.64	14	13.82	6.5	1.26662E-08	10	50	40	RC/NaCl Sol. Permeate
13-Mar	13.15	13	13.075	6.5	1.19834E-08	10	50	40	RC/NaCl Sol. Permeate
14-Mar	12.66	12.5	12.58	6.5	1.15298E-08	10	50	40	RC/NaCl Sol. Permeate
15-Mar	12.66	12.5	12.58	6.5	1.15298E-08	10	50	40	RC/NaCl Sol. Permeate
16-Mar	12.66	12.5	12.58	6.5	1.15298E-08	10	50	40	RC/NaCl Sol. Permeate
17-Mar	12.66	13	12.83	6.5	1.17589E-08	10	50	40	RC/NaCl Sol. Permeate
18-Mar	12.18	12.5	12.34	6.5	1.13098E-08	10	50	40	RC/NaCl Sol. Permeate
19-Mar	12.18	11.5	11.84	6.5	1.08515E-08	10	50	40	RC/NaCl Sol. Permeate
20-Mar	13.15	13	13.075	6.5	1.19834E-08	10	50	40	RC/NaCl Sol. Permeate
21-Mar	13.15	13	13.075	6.5	1.19834E-08	10	50	40	RC/NaCl Sol. Permeate
22-Mar	12.66	12.5	12.58	6.5	1.15298E-08	10	50	40	RC/NaCl Sol. Permeate
23-Mar	12.18	12	12.09	6.5	1.10807E-08	10	50	40	RC/NaCl Sol. Permeate
24-Mar	12.18	12	12.09	6.5	1.10807E-08	10	50	40	RC/NaCl Sol. Permeate
25-Mar	11.69	11.5	11.595	6.5	1.0627E-08	10	50	40	RC/NaCl Sol. Permeate
26-Mar	1[illegible]66	12.5	12.58	6.5	1.15298E-08	10	50	40	RC/NaCl Sol. Permeate
27-Mar	12.18	12	12.09	6.5	1.10807E-08	10	50	40	RC/NaCl Sol. Permeate
28-Mar	11.69	11.5	11.595	6.5	1.0627E-08	10	50	40	RC/NaCl Sol. Permeate
End	11.69	11.5	11.595	6.5	1.0627E-08	10	50	40	RC/NaCl Sol. Permeate
	11.69	11.5	11.595	6.5	1.0627E-08	10	50	40	RC/NaCl Sol. Permeate
Sample 73B									
21-Jan									
22-Jan									
23-Jan	6.3	7.31	6.805	2.2	1.84209E-08	10	50	40	RC/CaExt/ F/T
24-Jan	6.3	6.26	6.28	2.2	1.69997E-08	10	50	40	RC/CaExt/ F/T
25-Jan	5.78	5.22	5.5	2.2	1.48883E-08	10	50	40	RC/CaExt/ F/T
26-Jan	5.78	5.74	5.76	2.2	1.55921E-08	10	50	40	RC/CaExt/ F/T
27-Jan	5.25	5.22	5.235	2.2	1.4171E-08	10	50	40	RC/CaExt/ F/T
28-Jan	5.25	5.22	5.235	2.2	1.4171E-08	10	50	40	RC/CaExt/ F/T
29-Jan	5.25	5.22	5.235	2.2	1.4171E-08	10	50	40	RC/CaExt/ F/T
30-Jan	4.73	5.22	4.975	2.2	1.34671E-08	10	50	40	RC/CaExt/ F/T
31-Jan	4.73	4.7	4.715	2.2	1.27633E-08	10	50	40	RC/CaExt/ F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
1-Feb	4.73	4.7	4.715	2.2	1.27633E-08	10	50	40	RC/CaExt/ F/T
2-Feb	4.73	4.18	4.455	2.2	1.20595E-08	10	50	40	RC/CaExt/ F/T
3-Feb	4.73	4.7	4.715	2.2	1.27633E-08	10	50	40	RC/CaExt/ F/T
4-Feb	5.25	5.22	5.235	2.2	1.4171E-08	10	50	40	RC/CaExt/ F/T
5-Feb	4.73	4.7	4.715	2.2	1.27633E-08	10	50	40	RC/CaExt/ F/T
6-Feb	4.73	4.7	4.715	2.2	1.27633E-08	10	50	40	RC/CaExt/ F/T
7-Feb	4.73	4.18	4.455	2.2	1.20595E-08	10	50	40	RC/CaExt/ F/T
8-Feb	4.73	4.18	4.455	2.2	1.20595E-08	10	50	40	RC/CaExt/ F/T
9-Feb	4.1	4.4	4.25	2.2	1.15046E-08	10	50	40	RC/CaExt/ F/T
10-Feb	3.8	3.9	3.85	2.2	1.04218E-08	10	50	40	RC/CaExt/ F/T
11-Feb	3.4	3.5	3.45	2.2	9.33902E-09	10	50	40	RC/CaExt/ F/T
12-Feb	4.3	4.3	4.3	2.2	1.16399E-08	10	50	40	RC/CaExt/ F/T
13-Feb	4.3	4.3	4.3	2.2	1.16399E-08	10	50	40	RC/CaExt/ F/T
24-Feb	4.2	4.2	4.2	2.2	1.13692E-08	10	50	40	RC/CaExt/ F/T
25-Feb	4.2	4.2	4.2	2.2	1.13692E-08	10	50	40	RC/CaExt/ F/T
26-Feb	23.1	23.49	23.295	2.2	6.30587E-08	10	50	40	RC/CaExt/ F/T
27-Feb	22.58	21.92	22.25	2.2	6.02299E-08	10	50	40	RC/CaExt/ F/T
28-Feb	22.58	21.92	22.25	2.2	6.02299E-08	10	50	40	RC/CaExt/ F/T
1-Mar	21.53	20.88	21.205	2.2	5.74011E-08	10	50	40	RC/CaExt/ F/T
2-Mar	23.63	23.49	23.56	2.2	6.3776E-08	10	50	40	RC/CaExt/ F/T
3-Mar	21.53	20.88	21.205	2.2	5.74011E-08	10	50	40	RC/CaExt/ F/T
4-Mar	18.9	18.79	18.845	2.2	5.10127E-08	10	50	40	RC/CaExt/ F/T
5-Mar	21	19.84	20.42	2.2	5.52762E-08	10	50	40	RC/CaExt/ F/T
6-Mar	20.48	20.88	20.68	2.2	5.598E-08	10	50	40	RC/CaExt/ F/T
7-Mar	18.9	18.27	18.585	2.2	5.03089E-08	10	50	40	RC/CaExt/ F/T
8-Mar	17.85	16.7	17.275	2.2	4.67628E-08	10	50	40	RC/CaExt/ F/T
9-Mar	15.23	15.66	15.445	2.2	4.1809E-08	10	50	40	RC/CaExt/ F/T
10-Mar	17.85	17.23	17.54	2.2	4.74801E-08	10	50	40	RC/CaExt/ F/T
11-Mar	16.8	15.66	16.23	2.2	4.3934E-08	10	50	40	RC/CaExt/ F/T
12-Mar	16.8	17.23	17.015	2.2	4.6059E-08	10	50	40	RC/CaExt/ F/T
13-Mar	17.33	16.7	17.015	2.2	4.6059E-08	10	50	40	RC/CaExt/ F/T
14-Mar	16.8	16.18	16.49	2.2	4.46378E-08	10	50	40	RC/CaExt/ F/T
15-Mar	16.8	16.18	16.49	2.2	4.46378E-08	10	50	40	RC/CaExt/ F/T
16-Mar	17.33	15.66	16.495	2.2	4.46514E-08	10	50	40	RC/CaExt/ F/T
1-Apr	15.75	15.66	15.705	2.2	4.25129E-08	10	50	40	RC/CaExt/ F/T
2-Apr	14.7	14.62	14.66	2.2	3.96841E-08	10	50	40	RC/CaExt/ F/T
3-Apr	28.35	28.19	28.27	2.2	7.65258E-08	10	50	40	RC/CaExt/ F/T
4-Apr	28.35	28.19	28.27	2.2	7.65258E-08	10	50	40	RC/CaExt/ F/T
5-Apr	28.35	27.67	28.01	2.2	7.5822E-08	10	50	40	RC/CaExt/ F/T
6-Apr	25.73	24.53	25.13	2.2	6.8026E-08	10	50	40	RC/CaExt/ F/T
8-Apr	24.15	23.49	23.82	2.2	6.44799E-08	10	50	40	RC/CaExt/ F/T
9-Apr	22.05	21.4	21.725	2.2	5.88088E-08	10	50	40	RC/CaExt/ F/T
10-Apr	22.58	21.92	22.25	2.2	6.02299E-08	10	50	40	RC/CaExt/ F/T
11-Apr	22.58	21.92	22.25	2.2	6.02299E-08	10	50	40	RC/CaExt/ F/T
12-Apr	22.05	21.92	21.985	2.2	5.95126E-08	10	50	40	RC/CaExt/ F/T
13-Apr	20.48	19.31	19.895	2.2	5.3855E-08	10	50	40	RC/CaExt/ F/T

Date	Total	Total	Avg	Grad	Hydraulic	Effec	Confin	Back	Moist
	Outflow	Inflow	Flow	(psi)	Conductivity	Stress	Press	Pres	Cond
14-Apr	21.53	22.45	21.99	2.2	5.95261E-08	10	50	40	RC/CaExt/ F/T
15-Apr	18.9	18.79	18.845	2.2	5.10127E-08	10	50	40	RC/CaExt/ F/T
16-Apr	17.33	16.7	17.015	2.2	4.6059E-08	10	50	40	RC/CaExt/ F/T
17-Apr	18.38	17.23	17.805	2.2	4.81975E-08	10	50	40	RC/CaExt/ F/T
27-Apr	17.85	16.7	17.275	2.2	4.67628E-08	10	50	40	RC/CaExt/ F/T
28-Apr	18.38	17.23	17.805	2.2	4.81975E-08	10	50	40	RC/CaExt/ F/T
29-Apr	48.3	46.98	47.64	2.2	1.2896E-07	10	50	40	RC/CaExt/ F/T
30-Apr	39.38	38.63	39.005	2.2	1.05585E-07	10	50	40	RC/CaExt/ F/T
1-May	32.55	31.32	31.935	2.2	8.64469E-08	10	50	40	RC/CaExt/ F/T
2-May	31.5	31.32	31.41	2.2	8.50257E-08	10	50	40	RC/CaExt/ F/T
3-May	31.5	31.32	31.41	2.2	8.50257E-08	10	50	40	RC/CaExt/ F/T
4-May	29.4	28.19	28.795	2.2	7.7947E-08	10	50	40	RC/CaExt/ F/T
5-May	26.78	26.1	26.44	2.2	7.15721E-08	10	50	40	RC/CaExt/ F/T
6-May	31.5	30.28	30.89	2.2	8.36181E-08	10	50	40	RC/CaExt/ F/T
7-May	27.3	26.62	26.96	2.2	7.29797E-08	10	50	40	RC/CaExt/ F/T
8-May	28.88	28.19	28.535	2.2	7.72432E-08	10	50	40	RC/CaExt/ F/T
9-May	26.25	25.06	25.655	2.2	6.94471E-08	10	50	40	RC/CaExt/ F/T
10-May	23.1	23.49	23.295	2.2	6.30587E-08	10	50	40	RC/CaExt/ F/T
11-May	27.3	26.1	26.7	2.2	7.22759E-08	10	50	40	RC/CaExt/ F/T
12-May	25.2	24.53	24.865	2.2	6.73086E-08	10	50	40	RC/CaExt/ F/T
13-May	23.63	23.49	23.56	2.2	6.3776E-08	10	50	40	RC/CaExt/ F/T
14-May	27.3	26.1	26.7	2.2	7.22759E-08	10	50	40	RC/CaExt/ F/T
15-May	26.25	26.1	26.175	2.2	7.08548E-08	10	50	40	RC/CaExt/ F/T
End	25.2	24.53	24.865	2.2	6.73086E-08	10	50	40	RC/CaExt/ F/T
	25.2	24.01	24.605	2.2	6.66048E-08	10	50	40	RC/CaExt/ F/T
Sample 70B									
18-Jan									
19-Jan									
20-Jan	2	3.06	2.53	2.2	2.71866E-08	10	50	40	RC/NaExt/120 day
21-Jan	1.5	2.55	2.025	2.2	2.17601E-08	10	50	40	RC/NaExt/120 day
22-Jan	2	2.55	2.275	2.2	2.44465E-08	10	50	40	RC/NaExt/120 day
23-Jan	1.5	2.04	1.77	2.2	1.90199E-08	10	50	40	RC/NaExt/120 day
24-Jan	1.5	2.04	1.77	2.2	1.90199E-08	10	50	40	RC/NaExt/120 day
25-Jan	1.5	1.53	1.515	2.2	1.62798E-08	10	50	40	RC/NaExt/120 day
26-Jan	1.5	2.04	1.77	2.2	1.90199E-08	10	50	40	RC/NaExt/120 day
27-Jan	1.5	1.53	1.515	2.2	1.62798E-08	10	50	40	RC/NaExt/120 day
28-Jan	1.3	1.6	1.45	2.2	1.55813E-08	10	50	40	RC/NaExt/120 day
29-Jan	1.3	1.5	1.4	2.2	1.5044E-08	10	50	40	RC/NaExt/120 day
30-Jan	1.3	1.6	1.45	2.2	1.55813E-08	10	50	40	RC/NaExt/120 day
31-Jan	1.3	1.4	1.35	2.2	1.45067E-08	10	50	40	RC/NaExt/120 day
1-Feb	1.2	1.3	1.25	2.2	1.34321E-08	10	50	40	RC/NaExt/120 day
2-Feb	1.2	1.2	1.2	2.2	1.28949E-08	10	50	40	RC/NaExt/120 day
3-Feb	1.1	1.2	1.15	2.2	1.23576E-08	10	50	40	RC/NaExt/120 day
4-Feb	0.9	1.2	1.05	2.2	1.1283E-08	10	50	40	RC/NaExt/120 day
5-Feb	0.9	1.3	1.1	2.2	1.18203E-08	10	50	40	RC/NaExt/120 day

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
6-Feb	0.9	0.9	0.9	2.2	9.67114E-09	10	50	40	RC/NaExt/120 day
7-Feb	0.9	0.9	0.9	2.2	9.67114E-09	10	50	40	RC/NaExt/120 day
8-Feb	0.8	0.9	0.85	2.2	9.13385E-09	10	50	40	RC/NaExt/120 day
9-Feb	0.7	0.9	0.8	2.2	8.59657E-09	10	50	40	RC/NaExt/120 day
10-Feb	0.7	0.9	0.8	2.2	8.59657E-09	10	50	40	RC/NaExt/120 day
11-Feb	0.6	0.9	0.75	2.2	8.05928E-09	10	50	40	RC/NaExt/120 day
12-Feb	1.1	1	1.05	2.2	1.1283E-08	10	50	40	RC/NaExt/120 day
13-Feb	1	1	1	2.2	1.07457E-08	10	50	40	RC/NaExt/120 day
14-Feb	0.8	1	0.9	2.2	9.67114E-09	10	50	40	RC/NaExt/120 day
15-Feb	0.6	0.9	0.75	2.2	8.05928E-09	10	50	40	RC/NaExt/120 day
16-Feb	1.9	2.2	2.05	4.3	1.12705E-08	10	50	40	RC/NaExt/120 day
17-Feb	1.8	2	1.9	4.3	1.04458E-08	10	50	40	RC/NaExt/120 day
18-Feb	1.7	1.8	1.75	4.3	9.62116E-09	10	50	40	RC/NaExt/120 day
19-Feb	1.7	1.7	1.7	4.3	9.34627E-09	10	50	40	RC/NaExt/120 day
20-Feb	1.8	1.8	1.8	4.3	9.89605E-09	10	50	40	RC/NaExt/120 day
21-Feb	1.8	1.8	1.8	4.3	9.89605E-09	10	50	40	RC/NaExt/120 day
22-Feb	1.9	1.8	1.85	4.3	1.01709E-08	10	50	40	RC/NaExt/120 day
23-Feb	1.6	1.8	1.7	4.3	9.34627E-09	10	50	40	RC/NaExt/120 day
24-Feb	1.6	1.6	1.6	4.3	8.79649E-09	10	50	40	RC/NaExt/120 day
25-Feb	1.8	1.7	1.75	4.3	9.62116E-09	10	50	40	RC/NaExt/120 day
26-Feb	1.6	1.7	1.65	4.3	9.07138E-09	10	50	40	RC/NaExt/120 day
27-Feb	1.5	1.5	1.5	4.3	8.24671E-09	10	50	40	RC/NaExt/120 day
28-Feb	1.5	1.5	1.5	4.3	8.24671E-09	10	50	40	RC/NaExt/120 day
1-Mar	1.5	1.5	1.5	4.3	8.24671E-09	10	50	40	RC/NaExt/120 day
2-Mar	1.5	1.5	1.5	4.3	8.24671E-09	10	50	40	RC/NaExt/120 day
3-Mar	1.7	1.5	1.6	4.3	8.79649E-09	10	50	40	RC/NaExt/120 day
4-Mar	1.4	1.5	1.45	4.3	7.97182E-09	10	50	40	RC/NaExt/120 day
5-Mar	1.5	1.5	1.5	4.3	8.24671E-09	10	50	40	RC/NaExt/120 day
6-Mar	1.4	1.7	1.55	4.3	8.5216E-09	10	50	40	RC/NaExt/120 day
7-Mar	1.4	1.6	1.5	4.3	8.24671E-09	10	50	40	RC/NaExt/120 day
8-Mar	1.3	1.5	1.4	4.3	7.69693E-09	10	50	40	RC/NaExt/120 day
9-Mar	1.6	1.2	1.4	4.3	7.69693E-09	10	50	40	RC/NaExt/120 day
10-Mar	1.4	1.3	1.35	4.3	7.42204E-09	10	50	40	RC/NaExt/120 day
11-Mar	1.4	1.3	1.35	4.3	7.42204E-09	10	50	40	RC/NaExt/120 day
12-Mar	2	2.7	2.35	6.5	8.54697E-09	10	50	40	RC/NaExt/120 day
13-Mar	2.3	2.5	2.4	6.5	8.72882E-09	10	50	40	RC/NaExt/120 day
14-Mar	2.3	2.3	2.3	6.5	8.36512E-09	10	50	40	RC/NaExt/120 day
15-Mar	2.3	2.3	2.3	6.5	8.36512E-09	10	50	40	RC/NaExt/120 day
16-Mar	2.2	2.1	2.15	6.5	7.81957E-09	10	50	40	RC/NaExt/120 day
17-Mar	2.4	2.2	2.3	6.5	8.36512E-09	10	50	40	RC/NaExt/120 day
18-Mar	2.1	2.3	2.2	6.5	8.00142E-09	10	50	40	RC/NaExt/120 day
19-Mar	2.2	2.1	2.15	6.5	7.81957E-09	10	50	40	RC/NaExt/120 day
20-Mar	2	2	2	6.5	7.27402E-09	10	50	40	RC/NaExt/120 day
21-Mar	2	2	2	6.5	7.27402E-09	10	50	40	RC/NaExt/120 day
22-Mar	1.9	1.9	1.9	6.5	6.91032E-09	10	50	40	RC/NaExt/120 day
23-Mar	2.4	2	2.2	6.5	8.00142E-09	10	50	40	RC/NaExt/120 day

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
24-Mar	2	2	2	6.5	7.27402E-09	10	50	40	RC/NaExt/120 day
25-Mar	1.9	1.9	1.9	6.5	6.91032E-09	10	50	40	RC/NaExt/120 day
26-Mar	1.8	1.8	1.8	6.5	6.54662E-09	10	50	40	RC/NaExt/120 day
27-Mar	1.9	1.8	1.85	6.5	6.72847E-09	10	50	40	RC/NaExt/120 day
28-Mar	1.8	1.8	1.8	6.5	6.54662E-09	10	50	40	RC/NaExt/120 day
29-Mar	1.8	1.8	1.8	6.5	6.54662E-09	10	50	40	RC/NaExt/120 day
30-Mar	1.7	1.6	1.65	6.5	6.00107E-09	10	50	40	RC/NaExt/120 day
31-Mar	1.6	1.6	1.6	6.5	5.81922E-09	10	50	40	RC/NaExt/120 day
4-Apr	1.6	1.6	1.6	6.5	5.81922E-09	10	50	40	RC/NaExt/120 day
5-Apr	1.9	1.6	1.75	6.5	6.36477E-09	10	50	40	RC/NaExt/120 day
6-Apr	2.2	4	3.1	6.5	1.12747E-08	10	50	40	RC/NaExt/120 day
7-Apr	2.1	3.8	2.95	6.5	1.07292E-08	10	50	40	RC/NaExt/120 day
8-Apr	1.8	1.6	1.7	6.5	6.18292E-09	10	50	40	RC/NaExt/120 day
9-Apr	2	1.7	1.85	6.5	6.72847E-09	10	50	40	RC/NaExt/120 day
10-Apr	1.8	1.7	1.75	6.5	6.36477E-09	10	50	40	RC/NaExt/120 day
11-Apr	1.6	1.7	1.65	6.5	6.00107E-09	10	50	40	RC/NaExt/120 day
12-Apr	1.5	1.6	1.55	6.5	5.63736E-09	10	50	40	RC/NaExt/120 day
13-Apr	1	1.5	1.25	6.5	4.54626E-09	10	50	40	RC/NaExt/120 day
14-Apr	2	2.04	2.02	6.5	7.34676E-09	10	50	40	RC/NaExt/120 day
15-Apr	2	1.5	1.75	6.5	6.36477E-09	10	50	40	RC/NaExt/120 day
16-Apr	2	1.5	1.75	6.5	6.36477E-09	10	50	40	RC/NaExt/120 day
17-Apr	1.5	1.5	1.5	6.5	5.45551E-09	10	50	40	RC/NaExt/120 day
18-Apr	2	1.5	1.75	6.5	6.36477E-09	10	50	40	RC/NaExt/120 day
19-Apr	2	2.04	2.02	6.5	7.34676E-09	10	50	40	RC/NaExt/120 day
20-Apr	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day
21-Apr	2	1.53	1.765	6.5	6.41932E-09	10	50	40	RC/NaExt/120 day
22-Apr	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day
23-Apr	2	1.02	1.51	6.5	5.49188E-09	10	50	40	RC/NaExt/120 day
24-Apr	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day
25-Apr	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day
26-Apr	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day
27-Apr	1.5	1.02	1.26	6.5	4.58263E-09	10	50	40	RC/NaExt/120 day
28-Apr	1	1.53	1.265	6.5	4.60082E-09	10	50	40	RC/NaExt/120 day
29-Apr	1.5	1.02	1.26	6.5	4.58263E-09	10	50	40	RC/NaExt/120 day
30-Apr	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day
1-May	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day
2-May	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day
3-May	1.5	1.02	1.26	6.5	4.58263E-09	10	50	40	RC/NaExt/120 day
4-May	1	1.02	1.01	6.5	3.67338E-09	10	50	40	RC/NaExt/120 day
5-May	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day
6-May	1.5	1.02	1.26	6.5	4.58263E-09	10	50	40	RC/NaExt/120 day
7-May	1.5	1.02	1.26	6.5	4.58263E-09	10	50	40	RC/NaExt/120 day
8-May	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day
9-May	1.5	1.02	1.26	6.5	4.58263E-09	10	50	40	RC/NaExt/120 day
10-May	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day
11-May	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
12-May	1.5	1.02	1.26	6.5	4.58263E-09	10	50	40	RC/NaExt/120 day
13-May	1.5	1.02	1.26	6.5	4.58263E-09	10	50	40	RC/NaExt/120 day
14-May	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day
15-May	1.5	1.02	1.26	6.5	4.58263E-09	10	50	40	RC/NaExt/120 day
16-May	1	1.02	1.01	6.5	3.67338E-09	10	50	40	RC/NaExt/120 day
17-May	1.5	1.53	1.515	6.5	5.51007E-09	10	50	40	RC/NaExt/120 day
18-May	1	1.53	1.265	6.5	4.60082E-09	10	50	40	RC/NaExt/120 day
End	1.5	1.02	1.26	6.5	4.58263E-09	10	50	40	RC/NaExt/120 day
	1.5	1.02	1.26	6.5	4.58263E-09	10	50	40	RC/NaExt/120 day
Sample 68A									
19-Jan									
20-Jan									
21-Jan	6.94	7.2	7.07	2.2	1.81725E-08	10	50	40	RC/Tap H_2O/ W/D
22-Jan	5.95	6.17	6.06	2.2	1.55764E-08	10	50	40	RC/Tap H_2O/ W/D
23-Jan	5.95	6.17	6.06	2.2	1.55764E-08	10	50	40	RC/Tap H_2O/ W/D
24-Jan	5.46	5.65	5.555	2.2	1.42784E-08	10	50	40	RC/Tap H_2O/ W/D
25-Jan	4.96	5.14	5.05	2.2	1.29804E-08	10	50	40	RC/Tap H_2O/ W/D
26-Jan	4.96	5.14	5.05	2.2	1.29804E-08	10	50	40	RC/Tap H_2O/ W/D
27-Jan	5.46	5.65	5.555	2.2	1.42784E-08	10	50	40	RC/Tap H_2O/ W/D
28-Jan	4.46	2.57	3.515	2.2	9.03485E-09	10	50	40	RC/Tap H_2O/ W/D
29-Jan	4.96	7.2	6.08	2.2	1.56278E-08	10	50	40	RC/Tap H_2O/ W/D
30-Jan	4.96	5.65	5.305	2.2	1.36358E-08	10	50	40	RC/Tap H_2O/ W/D
31-Jan	4.96	5.14	5.05	2.2	1.29804E-08	10	50	40	RC/Tap H_2O/ W/D
1-Feb	5.46	4.63	5.045	2.2	1.29675E-08	10	50	40	RC/Tap H_2O/ W/D
2-Feb	4.46	5.14	4.8	2.2	1.23378E-08	10	50	40	RC/Tap H_2O/ W/D
3-Feb	4.96	4.63	4.795	2.2	1.23249E-08	10	50	40	RC/Tap H_2O/ W/D
4-Feb	4.46	5.14	4.8	2.2	1.23378E-08	10	50	40	RC/Tap H_2O/ W/D
5-Feb	4.46	4.63	4.545	2.2	1.16823E-08	10	50	40	RC/Tap H_2O/ W/D
6-Feb	4.46	4.63	4.545	2.2	1.16823E-08	10	50	40	RC/Tap H_2O/ W/D
1-Mar	4.46	4.63	4.545	2.2	1.16823E-08	10	50	40	RC/Tap H_2O/ W/D
2-Mar	4.46	4.11	4.285	2.2	1.1014E-08	10	50	40	RC/Tap H_2O/ W/D
3-Mar	4.46	5.14	4.8	2.2	1.23378E-08	10	50	40	RC/Tap H_2O/ W/D
4-Mar	3.97	4.11	4.04	2.2	1.03843E-08	10	50	40	RC/Tap H_2O/ W/D
5-Mar	4	4.1	4.05	2.2	1.041E-08	10	50	40	RC/Tap H_2O/ W/D
6-Mar	3.8	3.8	3.8	2.2	9.7674E-09	10	50	40	RC/Tap H_2O/ W/D
7-Mar	3.5	3.5	3.5	2.2	8.99629E-09	10	50	40	RC/Tap H_2O/ W/D
8-Mar	3.2	3.3	3.25	2.2	8.3537E-09	10	50	40	RC/Tap H_2O/ W/D
9-Mar	3.1	3	3.05	2.2	7.83962E-09	10	50	40	RC/Tap H_2O/ W/D
10-Mar	4	3.8	3.9	2.2	1.00244E-08	10	50	40	RC/Tap H_2O/ W/D
11-Mar	3.8	3.7	3.75	2.2	9.63888E-09	10	50	40	RC/Tap H_2O/ W/D
12-Mar	3.4	3.5	3.45	2.2	8.86777E-09	10	50	40	RC/Tap H_2O/ W/D
13-Mar	3.7	3.8	3.75	2.2	9.63888E-09	10	50	40	RC/Tap H_2O/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
14-Mar	3.6	3.6	3.6	2.2	9.25333E-09	10	50	40	RC/Tap H_2O/ W/D
15-Mar	3.5	3.5	3.5	2.2	8.99629E-09	10	50	40	RC/Tap H_2O/ W/D
16-Mar	3.8	3.7	3.75	2.2	9.63888E-09	10	50	40	RC/Tap H_2O/ W/D
17-Mar	3.6	3.7	3.65	2.2	9.38185E-09	10	50	40	RC/Tap H_2O/ W/D
18-Mar	3.4	3.4	3.4	2.2	8.73925E-09	10	50	40	RC/Tap H_2O/ W/D
19-Mar	3.2	3.2	3.2	2.2	8.22518E-09	10	50	40	RC/Tap H_2O/ W/D
20-Mar	3.6	3.6	3.6	2.2	9.25333E-09	10	50	40	RC/Tap H_2O/ W/D
11-Apr	3.5	3.6	3.55	2.2	9.12481E-09	10	50	40	RC/Tap H_2O/ W/D
12-Apr	3.5	3.5	3.5	2.2	8.99629E-09	10	50	40	RC/Tap H_2O/ W/D
13-Apr	3.97	4.11	4.04	2.2	1.03843E-08	10	50	40	RC/Tap H_2O/ W/D
14-Apr	3.97	4.11	4.04	2.2	1.03843E-08	10	50	40	RC/Tap H_2O/ W/D
15-Apr	3.97	4.11	4.04	2.2	1.03843E-08	10	50	40	RC/Tap H_2O/ W/D
16-Apr	3.97	4.11	4.04	2.2	1.03843E-08	10	50	40	RC/Tap H_2O/ W/D
17-Apr	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
18-Apr	3.97	3.08	3.525	2.2	9.06055E-09	10	50	40	RC/Tap H_2O/ W/D
19-Apr	3.47	4.63	4.05	2.2	1.041E-08	10	50	40	RC/Tap H_2O/ W/D
20-Apr	3.47	3.08	3.275	2.2	8.41796E-09	10	50	40	RC/Tap H_2O/ W/D
21-Apr	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
22-Apr	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
23-Apr	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
24-Apr	3.97	4.11	4.04	2.2	1.03843E-08	10	50	40	RC/Tap H_2O/ W/D
25-Apr	3.97	3.6	3.785	2.2	9.72885E-09	10	50	40	RC/Tap H_2O/ W/D
26-Apr	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
27-Apr	3.47	4.11	3.79	2.2	9.7417E-09	10	50	40	RC/Tap H_2O/ W/D
28-Apr	3.97	3.6	3.785	2.2	9.72885E-09	10	50	40	RC/Tap H_2O/ W/D
29-Apr	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
30-Apr	3.47	3.08	3.275	2.2	8.41796E-09	10	50	40	RC/Tap H_2O/ W/D
1-May	3.97	3.6	3.785	2.2	9.72885E-09	10	50	40	RC/Tap H_2O/ W/D
2-May	3.47	4.11	3.79	2.2	9.7417E-09	10	50	40	RC/Tap H_2O/ W/D
23-May	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
24-May	3.47	3.08	3.275	2.2	8.41796E-09	10	50	40	RC/Tap H_2O/ W/D
25-May	3.47	4.11	3.79	2.2	9.7417E-09	10	50	40	RC/Tap H_2O/ W/D
26-May	3.97	4.11	4.04	2.2	1.03843E-08	10	50	40	RC/Tap H_2O/ W/D
27-May	3.97	3.6	3.785	2.2	9.72885E-09	10	50	40	RC/Tap H_2O/ W/D
28-May	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
29-May	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
30-May	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
31-May	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
1-Jun	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
2-Jun	2.98	3.08	3.03	2.2	7.78822E-09	10	50	40	RC/Tap H_2O/ W/D
3-Jun	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
4-Jun	2.98	3.6	3.29	2.2	8.45651E-09	10	50	40	RC/Tap H_2O/ W/D
5-Jun	3.47	3.08	3.275	2.2	8.41796E-09	10	50	40	RC/Tap H_2O/ W/D
6-Jun	2.98	3.08	3.03	2.2	7.78822E-09	10	50	40	RC/Tap H_2O/ W/D
7-Jun	2.98	3.08	3.03	2.2	7.78822E-09	10	50	40	RC/Tap H_2O/ W/D
8-Jun	3.97	2.57	3.27	2.2	8.40511E-09	10	50	40	RC/Tap H_2O/ W/D
9-Jun	3.47	4.11	3.79	2.2	9.7417E-09	10	50	40	RC/Tap H_2O/ W/D
10-Jun	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
11-Jun	2.98	3.08	3.03	2.2	7.78822E-09	10	50	40	RC/Tap H_2O/ W/D
12-Jun	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
End	3.47	3.6	3.535	2.2	9.08625E-09	10	50	40	RC/Tap H_2O/ W/D
	2.98	3.08	3.03	2.2	7.78822E-09	10	50	40	RC/Tap H_2O/ W/D
Sample 72A									
19-Jan									
20-Jan									
21-Jan	10.56	11.5	11.03	2.2	2.90332E-08	10	50	40	RC/NaExt/ W/D
22-Jan	7.39	7.5	7.445	2.2	1.95968E-08	10	50	40	RC/NaExt/ W/D
23-Jan	5.28	6.5	5.89	2.2	1.55037E-08	10	50	40	RC/NaExt/ W/D
24-Jan	4.75	4.5	4.625	2.2	1.21739E-08	10	50	40	RC/NaExt/ W/D
25-Jan	4.22	4	4.11	2.2	1.08184E-08	10	50	40	RC/NaExt/ W/D
26-Jan	3.7	4	3.85	2.2	1.0134E-08	10	50	40	RC/NaExt/ W/D
27-Jan	3.7	3	3.35	2.2	8.81789E-09	10	50	40	RC/NaExt/ W/D
28-Jan	3.17	3.5	3.335	2.2	8.7784E-09	10	50	40	RC/NaExt/ W/D
29-Jan	3.17	3.5	3.335	2.2	8.7784E-09	10	50	40	RC/NaExt/ W/D
30-Jan	3.7	3	3.35	2.2	8.81789E-09	10	50	40	RC/NaExt/ W/D
31-Jan	3.17	3.5	3.335	2.2	8.7784E-09	10	50	40	RC/NaExt/ W/D
1-Feb	3.17	3	3.085	2.2	8.12035E-09	10	50	40	RC/NaExt/ W/D
2-Feb	3.1	2.9	3	2.2	7.89662E-09	10	50	40	RC/NaExt/ W/D
3-Feb	3	2.9	2.95	2.2	7.76501E-09	10	50	40	RC/NaExt/ W/D
4-Feb	2.6	2.8	2.7	2.2	7.10695E-09	10	50	40	RC/NaExt/ W/D
5-Feb	2.9	3.1	3	2.2	7.89662E-09	10	50	40	RC/NaExt/ W/D
6-Feb	2.8	2.7	2.75	2.2	7.23856E-09	10	50	40	RC/NaExt/ W/D
7-Feb	2.6	2.6	2.6	2.2	6.84373E-09	10	50	40	RC/NaExt/ W/D
2-Mar	2.6	2.3	2.45	2.2	6.4489E-09	10	50	40	RC/NaExt/ W/D
3-Mar	2.2	2.5	2.35	2.2	6.18568E-09	10	50	40	RC/NaExt/ W/D
4-Mar	2.94	3.5	3.22	2.2	8.4757E-09	10	50	40	RC/NaExt/ W/D
5-Mar	3.2	3.4	3.3	2.2	8.68628E-09	10	50	40	RC/NaExt/ W/D
6-Mar	2.9	3.2	3.05	2.2	8.02823E-09	10	50	40	RC/NaExt/ W/D
7-Mar	2.6	2.9	2.75	2.2	7.23856E-09	10	50	40	RC/NaExt/ W/D
8-Mar	2.6	2.6	2.6	2.2	6.84373E-09	10	50	40	RC/NaExt/ W/D
9-Mar	2.4	2.2	2.3	2.2	6.05407E-09	10	50	40	RC/NaExt/ W/D
10-Mar	3.1	2.9	3	2.2	7.89662E-09	10	50	40	RC/NaExt/ W/D
11-Mar	3	2.7	2.85	2.2	7.50179E-09	10	50	40	RC/NaExt/ W/D
12-Mar	3	3.3	3.15	2.2	8.29145E-09	10	50	40	RC/NaExt/ W/D
13-Mar	3	2.9	2.95	2.2	7.76501E-09	10	50	40	RC/NaExt/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
14-Mar	2.9	2.9	2.9	2.2	7.6334E-09	10	50	40	RC/NaExt/ W/D
15-Mar	2.9	2.8	2.85	2.2	7.50179E-09	10	50	40	RC/NaExt/ W/D
16-Mar	3.1	2.8	2.95	2.2	7.76501E-09	10	50	40	RC/NaExt/ W/D
17-Mar	2.7	2.8	2.75	2.2	7.23856E-09	10	50	40	RC/NaExt/ W/D
18-Mar	2.5	2.8	2.65	2.2	6.97534E-09	10	50	40	RC/NaExt/ W/D
19-Mar	2.5	2.3	2.4	2.2	6.31729E-09	10	50	40	RC/NaExt/ W/D
20-Mar	2.8	2.7	2.75	2.2	7.23856E-09	10	50	40	RC/NaExt/ W/D
11-Apr	2.7	2.6	2.65	2.2	6.97534E-09	10	50	40	RC/NaExt/ W/D
12-Apr	2.5	2.6	2.55	2.2	6.71212E-09	10	50	40	RC/NaExt/ W/D
13-Apr	2.94	3.5	3.22	2.2	8.4757E-09	10	50	40	RC/NaExt/ W/D
14-Apr	3.43	3.5	3.465	2.2	9.12059E-09	10	50	40	RC/NaExt/ W/D
15-Apr	2.94	3	2.97	2.2	7.81765E-09	10	50	40	RC/NaExt/ W/D
16-Apr	2.45	3	2.725	2.2	7.17276E-09	10	50	40	RC/NaExt/ W/D
17-Apr	2.94	3.5	3.22	2.2	8.4757E-09	10	50	40	RC/NaExt/ W/D
18-Apr	2.45	3	2.725	2.2	7.17276E-09	10	50	40	RC/NaExt/ W/D
19-Apr	2.94	3	2.97	2.2	7.81765E-09	10	50	40	RC/NaExt/ W/D
20-Apr	2.94	3	2.97	2.2	7.81765E-09	10	50	40	RC/NaExt/ W/D
21-Apr	2.45	2.5	2.475	2.2	6.51471E-09	10	50	40	RC/NaExt/ W/D
22-Apr	2.45	3	2.725	2.2	7.17276E-09	10	50	40	RC/NaExt/ W/D
23-Apr	2.94	2.5	2.72	2.2	7.1596E-09	10	50	40	RC/NaExt/ W/D
24-Apr	2.94	3	2.97	2.2	7.81765E-09	10	50	40	RC/NaExt/ W/D
25-Apr	2.45	3	2.725	2.2	7.17276E-09	10	50	40	RC/NaExt/ W/D
26-Apr	2.45	3	2.725	2.2	7.17276E-09	10	50	40	RC/NaExt/ W/D
27-Apr	2.94	2.5	2.72	2.2	7.1596E-09	10	50	40	RC/NaExt/ W/D
28-Apr	2.45	3	2.725	2.2	7.17276E-09	10	50	40	RC/NaExt/ W/D
29-Apr	2.45	2.5	2.475	2.2	6.51471E-09	10	50	40	RC/NaExt/ W/D
30-Apr	2.45	3	2.725	2.2	7.17276E-09	10	50	40	RC/NaExt/ W/D
1-May	3.43	3.5	3.465	2.2	9.12059E-09	10	50	40	RC/NaExt/ W/D
2-May	2.94	3.5	3.22	2.2	8.4757E-09	10	50	40	RC/NaExt/ W/D
25-May	2.94	3.5	3.22	2.2	8.4757E-09	10	50	40	RC/NaExt/ W/D
26-May	2.94	3.5	3.22	2.2	8.4757E-09	10	50	40	RC/NaExt/ W/D
27-May	3.43	3.5	3.465	2.2	9.12059E-09	10	50	40	RC/NaExt/ W/D
28-May	3.43	4	3.715	2.2	9.77864E-09	10	50	40	RC/NaExt/ W/D
29-May	3.43	3.5	3.465	2.2	9.12059E-09	10	50	40	RC/NaExt/ W/D
30-May	3.43	3.5	3.465	2.2	9.12059E-09	10	50	40	RC/NaExt/ W/D
31-May	3.43	3.5	3.465	2.2	9.12059E-09	10	50	40	RC/NaExt/ W/D
1-Jun	2.94	3.5	3.22	2.2	8.4757E-09	10	50	40	RC/NaExt/ W/D
2-Jun	3.43	3.5	3.465	2.2	9.12059E-09	10	50	40	RC/NaExt/ W/D
3-Jun	2.94	3.5	3.22	2.2	8.4757E-09	10	50	40	RC/NaExt/ W/D
4-Jun	3.43	3.5	3.465	2.2	9.12059E-09	10	50	40	RC/NaExt/ W/D
5-Jun	3.92	4	3.96	2.2	1.04235E-08	10	50	40	RC/NaExt/ W/D
6-Jun	3.43	3.5	3.465	2.2	9.12059E-09	10	50	40	RC/NaExt/ W/D
7-Jun	3.43	3.5	3.465	2.2	9.12059E-09	10	50	40	RC/NaExt/ W/D
8-Jun	2.45	4	3.225	2.2	8.48886E-09	10	50	40	RC/NaExt/ W/D
9-Jun	3.43	3	3.215	2.2	8.46254E-09	10	50	40	RC/NaExt/ W/D
10-Jun	2.94	3	2.97	2.2	7.81765E-09	10	50	40	RC/NaExt/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
11-Jun	3.43	3.5	3.465	2.2	9.12059E-09	10	50	40	RC/NaExt/ W/D
12-Jun	2.94	3.5	3.22	2.2	8.4757E-09	10	50	40	RC/NaExt/ W/D
End	2.94	3	2.97	2.2	7.81765E-09	10	50	40	RC/NaExt/ W/D
	2.94	3	2.97	2.2	7.81765E-09	10	50	40	RC/NaExt/ W/D
Sample 79									
1-Mar									
2-Mar									
3-Mar	8.64	8.89	8.765	2.2	2.29499E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
4-Mar	8.1	7.84	7.97	2.2	2.08683E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
5-Mar	6.3	6.5	6.4	2.2	1.67575E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
6-Mar	5.94	5.75	5.845	2.2	1.53043E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
7-Mar	4.86	5.23	5.045	2.2	1.32096E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
8-Mar	4.32	4.71	4.515	2.2	1.18219E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
9-Mar	4.32	3.66	3.99	2.2	1.04473E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
10-Mar	4.3	4.1	4.2	2.2	1.09971E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
11-Mar	3.8	3.8	3.8	2.2	9.94977E-09	10	50	40	RC-$CaCl_2$/NaExt/ F/T
12-Mar	3.6	3.8	3.7	2.2	9.68794E-09	10	50	40	RC-$CaCl_2$/NaExt/ F/T
13-Mar	3.6	3.6	3.6	2.2	9.4261E-09	10	50	40	RC-$CaCl_2$/NaExt/ F/T
14-Mar	3.5	3.6	3.55	2.2	9.29518E-09	10	50	40	RC-$CaCl_2$/NaExt/ F/T
15-Mar	3.5	3.6	3.55	2.2	9.29518E-09	10	50	40	RC-$CaCl_2$/NaExt/ F/T
16-Mar	3.6	3.3	3.45	2.2	9.03335E-09	10	50	40	RC-$CaCl_2$/NaExt/ F/T
17-Mar	3.1	3.2	3.15	2.2	8.24784E-09	10	50	40	RC-$CaCl_2$/NaExt/ F/T
18-Mar	2.7	3.1	2.9	2.2	7.59325E-09	10	50	40	RC-$CaCl_2$/NaExt/ F/T
19-Mar	2.7	2.5	2.6	2.2	6.80774E-09	10	50	40	RC-$CaCl_2$/NaExt/ F/T
20-Mar	2.9	2.9	2.9	2.2	7.59325E-09	10	50	40	RC-$CaCl_2$/NaExt/ F/T
4-Apr	2.8	2.8	2.8	2.2	7.33141E-09	10	50	40	RC-$CaCl_2$/NaExt/ F/T
5-Apr	2.8	2.8	2.8	2.2	7.33141E-09	10	50	40	RC-$CaCl_2$/NaExt/ F/T
6-Apr	14.04	13.07	13.555	2.2	3.54919E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
7-Apr	13.5	13.07	13.285	2.2	3.47849E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
8-Apr	11.34	10.98	11.16	2.2	2.92209E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
9-Apr	9.72	9.41	9.565	2.2	2.50446E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
10-Apr	8.64	8.37	8.505	2.2	2.22692E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
11-Apr	8.1	7.85	7.975	2.2	2.08814E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
12-Apr	7.56	7.32	7.44	2.2	1.94806E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
14-Apr	9.18	7.85	8.515	2.2	2.22953E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
15-Apr	10.26	10.46	10.36	2.2	2.71262E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
16-Apr	8.64	8.89	8.765	2.2	2.29499E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
17-Apr	8.64	8.37	8.505	2.2	2.22692E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
18-Apr	8.1	7.85	7.975	2.2	2.08814E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
29-Apr	7.56	7.32	7.44	2.2	1.94806E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
30-Apr	8.64	7.85	8.245	2.2	2.15884E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
1-May	31.86	30.33	31.095	2.2	8.14179E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
2-May	30.78	30.33	30.555	2.2	8.0004E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
3-May	29.7	30.33	30.015	2.2	7.85901E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
4-May	28.08	26.67	27.375	2.2	7.16776E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
5-May	25.38	24.58	24.98	2.2	6.54067E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
6-May	28.62	27.72	28.17	2.2	7.37592E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
7-May	24.84	24.06	24.45	2.2	6.40189E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
8-May	27	26.15	26.575	2.2	6.9583E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
9-May	24.84	24.06	24.45	2.2	6.40189E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
10-May	23.76	23.01	23.385	2.2	6.12304E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
11-May	27	25.63	26.315	2.2	6.89022E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
12-May	24.84	24.06	24.45	2.2	6.40189E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
13-May	22.68	21.97	22.325	2.2	5.84549E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
14-May	25.92	24.58	25.25	2.2	6.61136E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
15-May	25.38	24.06	24.72	2.2	6.47259E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
26-May	24.3	23.54	23.92	2.2	6.26312E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
27-May	23.22	23.01	23.115	2.2	6.05234E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
28-May	54	52.3	53.15	2.2	1.39166E-07	10	50	40	RC-$CaCl_2$/NaExt/ F/T
29-May	38.88	38.18	38.53	2.2	1.00885E-07	10	50	40	RC-$CaCl_2$/NaExt/ F/T
30-May	34.5	36.61	35.555	2.2	9.30958E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
31-May	35.1	33.47	34.285	2.2	8.97705E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
3-Jun	41.58	39.75	40.665	2.2	1.06476E-07	10	50	40	RC-$CaCl_2$/NaExt/ F/T
4-Jun	34.56	33.47	34.015	2.2	8.90636E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
5-Jun	35.64	35.04	35.34	2.2	9.25329E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
6-Jun	34.56	33.47	34.015	2.2	8.90636E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
7-Jun	34.56	32.95	33.755	2.2	8.83828E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
8-Jun	38.34	37.66	38	2.2	9.94977E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
9-Jun	32.4	30.33	31.365	2.2	8.21249E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
10-Jun	29.16	28.24	28.7	2.2	7.5147E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
11-Jun	25.92	25.1	25.51	2.2	6.67944E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
12-Jun	35.64	35.04	35.34	2.2	9.25329E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
End	32.4	30.86	31.63	2.2	8.28188E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
	31.86	30.33	31.095	2.2	8.14179E-08	10	50	40	RC-$CaCl_2$/NaExt/ F/T
Sample 76									
25-Feb									
26-Feb									
27-Feb	1.5	1.9	1.7	2.2	1.82677E-08	10	50	40	RC/CaExt/120 days
28-Feb	1.4	1.7	1.55	2.2	1.66559E-08	10	50	40	RC/CaExt/120 days
1-Mar	1.4	1.6	1.5	2.2	1.61186E-08	10	50	40	RC/CaExt/120 days
2-Mar	1.4	1.6	1.5	2.2	1.61186E-08	10	50	40	RC/CaExt/120 days
3-Mar	1.6	1.6	1.6	2.2	1.71931E-08	10	50	40	RC/CaExt/120 days

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
4-Mar	1.3	1.5	1.4	2.2	1.5044E-08	10	50	40	RC/CaExt/120 days
5-Mar	1.3	1.4	1.35	2.2	1.45067E-08	10	50	40	RC/CaExt/120 days
6-Mar	1.2	1.5	1.35	2.2	1.45067E-08	10	50	40	RC/CaExt/120 days
7-Mar	1.2	1.4	1.3	2.2	1.39694E-08	10	50	40	RC/CaExt/120 days
8-Mar	1.1	1.2	1.15	2.2	1.23576E-08	10	50	40	RC/CaExt/120 days
9-Mar	1.2	1.1	1.15	2.2	1.23576E-08	10	50	40	RC/CaExt/120 days
10-Mar	1.5	1.3	1.4	2.2	1.5044E-08	10	50	40	RC/CaExt/120 days
11-Mar	1.3	1.4	1.35	2.2	1.45067E-08	10	50	40	RC/CaExt/120 days
12-Mar	1	1.4	1.2	2.2	1.28949E-08	10	50	40	RC/CaExt/120 days
13-Mar	1.2	1.3	1.25	2.2	1.34321E-08	10	50	40	RC/CaExt/120 days
14-Mar	1.2	1.3	1.25	2.2	1.34321E-08	10	50	40	RC/CaExt/120 days
15-Mar	1.2	1.2	1.2	2.2	1.28949E-08	10	50	40	RC/CaExt/120 days
16-Mar	1.5	1.3	1.4	2.2	1.5044E-08	10	50	40	RC/CaExt/120 days
17-Mar	1.2	1.3	1.25	2.2	1.34321E-08	10	50	40	RC/CaExt/120 days
18-Mar	1	1.4	1.2	2.2	1.28949E-08	10	50	40	RC/CaExt/120 days
19-Mar	1.3	1.1	1.2	2.2	1.28949E-08	10	50	40	RC/CaExt/120 days
20-Mar	2.2	2.5	2.35	4.3	1.29198E-08	10	50	40	RC/CaExt/120 days
21-Mar	2.2	2.5	2.35	4.3	1.29198E-08	10	50	40	RC/CaExt/120 days
22-Mar	2.1	2.5	2.3	4.3	1.2645E-08	10	50	40	RC/CaExt/120 days
23-Mar	2.1	2.2	2.15	4.3	1.18203E-08	10	50	40	RC/CaExt/120 days
24-Mar	2.4	2.3	2.35	4.3	1.29198E-08	10	50	40	RC/CaExt/120 days
25-Mar	2.2	2.4	2.3	4.3	1.2645E-08	10	50	40	RC/CaExt/120 days
26-Mar	2.2	2.2	2.2	4.3	1.20952E-08	10	50	40	RC/CaExt/120 days
27-Mar	2.2	2.3	2.25	4.3	1.23701E-08	10	50	40	RC/CaExt/120 days
28-Mar	2.1	2.2	2.15	4.3	1.18203E-08	10	50	40	RC/CaExt/120 days
29-Mar	2	2.2	2.1	4.3	1.15454E-08	10	50	40	RC/CaExt/120 days
30-Mar	2.1	2.1	2.1	4.3	1.15454E-08	10	50	40	RC/CaExt/120 days
31-Mar	2.2	2.2	2.2	4.3	1.20952E-08	10	50	40	RC/CaExt/120 days
1-Apr	2.1	2.3	2.2	4.3	1.20952E-08	10	50	40	RC/CaExt/120 days
2-Apr	2.1	2.2	2.15	4.3	1.18203E-08	10	50	40	RC/CaExt/120 days
3-Apr	2.2	2.2	2.2	4.3	1.20952E-08	10	50	40	RC/CaExt/120 days
4-Apr	2.1	2.1	2.1	4.3	1.15454E-08	10	50	40	RC/CaExt/120 days
5-Apr	2.1	2.1	2.1	4.3	1.15454E-08	10	50	40	RC/CaExt/120 days
6-Apr	2	2.2	2.1	4.3	1.15454E-08	10	50	40	RC/CaExt/120 days
7-Apr	1.9	2.1	2	4.3	1.09956E-08	10	50	40	RC/CaExt/120 days
8-Apr	2.3	2.2	2.25	4.3	1.23701E-08	10	50	40	RC/CaExt/120 days
9-Apr	2.1	2.1	2.1	4.3	1.15454E-08	10	50	40	RC/CaExt/120 days
10-Apr	3.2	3.6	3.4	6.5	1.23658E-08	10	50	40	RC/CaExt/120 days
11-Apr	3.1	3.6	3.35	6.5	1.2184E-08	10	50	40	RC/CaExt/120 days
12-Apr	3.1	3.6	3.35	6.5	1.2184E-08	10	50	40	RC/CaExt/120 days
13-Apr	2.4	3.4	2.9	6.5	1.05473E-08	10	50	40	RC/CaExt/120 days
14-Apr	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
15-Apr	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
16-Apr	3.41	4	3.705	6.5	1.34751E-08	10	50	40	RC/CaExt/120 days
17-Apr	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
18-Apr	2.92	3	2.96	6.5	1.07655E-08	10	50	40	RC/CaExt/120 days

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
19-Apr	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
20-Apr	2.92	3.5	3.21	6.5	1.16748E-08	10	50	40	RC/CaExt/120 days
21-Apr	3.41	3	3.205	6.5	1.16566E-08	10	50	40	RC/CaExt/120 days
22-Apr	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
23-Apr	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
24-Apr	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
25-Apr	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
26-Apr	2.92	3.5	3.21	6.5	1.16748E-08	10	50	40	RC/CaExt/120 days
27-Apr	3.41	3	3.205	6.5	1.16566E-08	10	50	40	RC/CaExt/120 days
28-Apr	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
29-Apr	2.92	3.5	3.21	6.5	1.16748E-08	10	50	40	RC/CaExt/120 days
30-Apr	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
1-May	3.41	4	3.705	6.5	1.34751E-08	10	50	40	RC/CaExt/120 days
2-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
3-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
4-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
5-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
6-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
7-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
8-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
9-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
10-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
11-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
12-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
13-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
14-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
15-May	3.9	4	3.95	6.5	1.43662E-08	10	50	40	RC/CaExt/120 days
16-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
17-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
18-May	2.92	3.5	3.21	6.5	1.16748E-08	10	50	40	RC/CaExt/120 days
19-May	3.9	3.5	3.7	6.5	1.34569E-08	10	50	40	RC/CaExt/120 days
20-May	2.92	3.5	3.21	6.5	1.16748E-08	10	50	40	RC/CaExt/120 days
21-May	3.41	4	3.705	6.5	1.34751E-08	10	50	40	RC/CaExt/120 days
22-May	3.9	4	3.95	6.5	1.43662E-08	10	50	40	RC/CaExt/120 days
23-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
24-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
25-May	2.92	3.5	3.21	6.5	1.16748E-08	10	50	40	RC/CaExt/120 days
26-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
27-May	3.9	3.5	3.7	6.5	1.34569E-08	10	50	40	RC/CaExt/120 days
28-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
29-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
30-May	2.92	3.5	3.21	6.5	1.16748E-08	10	50	40	RC/CaExt/120 days
31-May	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
1-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
2-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
3-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
4-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
5-Jun	3.9	4	3.95	6.5	1.43662E-08	10	50	40	RC/CaExt/120 days
6-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
7-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
8-Jun	3.41	4	3.705	6.5	1.34751E-08	10	50	40	RC/CaExt/120 days
9-Jun	3.41	3	3.205	6.5	1.16566E-08	10	50	40	RC/CaExt/120 days
10-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
11-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
12-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
13-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
14-Jun	2.92	3	2.96	6.5	1.07655E-08	10	50	40	RC/CaExt/120 days
15-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
16-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
17-Jun	2.92	3.5	3.21	6.5	1.16748E-08	10	50	40	RC/CaExt/120 days
18-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
19-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
20-Jun	3.41	3.5	3.455	6.5	1.25659E-08	10	50	40	RC/CaExt/120 days
End	3.41	3	3.205	6.5	1.16566E-08	10	50	40	RC/CaExt/120 days
	2.92	3.5	3.21	6.5	1.16748E-08	10	50	40	RC/CaExt/120 days
Sample 74A									
21-Jan									
22-Jan									
23-Jan	15	15.58	15.29	2.2	4.11355E-08	10	50	40	RC/CaExt/ W/D
24-Jan	14	15.1	14.55	2.2	3.91446E-08	10	50	40	RC/CaExt/ W/D
25-Jan	11	11.2	11.1	2.2	2.98629E-08	10	50	40	RC/CaExt/ W/D
26-Jan	11	10.23	10.615	2.2	2.85581E-08	10	50	40	RC/CaExt/ W/D
27-Jan	14	13.15	13.575	2.2	3.65215E-08	10	50	40	RC/CaExt/ W/D
28-Jan	12	11.69	11.845	2.2	3.18672E-08	10	50	40	RC/CaExt/ W/D
29-Jan	12	11.69	11.845	2.2	3.18672E-08	10	50	40	RC/CaExt/ W/D
30-Jan	10.5	10.71	10.605	2.2	2.85312E-08	10	50	40	RC/CaExt/ W/D
31-Jan	10	9.25	9.625	2.2	2.58946E-08	10	50	40	RC/CaExt/ W/D
1-Feb	9.5	9.25	9.375	2.2	2.5222E-08	10	50	40	RC/CaExt/ W/D
2-Feb	11.5	10.71	11.105	2.2	2.98763E-08	10	50	40	RC/CaExt/ W/D
3-Feb	10.5	10.71	10.605	2.2	2.85312E-08	10	50	40	RC/CaExt/ W/D
4-Feb	10	9.74	9.87	2.2	2.65538E-08	10	50	40	RC/CaExt/ W/D
5-Feb	9	9.25	9.125	2.2	2.45494E-08	10	50	40	RC/CaExt/ W/D
6-Feb	8.5	8.28	8.39	2.2	2.2572E-08	10	50	40	RC/CaExt/ W/D
7-Feb	8.5	7.79	8.145	2.2	2.19129E-08	10	50	40	RC/CaExt/ W/D
8-Feb	8	7.79	7.895	2.2	2.12403E-08	10	50	40	RC/CaExt/ W/D
9-Feb	9.5	9.25	9.375	2.2	2.5222E-08	10	50	40	RC/CaExt/ W/D
10-Feb	8.5	8.28	8.39	2.2	2.2572E-08	10	50	40	RC/CaExt/ W/D
11-Feb	8.5	8.28	8.39	2.2	2.2572E-08	10	50	40	RC/CaExt/ W/D
12-Feb	8	7.79	7.895	2.2	2.12403E-08	10	50	40	RC/CaExt/ W/D
13-Feb	9.5	9.25	9.375	2.2	2.5222E-08	10	50	40	RC/CaExt/ W/D
8-Mar	8.5	8.28	8.39	2.2	2.2572E-08	10	50	40	RC/CaExt/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
9-Mar	8.5	7.79	8.145	2.2	2.19129E-08	10	50	40	RC/CaExt/ W/D
10-Mar	6	5.84	5.92	2.2	1.59269E-08	10	50	40	RC/CaExt/ W/D
11-Mar	6	5.84	5.92	2.2	1.59269E-08	10	50	40	RC/CaExt/ W/D
12-Mar	5.5	5.36	5.43	2.2	1.46086E-08	10	50	40	RC/CaExt/ W/D
13-Mar	6	5.36	5.68	2.2	1.52812E-08	10	50	40	RC/CaExt/ W/D
14-Mar	5.5	5.36	5.43	2.2	1.46086E-08	10	50	40	RC/CaExt/ W/D
15-Mar	5.5	5.36	5.43	2.2	1.46086E-08	10	50	40	RC/CaExt/ W/D
16-Mar	6	5.36	5.68	2.2	1.52812E-08	10	50	40	RC/CaExt/ W/D
17-Mar	6	5.84	5.92	2.2	1.59269E-08	10	50	40	RC/CaExt/ W/D
18-Mar	5	5.36	5.18	2.2	1.3936E-08	10	50	40	RC/CaExt/ W/D
19-Mar	5.5	5.36	5.43	2.2	1.46086E-08	10	50	40	RC/CaExt/ W/D
20-Mar	5.5	4.87	5.185	2.2	1.39495E-08	10	50	40	RC/CaExt/ W/D
21-Mar	5	4.87	4.935	2.2	1.32769E-08	10	50	40	RC/CaExt/ W/D
22-Mar	5	4.87	4.935	2.2	1.32769E-08	10	50	40	RC/CaExt/ W/D
23-Mar	4.5	4.87	4.685	2.2	1.26043E-08	10	50	40	RC/CaExt/ W/D
24-Mar	5	4.38	4.69	2.2	1.26177E-08	10	50	40	RC/CaExt/ W/D
25-Mar	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
26-Mar	4.5	4.87	4.685	2.2	1.26043E-08	10	50	40	RC/CaExt/ W/D
27-Mar	5	4.87	4.935	2.2	1.32769E-08	10	50	40	RC/CaExt/ W/D
28-Mar	5	4.87	4.935	2.2	1.32769E-08	10	50	40	RC/CaExt/ W/D
29-Mar	5	4.87	4.935	2.2	1.32769E-08	10	50	40	RC/CaExt/ W/D
30-Mar	5	4.38	4.69	2.2	1.26177E-08	10	50	40	RC/CaExt/ W/D
31-Mar	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
27-Apr	4.5	4.87	4.685	2.2	1.26043E-08	10	50	40	RC/CaExt/ W/D
28-Apr	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
29-Apr	5.5	4.87	5.185	2.2	1.39495E-08	10	50	40	RC/CaExt/ W/D
30-Apr	4.5	4.87	4.685	2.2	1.26043E-08	10	50	40	RC/CaExt/ W/D
1-May	5	4.87	4.935	2.2	1.32769E-08	10	50	40	RC/CaExt/ W/D
2-May	4.5	4.87	4.685	2.2	1.26043E-08	10	50	40	RC/CaExt/ W/D
3-May	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
4-May	4	3.9	3.95	2.2	1.06269E-08	10	50	40	RC/CaExt/ W/D
5-May	4.5	3.9	4.2	2.2	1.12995E-08	10	50	40	RC/CaExt/ W/D
6-May	4	3.9	3.95	2.2	1.06269E-08	10	50	40	RC/CaExt/ W/D
7-May	4	3.9	3.95	2.2	1.06269E-08	10	50	40	RC/CaExt/ W/D
8-May	5	4.38	4.69	2.2	1.26177E-08	10	50	40	RC/CaExt/ W/D
9-May	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
10-May	4	4.38	4.19	2.2	1.12726E-08	10	50	40	RC/CaExt/ W/D
11-May	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
12-May	4	3.9	3.95	2.2	1.06269E-08	10	50	40	RC/CaExt/ W/D
13-May	4	3.9	3.95	2.2	1.06269E-08	10	50	40	RC/CaExt/ W/D
14-May	4.5	3.9	4.2	2.2	1.12995E-08	10	50	40	RC/CaExt/ W/D
15-May	5	4.38	4.69	2.2	1.26177E-08	10	50	40	RC/CaExt/ W/D
6-Jun	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
7-Jun	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
8-Jun	5	5.36	5.18	2.2	1.3936E-08	10	50	40	RC/CaExt/ W/D
9-Jun	5	4.38	4.69	2.2	1.26177E-08	10	50	40	RC/CaExt/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
10-Jun	4.5	4.87	4.685	2.2	1.26043E-08	10	50	40	RC/CaExt/ W/D
11-Jun	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
12-Jun	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
13-Jun	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
14-Jun	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
15-Jun	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
16-Jun	4	3.9	3.95	2.2	1.06269E-08	10	50	40	RC/CaExt/ W/D
17-Jun	4	3.9	3.95	2.2	1.06269E-08	10	50	40	RC/CaExt/ W/D
18-Jun	4	4.38	4.19	2.2	1.12726E-08	10	50	40	RC/CaExt/ W/D
19-Jun	5	4.87	4.935	2.2	1.32769E-08	10	50	40	RC/CaExt/ W/D
20-Jun	5	4.87	4.935	2.2	1.32769E-08	10	50	40	RC/CaExt/ W/D
21-Jun	4.5	4.38	4.44	2.2	1.19452E-08	10	50	40	RC/CaExt/ W/D
22-Jun	4.3	4.9	4.6	2.2	1.23756E-08	10	50	40	RC/CaExt/ W/D
23-Jun	4.2	3.6	3.9	2.2	1.04924E-08	10	50	40	RC/CaExt/ W/D
24-Jun	4.6	4.5	4.55	2.2	1.22411E-08	10	50	40	RC/CaExt/ W/D
25-Jun	4	4.3	4.15	2.2	1.1165E-08	10	50	40	RC/CaExt/ W/D
26-Jun	4	3.9	3.95	2.2	1.06269E-08	10	50	40	RC/CaExt/ W/D
End	4	3.9	3.95	2.2	1.06269E-08	10	50	40	RC/CaExt/ W/D
	4	3.9	3.95	2.2	1.06269E-08	10	50	40	RC/CaExt/ W/D
Sample 80									
23-Mar									
24-Mar									
25-Mar	5.39	6	5.695	2.2	1.44648E-08	10	50	40	RC/CaExt/ F/T
26-Mar	5.39	5.5	5.445	2.2	1.38298E-08	10	50	40	RC/CaExt/ F/T
27-Mar	5.39	5.5	5.445	2.2	1.38298E-08	10	50	40	RC/CaExt/ F/T
28-Mar	4.9	5	4.95	2.2	1.25726E-08	10	50	40	RC/CaExt/ F/T
29-Mar	4.9	5	4.95	2.2	1.25726E-08	10	50	40	RC/CaExt/ F/T
30-Mar	4.9	4.5	4.7	2.2	1.19376E-08	10	50	40	RC/CaExt/ F/T
31-Mar	5.88	5	5.44	2.2	1.38171E-08	10	50	40	RC/CaExt/ F/T
1-Apr	4.9	5.5	5.2	2.2	1.32075E-08	10	50	40	RC/CaExt/ F/T
2-Apr	5.39	5.5	5.445	2.2	1.38298E-08	10	50	40	RC/CaExt/ F/T
3-Apr	4.9	5	4.95	2.2	1.25726E-08	10	50	40	RC/CaExt/ F/T
4-Apr	4.9	5	4.95	2.2	1.25726E-08	10	50	40	RC/CaExt/ F/T
5-Apr	4.9	4.5	4.7	2.2	1.19376E-08	10	50	40	RC/CaExt/ F/T
6-Apr	4.9	5	4.95	2.2	1.25726E-08	10	50	40	RC/CaExt/ F/T
21-Apr	4.41	4.5	4.455	2.2	1.13153E-08	10	50	40	RC/CaExt/ F/T
22-Apr	4.41	4.5	4.455	2.2	1.13153E-08	10	50	40	RC/CaExt/ F/T
23-Apr	29.89	30	29.945	2.2	7.60577E-08	10	50	40	RC/CaExt/ F/T
24-Apr	26.46	26.5	26.48	2.2	6.72569E-08	10	50	40	RC/CaExt/ F/T
25-Apr	25.48	26	25.74	2.2	6.53773E-08	10	50	40	RC/CaExt/ F/T
29-Apr	24.99	25	24.995	2.2	6.34851E-08	10	50	40	RC/CaExt/ F/T
30-Apr	26.46	26.5	26.48	2.2	6.72569E-08	10	50	40	RC/CaExt/ F/T
1-May	24.5	24.5	24.5	2.2	6.22278E-08	10	50	40	RC/CaExt/ F/T
2-May	23.52	24	23.76	2.2	6.03483E-08	10	50	40	RC/CaExt/ F/T
3-May	23.52	23.5	23.51	2.2	5.97133E-08	10	50	40	RC/CaExt/ F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
4-May	24.01	23.5	23.755	2.2	6.03356E-08	10	50	40	RC/CaExt/ F/T
6-May	23.03	25	24.015	2.2	6.0996E-08	10	50	40	RC/CaExt/ F/T
7-May	22.05	21.5	21.775	2.2	5.53066E-08	10	50	40	RC/CaExt/ F/T
8-May	22.05	22.5	22.275	2.2	5.65765E-08	10	50	40	RC/CaExt/ F/T
18-May	20.58	21	20.79	2.2	5.28048E-08	10	50	40	RC/CaExt/ F/T
19-May	19.6	19.5	19.55	2.2	4.96553E-08	10	50	40	RC/CaExt/ F/T
20-May	32.83	33	32.915	2.2	8.36012E-08	10	50	40	RC/CaExt/ F/T
21-May	27.93	28	27.965	2.2	7.10286E-08	10	50	40	RC/CaExt/ F/T
22-May	27.44	27	27.22	2.2	6.91364E-08	10	50	40	RC/CaExt/ F/T
23-May	25.97	26.5	26.235	2.2	6.66346E-08	10	50	40	RC/CaExt/ F/T
24-May	26.46	26	26.23	2.2	6.66219E-08	10	50	40	RC/CaExt/ F/T
25-May	28.42	28	28.21	2.2	7.16509E-08	10	50	40	RC/CaExt/ F/T
26-May	24.99	25	24.995	2.2	6.34851E-08	10	50	40	RC/CaExt/ F/T
27-May	22.05	22	22.025	2.2	5.59416E-08	10	50	40	RC/CaExt/ F/T
28-May	26.95	26	26.475	2.2	6.72442E-08	10	50	40	RC/CaExt/ F/T
29-May	24.5	25.5	25	2.2	6.34978E-08	10	50	40	RC/CaExt/ F/T
30-May	23.03	23.5	23.265	2.2	5.90911E-08	10	50	40	RC/CaExt/ F/T
31-May	23.03	21.5	22.265	2.2	5.65511E-08	10	50	40	RC/CaExt/ F/T
1-Jun	18.62	18.5	18.56	2.2	4.71408E-08	10	50	40	RC/CaExt/ F/T
2-Jun	24.5	24.5	24.5	2.2	6.22278E-08	10	50	40	RC/CaExt/ F/T
3-Jun	22.05	22	22.025	2.2	5.59416E-08	10	50	40	RC/CaExt/ F/T
4-Jun	20.09	19.5	19.795	2.2	5.02776E-08	10	50	40	RC/CaExt/ F/T
5-Jun	22.05	22	22.025	2.2	5.59416E-08	10	50	40	RC/CaExt/ F/T
13-Jun	20.58	21	20.79	2.2	5.28048E-08	10	50	40	RC/CaExt/ F/T
14-Jun	20.58	20	20.29	2.2	5.15348E-08	10	50	40	RC/CaExt/ F/T
15-Jun	26.95	27.5	27.225	2.2	6.91491E-08	10	50	40	RC/CaExt/ F/T
16-Jun	24.01	24	24.005	2.2	6.09706E-08	10	50	40	RC/CaExt/ F/T
17-Jun	21.56	21	21.28	2.2	5.40493E-08	10	50	40	RC/CaExt/ F/T
18-Jun	18.13	18.5	18.315	2.2	4.65185E-08	10	50	40	RC/CaExt/ F/T
19-Jun	22.54	22.5	22.52	2.2	5.71988E-08	10	50	40	RC/CaExt/ F/T
20-Jun	20.58	20.5	20.54	2.2	5.21698E-08	10	50	40	RC/CaExt/ F/T
21-Jun	20.58	20.5	20.54	2.2	5.21698E-08	10	50	40	RC/CaExt/ F/T
23-Jun	17.64	17.5	17.57	2.2	4.46263E-08	10	50	40	RC/CaExt/ F/T
24-Jun	16.17	16	16.085	2.2	4.08545E-08	10	50	40	RC/CaExt/ F/T
25-Jun	22.05	22	22.025	2.2	5.59416E-08	10	50	40	RC/CaExt/ F/T
26-May	19.6	19.5	19.55	2.2	4.96553E-08	10	50	40	RC/CaExt/ F/T
28-Jun	17.15	17	17.075	2.2	4.3369E-08	10	50	40	RC/CaExt/ F/T
29-Jun	16.66	16.5	16.58	2.2	4.21117E-08	10	50	40	RC/CaExt/ F/T
30-Jun	19.11	18.5	18.805	2.2	4.7763E-08	10	50	40	RC/CaExt/ F/T
1-Jul	16.66	17	16.83	2.2	4.27467E-08	10	50	40	RC/CaExt/ F/T
2-Jul	16.17	16	16.085	2.2	4.08545E-08	10	50	40	RC/CaExt/ F/T
3-Jul	16.66	16.5	16.58	2.2	4.21117E-08	10	50	40	RC/CaExt/ F/T
4-Jul	16.66	16.5	16.58	2.2	4.21117E-08	10	50	40	RC/CaExt/ F/T
5-Jul	16.66	16.5	16.58	2.2	4.21117E-08	10	50	40	RC/CaExt/ F/T
End	15.68	15.5	15.59	2.2	3.95972E-08	10	50	40	RC/CaExt/ F/T
	15.19	15.5	15.345	2.2	3.89749E-08	10	50	40	RC/CaExt/ F/T

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
Sample 81									
28-Mar									
29-Mar									
30-Mar	44.14	42.84	43.49	2.2	4.67572E-07	10	50	40	RC/Na ash(2)
31-Mar	34.34	33.66	34	2.2	3.65542E-07	10	50	40	RC/Na ash(2)
4-Apr	25.07	26.01	25.54	2.2	2.74587E-07	10	50	40	RC/Na ash(2)
5-Apr	27.8	27.03	27.415	2.2	2.94745E-07	10	50	40	RC/Na ash(2)
6-Apr	25.07	26.52	25.795	2.2	2.77328E-07	10	50	40	RC/Na ash(2)
7-Apr	24.53	25.5	25.015	2.2	2.68942E-07	10	50	40	RC/Na ash(2)
8-Apr	29.98	28.56	29.27	2.2	3.14689E-07	10	50	40	RC/Na ash(2)
9-Apr	27.8	27.54	27.67	2.2	2.97487E-07	10	50	40	RC/Na ash(2)
10-Apr	17.44	17.34	17.39	2.2	1.86964E-07	10	50	40	RC/Na ash(2)
11-Apr	16.9	16.83	16.865	2.2	1.8132E-07	10	50	40	RC/Na ash(2)
12-Apr	16.9	16.83	16.865	2.2	1.8132E-07	10	50	40	RC/Na ash(2)
13-Apr	35.97	34.68	35.325	2.2	3.79788E-07	10	50	40	RC/Na ash(2)
14-Apr	47.96	47.43	47.695	2.2	5.12781E-07	10	50	40	RC/Na ash(2)
15-Apr	38.15	37.74	37.945	2.2	4.07956E-07	10	50	40	RC/Na ash(2)
16-Apr	43.06	43.35	43.205	2.2	4.64508E-07	10	50	40	RC/Na ash(2)
17-Apr	34.88	33.15	34.015	2.2	3.65704E-07	10	50	40	RC/Na ash(2)
18-Apr	33.25	33.15	33.2	2.2	3.56941E-07	10	50	40	RC/Na ash(2)
19-Apr	26.16	25.5	25.83	2.2	2.77705E-07	10	50	40	RC/Na ash(2)
20-Apr	22.89	22.95	22.92	2.2	2.46419E-07	10	50	40	RC/Na ash(2)
21-Apr	29.43	29.07	29.25	2.2	3.14474E-07	10	50	40	RC/Na ash(2)
25-Apr	46.87	45.9	46.385	2.2	4.98697E-07	10	50	40	RC/Na ash(2)
26-Apr	40.88	41.82	41.35	2.2	4.44564E-07	10	50	40	RC/Na ash(2)
27-Apr	45.24	43.35	44.295	2.2	4.76227E-07	10	50	40	RC/Na ash(2)
28-Apr	35.97	36.21	36.09	2.2	3.88013E-07	10	50	40	RC/Na ash(2)
5-May	57.77	56.61	57.19	2.2	6.14864E-07	10	50	40	RC/Na ash(2)
6-May	41.42	41.82	41.62	2.2	4.47467E-07	10	50	40	RC/Na ash(2)
7-May	56.14	55.59	55.865	2.2	6.00618E-07	10	50	40	RC/Na ash(2)
8-May	70.31	65.28	67.795	2.2	7.28881E-07	10	50	40	RC/Na ash(2)
9-May	62.68	62.62	62.65	2.2	6.73566E-07	10	50	40	RC/Na ash(2)
10-May	84.48	84.15	84.315	2.2	9.06491E-07	10	50	40	RC/Na ash(2)
11-May	62.68	63.24	62.96	2.2	6.76899E-07	10	50	40	RC/Na ash(2)
12-May	79.57	78.54	79.055	2.2	8.4994E-07	10	50	40	RC/Na ash(2)
13-May	84.48	84.66	84.57	2.2	9.09233E-07	10	50	40	RC/Na ash(2)
14-May	76.3	75.48	75.89	2.2	8.15912E-07	10	50	40	RC/Na ash(2)
15-May	136.8	140.6	138.7	2.2	1.4912E-06	10	50	40	RC/Na ash(2)
16-May	136.8	136.8	136.8	2.2	1.47077E-06	10	50	40	RC/Na ash(2)
17-May	133	136.8	134.9	2.2	1.45034E-06	10	50	40	RC/Na ash(2)
18-May	121.6	125.4	123.5	2.2	1.32778E-06	10	50	40	RC/Na ash(2)
19-May	98.8	95	96.9	2.2	1.0418E-06	10	50	40	RC/Na ash(2)
20-May	64.6	68.4	66.5	2.2	7.14958E-07	10	50	40	RC/Na ash(2)
21-May	53.2	57	55.1	2.2	5.92394E-07	10	50	40	RC/Na ash(2)
22-May	57	57	57	2.2	6.12821E-07	10	50	40	RC/Na ash(2)

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
23-May	53.2	57	55.1	2.2	5.92394E-07	10	50	40	RC/Na ash(2)
24-May	53.2	53.2	53.2	2.2	5.71966E-07	10	50	40	RC/Na ash(2)
25-May	45.6	49.4	47.5	2.2	5.10684E-07	10	50	40	RC/Na ash(2)
27-May	41.8	41.8	41.8	2.2	4.49402E-07	10	50	40	RC/Na ash(2)
28-May	41.8	41.8	41.8	2.2	4.49402E-07	10	50	40	RC/Na ash(2)
29-May	45.6	45.6	45.6	2.2	4.90257E-07	10	50	40	RC/Na ash(2)
30-May	41.8	45.6	43.7	2.2	4.6983E-07	10	50	40	RC/Na ash(2)
31-May	41.8	41.8	41.8	2.2	4.49402E-07	10	50	40	RC/Na ash(2)
1-Jun	19	19	19	2.2	2.04274E-07	10	50	40	RC/Na ash(2)
2-Jun	19	19	19	2.2	2.04274E-07	10	50	40	RC/Na ash(2)
3-Jun	15.2	19	17.1	2.2	1.83846E-07	10	50	40	RC/Na ash(2)
4-Jun	15.2	15.2	15.2	2.2	1.63419E-07	10	50	40	RC/Na ash(2)
5-Jun	38	34.2	36.1	2.2	3.8812E-07	10	50	40	RC/Na ash(2)
6-Jun	38	38	38	2.2	4.08547E-07	10	50	40	RC/Na ash(2)
7-Jun	38	38	38	2.2	4.08547E-07	10	50	40	RC/Na ash(2)
8-Jun	49.4	53.2	51.3	4.3	2.82183E-07	10	50	40	RC/Na ash(2)
9-Jun	41.8	45.6	43.7	4.3	2.40378E-07	10	50	40	RC/Na ash(2)
10-Jun	41.8	41.8	41.8	4.3	2.29927E-07	10	50	40	RC/Na ash(2)
11-Jun	38	34.2	36.1	4.3	1.98573E-07	10	50	40	RC/Na ash(2)
12-Jun	53.2	49.4	51.3	4.3	2.82183E-07	10	50	40	RC/Na ash(2)
13-Jun	49.4	49.4	49.4	4.3	2.71732E-07	10	50	40	RC/Na ash(2)
14-Jun	49.4	49.4	49.4	4.3	2.71732E-07	10	50	40	RC/Na ash(2)
15-Jun	64.6	60.8	62.7	4.3	3.4489E-07	10	50	40	RC/Na ash(2)
16-Jun	64.6	68.4	66.5	4.3	3.65792E-07	10	50	40	RC/Na ash(2)
17-Jun	53.2	57	55.1	4.3	3.03085E-07	10	50	40	RC/Na ash(2)
18-Jun	53.2	57	55.1	4.3	3.03085E-07	10	50	40	RC/Na ash(2)
19-Jun	53.2	53.2	53.2	4.3	2.92634E-07	10	50	40	RC/Na ash(2)
20-Jun	53.2	53.2	53.2	4.3	2.92634E-07	10	50	40	RC/Na ash(2)
21-Jun	49.4	49.4	49.4	4.3	2.71732E-07	10	50	40	RC/Na ash(2)
22-Jun	26.6	53.2	39.9	4.3	2.19475E-07	10	50	40	RC/Na ash(2)
23-Jun	30.4	45.6	38	4.3	2.09024E-07	10	50	40	RC/Na ash(2)
24-Jun	49.4	45.6	47.5	4.3	2.6128E-07	10	50	40	RC/Na ash(2)
25-Jun	45.6	49.4	47.5	4.3	2.6128E-07	10	50	40	RC/Na ash(2)
26-Jun	281.2	281.2	281.2	6.5	1.02325E-06	10	50	40	RC/Na ash(2)
27-Jun	262.2	254.6	258.4	6.5	9.40288E-07	10	50	40	RC/Na ash(2)
28-Jun	171	186.2	178.6	6.5	6.49905E-07	10	50	40	RC/Na ash(2)
29-Jun	281.2	277.4	279.3	6.5	1.01634E-06	10	50	40	RC/Na ash(2)
30-Jun	254.6	254.6	254.6	6.5	9.2646E-07	10	50	40	RC/Na ash(2)
1-Jul	262.2	262.2	262.2	6.5	9.54115E-07	10	50	40	RC/Na ash(2)
2-Jul	243.2	239.4	241.3	6.5	8.78063E-07	10	50	40	RC/Na ash(2)
3-Jul	243.2	243.2	243.2	6.5	8.84977E-07	10	50	40	RC/Na ash(2)
4-Jul	228	224.2	226.1	6.5	8.22752E-07	10	50	40	RC/Na ash(2)
5-Jul	216.6	224.2	220.4	6.5	8.0201E-07	10	50	40	RC/Na ash(2)
6-Jul	273.6	273.6	273.6	6.5	9.95599E-07	10	50	40	RC/Na ash(2)
7-Jul	250.8	254.6	252.7	6.5	9.19546E-07	10	50	40	RC/Na ash(2)
8-Jul	281.2	277.4	279.3	6.5	1.01634E-06	10	50	40	RC/Na ash(2)

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
9-Jul	258.4	262.2	260.3	6.5	9.47201E-07	10	50	40	RC/Na ash(2)
10-Jul	231.8	228	229.9	6.5	8.36579E-07	10	50	40	RC/Na ash(2)
11-Jul	224.2	224.2	224.2	6.5	8.15838E-07	10	50	40	RC/Na ash(2)
12-Jul	216.6	216.6	216.6	6.5	7.88182E-07	10	50	40	RC/Na ash(2)
13-Jul	212.8	212.8	212.8	6.5	7.74355E-07	10	50	40	RC/Na ash(2)
14-Jul	190	190	190	6.5	6.91388E-07	10	50	40	RC/Na ash(2)
15-Jul	197.6	201.4	199.5	6.5	7.25957E-07	10	50	40	RC/Na ash(2)
16-Jul	190	190	190	6.5	6.91388E-07	10	50	40	RC/Na ash(2)
17-Jul	171	171	171	6.5	6.22249E-07	10	50	40	RC/Na ash(2)
18-Jul	163.4	163.4	163.4	6.5	5.94594E-07	10	50	40	RC/Na ash(2)
19-Jul	152	152	152	6.5	5.5311E-07	10	50	40	RC/Na ash(2)
20-Jul	182.4	174.8	178.6	6.5	6.49905E-07	10	50	40	RC/Na ash(2)
21-Jul	182.4	178.6	180.5	6.5	6.56819E-07	10	50	40	RC/Na ash(2)
22-Jul	163.4	167.2	165.3	6.5	6.01508E-07	10	50	40	RC/Na ash(2)
23-Jul	174.8	174.8	174.8	6.5	6.36077E-07	10	50	40	RC/Na ash(2)
24-Jul	159.6	159.6	159.6	6.5	5.80766E-07	10	50	40	RC/Na ash(2)
	155.8	155.8	155.8	6.5	5.66938E-07	10	50	40	RC/Na ash(2)
	148.2	148.2	148.2	6.5	5.39283E-07	10	50	40	RC/Na ash(2)
Sample 77									
8-Mar									
9-Mar									
10-Mar	3.7	4	3.85	2.2	9.26699E-09	10	50	40	RC/NaExt/ W/D
11-Mar	3.2	3.3	3.25	2.2	7.82278E-09	10	50	40	RC/NaExt/ W/D
12-Mar	2.9	3.1	3	2.2	7.22103E-09	10	50	40	RC/NaExt/ W/D
13-Mar	2.9	3	2.95	2.2	7.10068E-09	10	50	40	RC/NaExt/ W/D
14-Mar	2.8	2.9	2.85	2.2	6.85998E-09	10	50	40	RC/NaExt/ W/D
15-Mar	2.9	2.8	2.85	2.2	6.85998E-09	10	50	40	RC/NaExt/ W/D
16-Mar	2.9	2.6	2.75	2.2	6.61928E-09	10	50	40	RC/NaExt/ W/D
17-Mar	2.5	2.6	2.55	2.2	6.13787E-09	10	50	40	RC/NaExt/ W/D
18-Mar	2.4	2.5	2.45	2.2	5.89717E-09	10	50	40	RC/NaExt/ W/D
19-Mar	2.2	2.1	2.15	2.2	5.17507E-09	10	50	40	RC/NaExt/ W/D
20-Mar	2.3	2.3	2.3	2.2	5.53612E-09	10	50	40	RC/NaExt/ W/D
11-Apr	2.2	2.2	2.2	2.2	5.29542E-09	10	50	40	RC/NaExt/ W/D
12-Apr	2.2	2.2	2.2	2.2	5.29542E-09	10	50	40	RC/NaExt/ W/D
13-Apr	2.11	2.11	2.11	2.2	5.07879E-09	10	50	40	RC/NaExt/ W/D
14-Apr	2.11	2.64	2.375	2.2	5.71665E-09	10	50	40	RC/NaExt/ W/D
15-Apr	2.11	2.11	2.11	2.2	5.07879E-09	10	50	40	RC/NaExt/ W/D
16-Apr	2.11	2.11	2.11	2.2	5.07879E-09	10	50	40	RC/NaExt/ W/D
17-Apr	2.11	2.11	2.11	2.2	5.07879E-09	10	50	40	RC/NaExt/ W/D
18-Apr	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
19-Apr	2.11	2.11	2.11	2.2	5.07879E-09	10	50	40	RC/NaExt/ W/D
20-Apr	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
21-Apr	2.11	2.11	2.11	2.2	5.07879E-09	10	50	40	RC/NaExt/ W/D
22-Apr	1.58	2.11	1.845	2.2	4.44093E-09	10	50	40	RC/NaExt/ W/D
23-Apr	2.11	1.58	1.845	2.2	4.44093E-09	10	50	40	RC/NaExt/ W/D
24-Apr	2.11	2.11	2.11	2.2	5.07879E-09	10	50	40	RC/NaExt/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
25-Apr	1.58	2.11	1.845	2.2	4.44093E-09	10	50	40	RC/NaExt/ W/D
26-Apr	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
27-Apr	2.11	1.58	1.845	2.2	4.44093E-09	10	50	40	RC/NaExt/ W/D
28-Apr	1.58	2.11	1.845	2.2	4.44093E-09	10	50	40	RC/NaExt/ W/D
29-Apr	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
30-Apr	2.11	2.11	2.11	2.2	5.07879E-09	10	50	40	RC/NaExt/ W/D
1-May	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
2-May	1.58	2.11	1.845	2.2	4.44093E-09	10	50	40	RC/NaExt/ W/D
3-May	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
4-May	2.11	2.11	2.11	2.2	5.07879E-09	10	50	40	RC/NaExt/ W/D
5-May	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
26-May	2.11	1.58	1.845	2.2	4.44093E-09	10	50	40	RC/NaExt/ W/D
27-May	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
28-May	2.11	2.11	2.11	2.2	5.07879E-09	10	50	40	RC/NaExt/ W/D
29-May	2.11	2.11	2.11	2.2	5.07879E-09	10	50	40	RC/NaExt/ W/D
30-May	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
31-May	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
1-Jun	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
2-Jun	1.58	2.11	1.845	2.2	4.44093E-09	10	50	40	RC/NaExt/ W/D
3-Jun	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
4-Jun	2.11	1.58	1.845	2.2	4.44093E-09	10	50	40	RC/NaExt/ W/D
5-Jun	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
6-Jun	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
7-Jun	1.58	1.06	1.32	2.2	3.17725E-09	10	50	40	RC/NaExt/ W/D
8-Jun	1.06	2.64	1.85	2.2	4.45297E-09	10	50	40	RC/NaExt/ W/D
9-Jun	2.11	1.06	1.585	2.2	3.81511E-09	10	50	40	RC/NaExt/ W/D
10-Jun	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
11-Jun	1.06	1.58	1.32	2.2	3.17725E-09	10	50	40	RC/NaExt/ W/D
12-Jun	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
13-Jun	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
14-Jun	1.58	1.06	1.32	2.2	3.17725E-09	10	50	40	RC/NaExt/ W/D
15-Jun	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
16-Jun	1.06	1.58	1.32	2.2	3.17725E-09	10	50	40	RC/NaExt/ W/D
13-Jul	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
14-Jul	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
15-Jul	1.58	2.11	1.845	2.2	4.44093E-09	10	50	40	RC/NaExt/ W/D
16-Jul	1.06	2.11	1.585	2.2	3.81511E-09	10	50	40	RC/NaExt/ W/D
17-Jul	2.11	1.58	1.845	2.2	4.44093E-09	10	50	40	RC/NaExt/ W/D
18-Jul	2.11	2.11	2.11	2.2	5.07879E-09	10	50	40	RC/NaExt/ W/D
19-Jul	1.58	1.58	1.58	2.2	3.80308E-09	10	50	40	RC/NaExt/ W/D
20-Jul	2.11	1.58	1.845	2.2	4.44093E-09	10	50	40	RC/NaExt/ W/D
21-Jul	1.5	1.8	1.65	2.2	3.97157E-09	10	50	40	RC/NaExt/ W/D
22-Jul	1.7	1.6	1.65	2.2	3.97157E-09	10	50	40	RC/NaExt/ W/D
23-Jul	1.6	1.6	1.6	2.2	3.85122E-09	10	50	40	RC/NaExt/ W/D
24-Jul	1.7	1.7	1.7	2.2	4.09192E-09	10	50	40	RC/NaExt/ W/D
25-Jul	1.7	1.7	1.7	2.2	4.09192E-09	10	50	40	RC/NaExt/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
23-Jun	8.72	8.16	8.44	2.2	9.44562E-08	10	50	40	RC/Ca ash/120 days
24-Jun	7.09	7.65	7.37	2.2	8.24813E-08	10	50	40	RC/Ca ash/120 days
25-Jun	7.09	7.65	7.37	2.2	8.24813E-08	10	50	40	RC/Ca ash/120 days
26-Jun	6	6.63	6.315	2.2	7.06742E-08	10	50	40	RC/Ca ash/120 days
27-Jun	6	6.12	6.06	2.2	6.78204E-08	10	50	40	RC/Ca ash/120 days
28-Jun	5.45	5.61	5.53	2.2	6.18889E-08	10	50	40	RC/Ca ash/120 days
29-Jun	4.91	5.1	5.005	2.2	5.60134E-08	10	50	40	RC/Ca ash/120 days
30-Jun	6	6.63	6.315	2.2	7.06742E-08	10	50	40	RC/Ca ash/120 days
1-Jul	5.45	5.1	5.275	2.2	5.90351E-08	10	50	40	RC/Ca ash/120 days
2-Jul	4.91	5.1	5.005	2.2	5.60134E-08	10	50	40	RC/Ca ash/120 days
3-Jul	4.91	5.1	5.005	2.2	5.60134E-08	10	50	40	RC/Ca ash/120 days
4-Jul	4.91	5.1	5.005	2.2	5.60134E-08	10	50	40	RC/Ca ash/120 days
5-Jul	4.91	4.59	4.75	2.2	5.31596E-08	10	50	40	RC/Ca ash/120 days
6-Jul	4.91	4.59	4.75	2.2	5.31596E-08	10	50	40	RC/Ca ash/120 days
7-Jul	4.36	4.59	4.475	2.2	5.00819E-08	10	50	40	RC/Ca ash/120 days
8-Jul	21.8	22.44	22.12	4.3	1.26656E-07	10	50	40	RC/Ca ash/120 days
9-Jul	21.8	21.93	21.865	4.3	1.25196E-07	10	50	40	RC/Ca ash/120 days
10-Jul	22.35	22.44	22.395	4.3	1.28231E-07	10	50	40	RC/Ca ash/120 days
11-Jul	22.35	21.93	22.14	4.3	1.26771E-07	10	50	40	RC/Ca ash/120 days
12-Jul	21.8	21.93	21.865	4.3	1.25196E-07	10	50	40	RC/Ca ash/120 days
13-Jul	23.98	23.97	23.975	4.3	1.37278E-07	10	50	40	RC/Ca ash/120 days
14-Jul	23.98	19.46	21.72	4.3	1.24366E-07	10	50	40	RC/Ca ash/120 days
15-Jul	20.71	21.42	21.065	4.3	1.20616E-07	10	50	40	RC/Ca ash/120 days
16-Jul	18.53	19.89	19.21	4.3	1.09994E-07	10	50	40	RC/Ca ash/120 days
17-Jul	16.89	17.85	17.37	4.3	9.94585E-08	10	50	40	RC/Ca ash/120 days
18-Jul	21.26	20.4	20.83	4.3	1.1927E-07	10	50	40	RC/Ca ash/120 days
20-Jul	19.08	19.38	19.23	4.3	1.10109E-07	10	50	40	RC/Ca ash/120 days
21-Jul	19.62	18.87	19.245	4.3	1.10195E-07	10	50	40	RC/Ca ash/120 days
22-Jul	20.17	19.89	20.03	4.3	1.14689E-07	10	50	40	RC/Ca ash/120 days
23-Jul	18.53	18.87	18.7	4.3	1.07074E-07	10	50	40	RC/Ca ash/120 days
24-Jul	18.53	18.36	18.445	4.3	1.05614E-07	10	50	40	RC/Ca ash/120 days
26-Jul	17.99	17.85	17.92	4.3	1.02608E-07	10	50	40	RC/Ca ash/120 days
27-Jul	17.99	17.85	17.92	4.3	1.02608E-07	10	50	40	RC/Ca ash/120 days
28-Jul	20.17	18.87	19.52	4.3	1.11769E-07	10	50	40	RC/Ca ash/120 days
29-Jul	19.08	19.38	19.23	4.3	1.10109E-07	10	50	40	RC/Ca ash/120 days
30-Jul	17.99	17.85	17.92	4.3	1.02608E-07	10	50	40	RC/Ca ash/120 days
31-Jul	16.9	18.87	17.885	4.3	1.02407E-07	10	50	40	RC/Ca ash/120 days
1-Aug	16.9	17.85	17.375	4.3	9.94871E-08	10	50	40	RC/Ca ash/120 days
2-Aug	16.9	17.85	17.375	4.3	9.94871E-08	10	50	40	RC/Ca ash/120 days
3-Aug	16.9	16.32	16.61	4.3	9.51068E-08	10	50	40	RC/Ca ash/120 days
17-Aug	17.44	16.83	17.135	4.3	9.81129E-08	10	50	40	RC/Ca ash/120 days
18-Aug	15.81	16.32	16.065	4.3	9.19862E-08	10	50	40	RC/Ca ash/120 days
19-Aug	45.78	45.9	45.84	6.5	1.73637E-07	10	50	40	RC/Ca ash/120 days
20-Aug	50.69	49.47	50.08	6.5	1.89697E-07	10	50	40	RC/Ca ash/120 days
22-Aug	46.33	45.9	46.115	6.5	1.74678E-07	10	50	40	RC/Ca ash/120 days
23-Aug	44.69	44.37	44.53	6.5	1.68675E-07	10	50	40	RC/Ca ash/120 days

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
24-Aug	49.05	46.41	47.73	6.5	1.80796E-07	10	50	40	RC/Ca ash/120 days
25-Aug	47.42	45.9	46.66	6.5	1.76743E-07	10	50	40	RC/Ca ash/120 days
26-Aug	44.69	44.88	44.785	6.5	1.69641E-07	10	50	40	RC/Ca ash/120 days
27-Aug	45.24	44.37	44.805	6.5	1.69716E-07	10	50	40	RC/Ca ash/120 days
28-Aug	43.06	42.84	42.95	6.5	1.6269E-07	10	50	40	RC/Ca ash/120 days
29-Aug	44.15	43.86	44.005	6.5	1.66686E-07	10	50	40	RC/Ca ash/120 days
31-Aug	42.51	41.82	42.165	6.5	1.59716E-07	10	50	40	RC/Ca ash/120 days
1-Sep	41.42	44.88	43.15	6.5	1.63447E-07	10	50	40	RC/Ca ash/120 days
2-Sep	39.79	39.78	39.785	6.5	1.50701E-07	10	50	40	RC/Ca ash/120 days
3-Sep	40.33	39.27	39.8	6.5	1.50758E-07	10	50	40	RC/Ca ash/120 days
4-Sep	37.06	35.7	36.38	6.5	1.37803E-07	10	50	40	RC/Ca ash/120 days
5-Sep	38.15	37.74	37.945	6.5	1.43731E-07	10	50	40	RC/Ca ash/120 days
6-Sep	34.34	34.68	34.51	6.5	1.3072E-07	10	50	40	RC/Ca ash/120 days
7-Sep	35.43	35.19	35.31	6.5	1.3375E-07	10	50	40	RC/Ca ash/120 days
8-Sep	34.34	33.66	34	6.5	1.28788E-07	10	50	40	RC/Ca ash/120 days
9-Sep	30.52	30.6	30.56	6.5	1.15758E-07	10	50	40	RC/Ca ash/120 days
10-Sep	32.16	30.6	31.38	6.5	1.18864E-07	10	50	40	RC/Ca ash/120 days
11-Sep	29.98	30.6	30.29	6.5	1.14735E-07	10	50	40	RC/Ca ash/120 days
12-Sep	28.34	28.05	28.195	6.5	1.068E-07	10	50	40	RC/Ca ash/120 days
13-Sep	30.52	29.07	29.795	6.5	1.1286E-07	10	50	40	RC/Ca ash/120 days
14-Sep	27.8	27.54	27.67	6.5	1.04811E-07	10	50	40	RC/Ca ash/120 days
15-Sep	29.43	28.56	28.995	6.5	1.0983E-07	10	50	40	RC/Ca ash/120 days
16-Sep	27.25	27.03	27.14	6.5	1.02803E-07	10	50	40	RC/Ca ash/120 days
17-Sep	29.43	28.05	28.74	6.5	1.08864E-07	10	50	40	RC/Ca ash/120 days
18-Sep	26.71	25.5	26.105	6.5	9.88828E-08	10	50	40	RC/Ca ash/120 days
19-Sep	24.53	25	24.765	6.5	9.3807E-08	10	50	40	RC/Ca ash/120 days
20-Sep	27.25	25.5	26.375	6.5	9.99055E-08	10	50	40	RC/Ca ash/120 days
21-Sep	25.07	25.5	25.285	6.5	9.57767E-08	10	50	40	RC/Ca ash/120 days
22-Sep	26.71	26.01	26.36	6.5	9.98487E-08	10	50	40	RC/Ca ash/120 days
23-Sep	22.89	22.44	22.665	6.5	8.58525E-08	10	50	40	RC/Ca ash/120 days
24-Sep	23.98	23.46	23.72	6.5	8.98487E-08	10	50	40	RC/Ca ash/120 days
25-Sep	23.4	22.44	22.92	6.5	8.68184E-08	10	50	40	RC/Ca ash/120 days
26-Sep	22.35	21.93	22.14	6.5	8.38638E-08	10	50	40	RC/Ca ash/120 days
27-Sep	21.8	20.91	21.355	6.5	8.08903E-08	10	50	40	RC/Ca ash/120 days
28-Sep	21.8	21.42	21.61	6.5	8.18563E-08	10	50	40	RC/Ca ash/120 days
29-Sep	21.8	20.91	21.355	6.5	8.08903E-08	10	50	40	RC/Ca ash/120 days
30-Sep	20.71	19.89	20.3	6.5	7.68941E-08	10	50	40	RC/Ca ash/120 days
1-Oct	19.08	19.38	19.23	6.5	7.28411E-08	10	50	40	RC/Ca ash/120 days
2-Oct	20.17	19.38	19.775	6.5	7.49055E-08	10	50	40	RC/Ca ash/120 days
3-Oct	17.99	18.36	18.175	6.5	6.88449E-08	10	50	40	RC/Ca ash/120 days
4-Oct	17.99	17.34	17.665	6.5	6.6913E-08	10	50	40	RC/Ca ash/120 days
5-Oct	18.53	17.34	17.935	6.5	6.79358E-08	10	50	40	RC/Ca ash/120 days
End	17.44	17.34	17.39	6.5	6.58714E-08	10	50	40	RC/Ca ash/120 days
	16.35	16.32	16.335	6.5	6.18751E-08	10	50	40	RC/Ca ash/120 days
Sample 84									

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
3-Jun									
4-Jun									
5-Jun	7	9.18	8.09	2.2	9.15844E-08	10	50	40	RC/Ca ash/ W/D
6-Jun	7	9.18	8.09	2.2	9.15844E-08	10	50	40	RC/Ca ash/ W/D
7-Jun	7	8.67	7.835	2.2	8.86977E-08	10	50	40	RC/Ca ash/ W/D
8-Jun	5.5	7.14	6.32	2.2	7.15468E-08	10	50	40	RC/Ca ash/ W/D
9-Jun	5.5	6.12	5.81	2.2	6.57733E-08	10	50	40	RC/Ca ash/ W/D
10-Jun	5	6.12	5.56	2.2	6.29431E-08	10	50	40	RC/Ca ash/ W/D
11-Jun	5	6.12	5.56	2.2	6.29431E-08	10	50	40	RC/Ca ash/ W/D
12-Jun	5.5	6.12	5.81	2.2	6.57733E-08	10	50	40	RC/Ca ash/ W/D
13-Jun	5.5	5.61	5.555	2.2	6.28865E-08	10	50	40	RC/Ca ash/ W/D
14-Jun	5	5.61	5.305	2.2	6.00563E-08	10	50	40	RC/Ca ash/ W/D
15-Jun	5	5.61	5.305	2.2	6.00563E-08	10	50	40	RC/Ca ash/ W/D
16-Jun	5	5.1	5.05	2.2	5.71695E-08	10	50	40	RC/Ca ash/ W/D
17-Jun	4.5	5.1	4.8	2.2	5.43393E-08	10	50	40	RC/Ca ash/ W/D
18-Jun	4.5	5.1	4.8	2.2	5.43393E-08	10	50	40	RC/Ca ash/ W/D
19-Jun	4	4.59	4.295	2.2	4.86224E-08	10	50	40	RC/Ca ash/ W/D
20-Jun	3.5	4.59	4.045	2.2	4.57922E-08	10	50	40	RC/Ca ash/ W/D
21-Jun	3.5	4.08	3.79	2.2	4.29054E-08	10	50	40	RC/Ca ash/ W/D
22-Jun	3.5	3.8	3.65	2.2	4.13205E-08	10	50	40	RC/Ca ash/ W/D
23-Jun	3.5	3.8	3.65	2.2	4.13205E-08	10	50	40	RC/Ca ash/ W/D
21-Jul	3.8	4.6	4.2	2.2	4.75469E-08	10	50	40	RC/Ca ash/ W/D
22-Jul	3.3	4.2	3.75	2.2	4.24526E-08	10	50	40	RC/Ca ash/ W/D
23-Jul	3.5	5.1	4.3	2.2	4.8679E-08	10	50	40	RC/Ca ash/ W/D
24-Jul	3	4.08	3.54	2.2	4.00753E-08	10	50	40	RC/Ca ash/ W/D
25-Jul	3	3.57	3.285	2.2	3.71885E-08	10	50	40	RC/Ca ash/ W/D
26-Jul	3	3.57	3.285	2.2	3.71885E-08	10	50	40	RC/Ca ash/ W/D
27-Jul	3	3.06	3.03	2.2	3.43017E-08	10	50	40	RC/Ca ash/ W/D
28-Jul	3	3.06	3.03	2.2	3.43017E-08	10	50	40	RC/Ca ash/ W/D
29-Jul	3	3.57	3.285	2.2	3.71885E-08	10	50	40	RC/Ca ash/ W/D
30-Jul	3	3.57	3.285	2.2	3.71885E-08	10	50	40	RC/Ca ash/ W/D
31-Jul	3	4.08	3.54	2.2	4.00753E-08	10	50	40	RC/Ca ash/ W/D
1-Aug	3	3.57	3.285	2.2	3.71885E-08	10	50	40	RC/Ca ash/ W/D
2-Aug	3	3.57	3.285	2.2	3.71885E-08	10	50	40	RC/Ca ash/ W/D
3-Aug	3	2.55	2.775	2.2	3.14149E-08	10	50	40	RC/Ca ash/ W/D
4-Aug	2.5	3.06	2.78	2.2	3.14715E-08	10	50	40	RC/Ca ash/ W/D
5-Aug	3	3.06	3.03	2.2	3.43017E-08	10	50	40	RC/Ca ash/ W/D
6-Aug	2.5	3.06	2.78	2.2	3.14715E-08	10	50	40	RC/Ca ash/ W/D
7-Aug	2.5	2.55	2.525	2.2	2.85848E-08	10	50	40	RC/Ca ash/ W/D
8-Aug	2.5	3.06	2.78	2.2	3.14715E-08	10	50	40	RC/Ca ash/ W/D
9-Aug	2.5	2.55	2.525	2.2	2.85848E-08	10	50	40	RC/Ca ash/ W/D
10-Aug	2.5	3.57	3.035	2.2	3.43583E-08	10	50	40	RC/Ca ash/ W/D
11-Aug	2.5	3.06	2.78	2.2	3.14715E-08	10	50	40	RC/Ca ash/ W/D
12-Aug	2.5	3.06	2.78	2.2	3.14715E-08	10	50	40	RC/Ca ash/ W/D
13-Aug	2.5	2.55	2.525	2.2	2.85848E-08	10	50	40	RC/Ca ash/ W/D
14-Aug	2.5	2.55	2.525	2.2	2.85848E-08	10	50	40	RC/Ca ash/ W/D

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
13-Sep	2	3.06	2.53	2.2	2.86414E-08	10	50	40	RC/Ca ash/ W/D
14-Sep	2	2.55	2.275	2.2	2.57546E-08	10	50	40	RC/Ca ash/ W/D
15-Sep	2	2.04	2.02	2.2	2.28678E-08	10	50	40	RC/Ca ash/ W/D
16-Sep	1.7	1.8	1.75	2.2	1.98112E-08	10	50	40	RC/Ca ash/ W/D
17-Sep	1.5	1.8	1.65	2.2	1.86792E-08	10	50	40	RC/Ca ash/ W/D
18-Sep	1.5	1.6	1.55	2.2	1.75471E-08	10	50	40	RC/Ca ash/ W/D
19-Sep	1.5	1.7	1.6	2.2	1.81131E-08	10	50	40	RC/Ca ash/ W/D
20-Sep	1.4	1.6	1.5	2.2	1.6981E-08	10	50	40	RC/Ca ash/ W/D
21-Sep	1.6	1.6	1.6	2.2	1.81131E-08	10	50	40	RC/Ca ash/ W/D
22-Sep	1.5	1.7	1.6	2.2	1.81131E-08	10	50	40	RC/Ca ash/ W/D
23-Sep	1.3	1.5	1.4	2.2	1.5849E-08	10	50	40	RC/Ca ash/ W/D
24-Sep	1.4	1.5	1.45	2.2	1.6415E-08	10	50	40	RC/Ca ash/ W/D
25-Sep	1.2	1.4	1.3	2.2	1.47169E-08	10	50	40	RC/Ca ash/ W/D
26-Sep	1.2	1.5	1.35	2.2	1.52829E-08	10	50	40	RC/Ca ash/ W/D
27-Sep	1.3	1.3	1.3	2.2	1.47169E-08	10	50	40	RC/Ca ash/ W/D
28-Sep	1.5	1.5	1.5	2.2	1.6981E-08	10	50	40	RC/Ca ash/ W/D
29-Sep	1.3	1.5	1.4	2.2	1.5849E-08	10	50	40	RC/Ca ash/ W/D
30-Sep	1.3	1.4	1.35	2.2	1.52829E-08	10	50	40	RC/Ca ash/ W/D
1-Oct	1.2	1.4	1.3	2.2	1.47169E-08	10	50	40	RC/Ca ash/ W/D
2-Oct	1.3	1.5	1.4	2.2	1.5849E-08	10	50	40	RC/Ca ash/ W/D
27-Oct	1.2	1.3	1.25	2.2	1.41509E-08	10	50	40	RC/Ca ash/ W/D
28-Oct	1.2	1.3	1.25	2.2	1.41509E-08	10	50	40	RC/Ca ash/ W/D
29-Oct	0.9	1	0.95	2.2	1.07547E-08	10	50	40	RC/Ca ash/ W/D
30-Oct	0.8	1	0.9	2.2	1.01886E-08	10	50	40	RC/Ca ash/ W/D
31-Oct	0.8	1	0.9	2.2	1.01886E-08	10	50	40	RC/Ca ash/ W/D
1-Nov	0.8	0.9	0.85	2.2	9.62259E-09	10	50	40	RC/Ca ash/ W/D
2-Nov	0.8	0.8	0.8	2.2	9.05656E-09	10	50	40	RC/Ca ash/ W/D
3-Nov	0.6	0.9	0.75	2.2	8.49052E-09	10	50	40	RC/Ca ash/ W/D
4-Nov	0.8	0.9	0.85	2.2	9.62259E-09	10	50	40	RC/Ca ash/ W/D
5-Nov	0.7	0.7	0.7	2.2	7.92449E-09	10	50	40	RC/Ca ash/ W/D
6-Nov	0.8	0.7	0.75	2.2	8.49052E-09	10	50	40	RC/Ca ash/ W/D
7-Nov	0.6	0.8	0.7	2.2	7.92449E-09	10	50	40	RC/Ca ash/ W/D
8-Nov	0.7	0.8	0.75	2.2	8.49052E-09	10	50	40	RC/Ca ash/ W/D
9-Nov	0.7	0.7	0.7	2.2	7.52587E-09	10	50	40	RC/Ca ash/ W/D
10-Nov	0.7	0.7	0.7	2.2	7.52587E-09	10	50	40	RC/Ca ash/ W/D
11-Nov	0.6	0.6	0.6	2.2	6.45075E-09	10	50	40	RC/Ca ash/ W/D
12-Nov	0.7	0.7	0.7	2.2	7.52587E-09	10	50	40	RC/Ca ash/ W/D
13-Nov	0.7	0.7	0.7	2.2	7.52587E-09	10	50	40	RC/Ca ash/ W/D
14-Nov	0.6	0.8	0.7	2.2	7.52587E-09	10	50	40	RC/Ca ash/ W/D
15-Nov	0.6	0.6	0.6	2.2	6.45075E-09	10	50	40	RC/Ca ash/ W/D
16-Nov	0.6	0.6	0.6	2.2	6.45075E-09	10	50	40	RC/Ca ash/ W/D
End	0.5	0.7	0.6	2.2	6.45075E-09	10	50	40	RC/Ca ash/ W/D
	0.6	0.6	0.6	2.2	6.45075E-09	10	50	40	RC/Ca ash/ W/D
Sample 41A									
2-Jul									

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
3-Jul									
4-Jul	0.1	0.5	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
5-Jul	0	0.4	0.2	2.2	2.15025E-09	10	50	40	AC/NaExt/120days
6-Jul	0.5	0.4	0.45	2.2	4.83806E-09	10	50	40	AC/NaExt/120days
7-Jul	0.5	0.4	0.45	2.2	4.83806E-09	10	50	40	AC/NaExt/120days
8-Jul	0.2	0.4	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
9-Jul	0.2	0.3	0.25	2.2	2.68781E-09	10	50	40	AC/NaExt/120days
10-Jul	0.2	0.5	0.35	2.2	3.76294E-09	10	50	40	AC/NaExt/120days
11-Jul	0.2	0.5	0.35	2.2	3.76294E-09	10	50	40	AC/NaExt/120days
12-Jul	0.2	0.4	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
13-Jul	0.3	0.5	0.4	2.2	4.3005E-09	10	50	40	AC/NaExt/120days
14-Jul	0.3	0.4	0.35	2.2	3.76294E-09	10	50	40	AC/NaExt/120days
15-Jul	0	0.8	0.4	2.2	4.3005E-09	10	50	40	AC/NaExt/120days
16-Jul	0.1	0.8	0.45	2.2	4.83806E-09	10	50	40	AC/NaExt/120days
17-Jul	0.2	0.4	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
18-Jul	0.2	0.4	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
19-Jul	0.1	0.3	0.2	2.2	2.15025E-09	10	50	40	AC/NaExt/120days
20-Jul	0.2	0.3	0.25	2.2	2.68781E-09	10	50	40	AC/NaExt/120days
21-Jul	0	0.6	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
22-Jul	0.2	0.4	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
23-Jul	0.3	0.3	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
24-Jul	0.2	0.4	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
25-Jul	0.2	0.5	0.35	2.2	3.76294E-09	10	50	40	AC/NaExt/120days
26-Jul	0.1	0.5	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
27-Jul	0.2	0.4	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
28-Jul	0.3	0.2	0.25	2.2	2.68781E-09	10	50	40	AC/NaExt/120days
29-Jul	0.3	0.6	0.45	2.2	4.83806E-09	10	50	40	AC/NaExt/120days
30-Jul	0.3	0.4	0.35	2.2	3.76294E-09	10	50	40	AC/NaExt/120days
31-Jul	0.2	0.7	0.45	2.2	4.83806E-09	10	50	40	AC/NaExt/120days
1-Aug	0.1	0.7	0.4	2.2	4.3005E-09	10	50	40	AC/NaExt/120days
2-Aug	0	0.7	0.35	2.2	3.76294E-09	10	50	40	AC/NaExt/120days
3-Aug	0.3	0.2	0.25	2.2	2.68781E-09	10	50	40	AC/NaExt/120days
4-Aug	0.3	0.3	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
5-Aug	0.1	0.6	0.35	2.2	3.76294E-09	10	50	40	AC/NaExt/120days
6-Aug	0.2	0.5	0.35	2.2	3.76294E-09	10	50	40	AC/NaExt/120days
7-Aug	0.3	0.3	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
8-Aug	0.3	0.2	0.25	2.2	2.68781E-09	10	50	40	AC/NaExt/120days
9-Aug	0.3	0.3	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
10-Aug	0	0.8	0.4	2.2	4.3005E-09	10	50	40	AC/NaExt/120days
11-Aug	0	0.6	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
12-Aug	0.4	0.3	0.35	2.2	3.76294E-09	10	50	40	AC/NaExt/120days
13-Aug	0.2	0.4	0.3	2.2	3.22537E-09	10	50	40	AC/NaExt/120days
14-Aug	0	0.4	0.2	2.2	2.15025E-09	10	50	40	AC/NaExt/120days
15-Aug	0	0.4	0.2	2.2	2.15025E-09	10	50	40	AC/NaExt/120days
16-Aug	0	0.4	0.2	2.2	2.15025E-09	10	50	40	AC/NaExt/120days
19-Aug	0.1	0.1	0.1	2.2	1.07512E-09	10	50	40	AC/NaExt/120days

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
20-Aug	0.1	0.1	0.1	2.2	1.07512E-09	10	50	40	AC/NaExt/120days
21-Aug	0.3	1	0.65	4.3	3.57542E-09	10	50	40	AC/NaExt/120days
22-Aug	0.2	1	0.6	4.3	3.30038E-09	10	50	40	AC/NaExt/120days
23-Aug	0.3	0.8	0.55	4.3	3.02535E-09	10	50	40	AC/NaExt/120days
24-Aug	0.5	0.5	0.5	4.3	2.75032E-09	10	50	40	AC/NaExt/120days
25-Aug	0.5	0.7	0.6	4.3	3.30038E-09	10	50	40	AC/NaExt/120days
26-Aug	0.5	0.7	0.6	4.3	3.30038E-09	10	50	40	AC/NaExt/120days
27-Aug	0.4	0.8	0.6	4.3	3.30038E-09	10	50	40	AC/NaExt/120days
28-Aug	0.3	0.8	0.55	4.3	3.02535E-09	10	50	40	AC/NaExt/120days
29-Aug	0.5	0.7	0.6	4.3	3.30038E-09	10	50	40	AC/NaExt/120days
31-Aug	0.4	0.7	0.55	4.3	3.02535E-09	10	50	40	AC/NaExt/120days
1-Sep	0.3	0.7	0.5	4.3	2.75032E-09	10	50	40	AC/NaExt/120days
2-Sep	0.5	0.7	0.6	4.3	3.30038E-09	10	50	40	AC/NaExt/120days
3-Sep	0.4	0.8	0.6	4.3	3.30038E-09	10	50	40	AC/NaExt/120days
4-Sep	0.4	0.5	0.45	4.3	2.47529E-09	10	50	40	AC/NaExt/120days
5-Sep	0.4	0.9	0.65	4.3	3.57542E-09	10	50	40	AC/NaExt/120days
6-Sep	0.4	0.7	0.55	4.3	3.02535E-09	10	50	40	AC/NaExt/120days
7-Sep	0.4	0.7	0.55	4.3	3.02535E-09	10	50	40	AC/NaExt/120days
8-Sep	0.4	0.7	0.55	4.3	3.02535E-09	10	50	40	AC/NaExt/120days
9-Sep	0.4	0.7	0.55	4.3	3.02535E-09	10	50	40	AC/NaExt/120days
10-Sep	0.3	0.6	0.45	4.3	2.47529E-09	10	50	40	AC/NaExt/120days
11-Sep	0.4	0.7	0.55	4.3	3.02535E-09	10	50	40	AC/NaExt/120days
12-Sep	0.5	0.6	0.55	4.3	3.02535E-09	10	50	40	AC/NaExt/120days
13-Sep	0.5	0.7	0.6	4.3	3.30038E-09	10	50	40	AC/NaExt/120days
14-Sep	0.3	0.6	0.45	4.3	2.47529E-09	10	50	40	AC/NaExt/120days
15-Sep	0.5	0.6	0.55	4.3	3.02535E-09	10	50	40	AC/NaExt/120days
16-Sep	0.4	2.1	1.25	6.5	4.5486E-09	10	50	40	AC/NaExt/120days
17-Sep	0.7	1.5	1.1	6.5	4.00277E-09	10	50	40	AC/NaExt/120days
18-Sep	0.6	1.2	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
19-Sep	0.6	1.1	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
20-Sep	0.6	1.2	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
21-Sep	0.7	1.1	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
22-Sep	0.6	1.1	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
23-Sep	0.5	1	0.75	6.5	2.72916E-09	10	50	40	AC/NaExt/120days
24-Sep	0.8	1	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
25-Sep	0.8	1.1	0.95	6.5	3.45694E-09	10	50	40	AC/NaExt/120days
26-Sep	0.6	1.1	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
27-Sep	0.7	0.9	0.8	6.5	2.91111E-09	10	50	40	AC/NaExt/120days
28-Sep	0.8	1.2	1	6.5	3.63888E-09	10	50	40	AC/NaExt/120days
29-Sep	0.7	1	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
30-Sep	0.6	1.1	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
1-Oct	0.8	1.1	0.95	6.5	3.45694E-09	10	50	40	AC/NaExt/120days
2-Oct	0.7	1.2	0.95	6.5	3.45694E-09	10	50	40	AC/NaExt/120days
3-Oct	0.7	1	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
4-Oct	0.7	1	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
5-Oct	0.7	1	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days

Date	Total	Total	Avg	Grad	Hydraulic	Effec	Confin	Back	Moist
	Outflow	Inflow	Flow	(psi)	Conductivity	Stress	Press	Pres	Cond
6-Oct	0.7	1	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
7-Oct	0.7	1.1	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
8-Oct	0.6	1	0.8	6.5	2.91111E-09	10	50	40	AC/NaExt/120days
9-Oct	0.8	1	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
10-Oct	0.8	1	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
11-Oct	0.7	1.1	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
12-Oct	0.7	1	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
13-Oct	0.7	0.9	0.8	6.5	2.91111E-09	10	50	40	AC/NaExt/120days
14-Oct	0.7	1	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
15-Oct	0.6	1.2	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
16-Oct	0.8	1	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
17-Oct	0.8	1	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
18-Oct	0.7	0.9	0.8	6.5	2.91111E-09	10	50	40	AC/NaExt/120days
19-Oct	0.8	1	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
20-Oct	0.7	1	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
21-Oct	0.7	1.1	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
22-Oct	0.7	0.9	0.8	6.5	2.91111E-09	10	50	40	AC/NaExt/120days
23-Oct	0.9	0.9	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
24-Oct	0.8	1	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
25-Oct	0.5	1.2	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
26-Oct	1	0.6	0.8	6.5	2.91111E-09	10	50	40	AC/NaExt/120days
27-Oct	0.8	0.9	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
28-Oct	0.8	0.9	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
29-Oct	1	0.9	0.95	6.5	3.45694E-09	10	50	40	AC/NaExt/120days
30-Oct	0.8	1	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
31-Oct	0.8	0.9	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
1-Nov	0.8	1	0.9	6.5	3.275E-09	10	50	40	AC/NaExt/120days
2-Nov	0.9	0.8	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
3-Nov	0.7	0.9	0.8	6.5	2.91111E-09	10	50	40	AC/NaExt/120days
4-Nov	0.7	1	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
5-Nov	0.9	0.8	0.85	6.5	3.09305E-09	10	50	40	AC/NaExt/120days
6-Nov	0.8	0.8	0.8	6.5	2.91111E-09	10	50	40	AC/NaExt/120days
End	0.8	0.8	0.8	6.5	2.91111E-09	10	50	40	AC/NaExt/120days
	0.6	0.9	0.75	6.5	2.72916E-09	10	50	40	AC/NaExt/120days
CI#2-2									
17-Feb									
18-Feb									
19-Feb	2.9	4.4	3.65	2.2	9.53344E-09	10	50	40	AC(dup) -Std.Moisture
20-Feb	2.6	3	2.8	2.2	7.31332E-09	10	50	40	AC(dup) -Std.Moisture
21-Feb	2.3	2.3	2.3	2.2	6.00737E-09	10	50	40	AC(dup) -Std.Moisture
22-Feb	2.2	2.4	2.3	2.2	6.00737E-09	10	50	40	AC(dup) -Std.Moisture
8-Mar	2.7	2.8	2.75	2.2	7.18273E-09	10	50	40	AC(dup) -Std.Moisture
9-Mar	2.3	2.4	2.35	2.2	6.13797E-09	10	50	40	AC(dup) -Std.Moisture
10-Mar	8.6	8.7	8.65	2.2	2.25929E-08	10	50	40	AC(dup) -Std.Moisture
11-Mar	6.1	6.2	6.15	2.2	1.60632E-08	10	50	40	AC(dup) -Std.Moisture

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
12-Mar	5.9	6	5.95	2.2	1.55408E-08	10	50	40	AC(dup) -Std.Moisture
13-Mar	5.9	5.9	5.9	2.2	1.54102E-08	10	50	40	AC(dup) -Std.Moisture
14-Mar	4.7	4.8	4.75	2.2	1.24065E-08	10	50	40	AC(dup) -Std.Moisture
15-Mar	3.6	3.8	3.7	2.2	9.66403E-09	10	50	40	AC(dup) -Std.Moisture
16-Mar	3.6	3.6	3.6	2.2	9.40284E-09	10	50	40	AC(dup) -Std.Moisture
17-Mar	2.9	3	2.95	2.2	7.70511E-09	10	50	40	AC(dup) -Std.Moisture
18-Mar	2.6	2.7	2.65	2.2	6.92154E-09	10	50	40	AC(dup) -Std.Moisture
4-Apr	2.5	2.7	2.6	2.2	6.79094E-09	10	50	40	AC(dup) -Std.Moisture
5-Apr	2.5	2.6	2.55	2.2	6.66035E-09	10	50	40	AC(dup) -Std.Moisture
6-Apr	1.6	2	1.8	2.2	4.70142E-09	10	50	40	AC(dup) -Std.Moisture
7-Apr	2.1	2.2	2.15	2.2	5.61559E-09	10	50	40	AC(dup) -Std.Moisture
8-Apr	2	2.2	2.1	2.2	5.48499E-09	10	50	40	AC(dup) -Std.Moisture
17-Apr	2.1	2.1	2.1	2.2	5.48499E-09	10	50	40	AC(dup) -Std.Moisture
18-Apr	2.1	2.1	2.1	2.2	5.48499E-09	10	50	40	AC(dup) -Std.Moisture
19-Apr	2.1	3	2.55	2.2	6.66035E-09	10	50	40	AC(dup) -Std.Moisture
20-Apr	2.7	2.8	2.75	2.2	7.18273E-09	10	50	40	AC(dup) -Std.Moisture
21-Apr	2.6	2.7	2.65	2.2	6.92154E-09	10	50	40	AC(dup) -Std.Moisture
22-Apr	2.3	2.3	2.3	2.2	6.00737E-09	10	50	40	AC(dup) -Std.Moisture
23-Apr	2.3	2.2	2.25	2.2	5.87678E-09	10	50	40	AC(dup) -Std.Moisture
End	2.2	2.2	2.2	2.2	5.74618E-09	10	50	40	AC(dup) -Std.Moisture
	2.1	1.9	2	2.2	5.2238E-09	10	50	40	AC(dup) -Std.Moisture
CL#2-3									
17-Feb									
18-Feb									
19-Feb	1.7	2.5	2.1	2.2	5.01983E-09	10	50	40	AC(dup)-wet of std.
20-Feb	1.9	2.1	2	2.2	4.78079E-09	10	50	40	AC(dup)-wet of std.
21-Feb	1.8	2	1.9	2.2	4.54175E-09	10	50	40	AC(dup)-wet of std.
22-Feb	1.7	1.9	1.8	2.2	4.30271E-09	10	50	40	AC(dup)-wet of std.
7-Mar	2	2.1	2.05	2.2	4.90031E-09	10	50	40	AC(dup)-wet of std.
8-Mar	1.8	1.8	1.8	2.2	4.30271E-09	10	50	40	AC(dup)-wet of std.
9-Mar	13	13.4	13.2	2.2	3.15532E-08	10	50	40	AC(dup)-wet of std.
10-Mar	8.8	9.1	8.95	2.2	2.13941E-08	10	50	40	AC(dup)-wet of std.
11-Mar	7.6	7.6	7.6	2.2	1.8167E-08	10	50	40	AC(dup)-wet of std.
12-Mar	3.8	3.8	3.8	2.2	9.08351E-09	10	50	40	AC(dup)-wet of std.
13-Mar	3.8	3.8	3.8	2.2	9.08351E-09	10	50	40	AC(dup)-wet of std.
14-Mar	2.9	3	2.95	2.2	7.05167E-09	10	50	40	AC(dup)-wet of std.
15-Mar	2.4	2.4	2.4	2.2	5.73695E-09	10	50	40	AC(dup)-wet of std.
16-Mar	2.5	2.4	2.45	2.2	5.85647E-09	10	50	40	AC(dup)-wet of std.
17-Mar	2.5	2.1	2.3	2.2	5.49791E-09	10	50	40	AC(dup)-wet of std.
18-Mar	2	2	2	2.2	4.78079E-09	10	50	40	AC(dup)-wet of std.
29-Mar	1.9	2	1.95	2.2	4.66127E-09	10	50	40	AC(dup)-wet of std.
30-Mar	1.8	1.9	1.85	2.2	4.42223E-09	10	50	40	AC(dup)-wet of std.
1-Apr	4.8	4.9	4.85	2.2	1.15934E-08	10	50	40	AC(dup)-wet of std.
2-Apr	2.5	2.8	2.65	2.2	6.33455E-09	10	50	40	AC(dup)-wet of std.
3-Apr	2.5	2.3	2.4	2.2	5.73695E-09	10	50	40	AC(dup)-wet of std.

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
4-Apr	2.1	2.1	2.1	2.2	5.01983E-09	10	50	40	AC(dup)-wet of std.
5-Apr	1.8	1.9	1.85	2.2	4.42223E-09	10	50	40	AC(dup)-wet of std.
6-Apr	1.7	1.7	1.7	2.2	4.06367E-09	10	50	40	AC(dup)-wet of std.
7-Apr	2.3	2.1	2.2	2.2	5.25887E-09	10	50	40	AC(dup)-wet of std.
8-Apr	2	2	2	2.2	4.78079E-09	10	50	40	AC(dup)-wet of std.
19-Apr	2	1.9	1.95	2.2	4.66127E-09	10	50	40	AC(dup)-wet of std.
20-Apr	1.9	1.8	1.85	2.2	4.42223E-09	10	50	40	AC(dup)-wet of std.
21-Apr	2	2.5	2.25	2.2	5.37839E-09	10	50	40	AC(dup)-wet of std.
22-Apr	2	2.1	2.05	2.2	4.90031E-09	10	50	40	AC(dup)-wet of std.
23-Apr	2	2.1	2.05	2.2	4.90031E-09	10	50	40	AC(dup)-wet of std.
End	2	2	2	2.2	4.78079E-09	10	50	40	AC(dup)-wet of std.
	1.9	1.7	1.8	2.2	4.30271E-09	10	50	40	AC(dup)-wet of std.
Clay2 ES									
21-Mar									
22-Mar									
23-Mar	0.1	0.2	0.15	2.2	1.67056E-09	10	50	40	AC/Eff.Stress=10,20,30
24-Mar	0	0.8	0.4	2.2	4.45481E-09	10	50	40	AC/Eff.Stress=10,20,30
25-Mar	0.2	0.6	0.4	2.2	4.45481E-09	10	50	40	AC/Eff.Stress=10,20,30
26-Mar	0.1	0.6	0.35	2.2	3.89796E-09	10	50	40	AC/Eff.Stress=10,20,30
27-Mar	0.1	0.6	0.35	2.2	3.89796E-09	10	50	40	AC/Eff.Stress=10,20,30
28-Mar	0.2	0.5	0.35	2.2	3.89796E-09	10	50	40	AC/Eff.Stress=10,20,30
29-Mar	0.2	0.4	0.3	2.2	3.34111E-09	10	50	40	AC/Eff.Stress=10,20,30
30-Mar	0.4	0.4	0.4	2.2	4.45481E-09	10	50	40	AC/Eff.Stress=10,20,30
1-Apr	0.2	0.4	0.3	2.2	3.34111E-09	10	50	40	AC/Eff.Stress=10,20,30
2-Apr	0.2	0.5	0.35	2.2	3.76294E-09	10	50	40	AC/Eff.Stress=10,20,30
3-Mar	0.3	0.7	0.5	2.2	5.37562E-09	10	50	40	AC/Eff.Stress=10,20,30
4-Apr	0.3	0.3	0.3	2.2	3.22537E-09	10	50	40	AC/Eff.Stress=10,20,30
5-Apr	0.2	0.5	0.35	2.2	3.76294E-09	10	50	40	AC/Eff.Stress=10,20,30
6-Apr	0.3	0.3	0.3	2.2	3.22537E-09	10	50	40	AC/Eff.Stress=10,20,30
7-Apr	0.3	0.4	0.35	2.2	3.76294E-09	10	50	40	AC/Eff.Stress=10,20,30
8-Apr	0.2	0.4	0.3	2.2	3.22537E-09	10	50	40	AC/Eff.Stress=10,20,30
9-Apr	0.3	0.4	0.35	2.2	3.76294E-09	10	50	40	AC/Eff.Stress=10,20,30
10-Apr	0.3	0.3	0.3	2.2	3.22537E-09	10	50	40	AC/Eff.Stress=10,20,30
11-Apr	0.2	0.4	0.3	2.2	3.22537E-09	10	50	40	AC/Eff.Stress=10,20,30
12-Apr	0.3	0.3	0.3	2.2	3.22537E-09	10	50	40	AC/Eff.Stress=10,20,30
13-Apr	0.3	0.4	0.35	2.2	3.76294E-09	10	50	40	AC/Eff.Stress=10,20,30
14-Apr	0.2	0.4	0.3	2.2	3.22537E-09	10	50	40	AC/Eff.Stress=10,20,30
19-Apr	0.2	0.4	0.3	2.2	3.22537E-09	10	50	40	AC/Eff.Stress=10,20,30
20-Apr	0.2	0.4	0.3	2.2	3.22537E-09	10	50	40	AC/Eff.Stress=10,20,30
21-Apr	0.4	0.1	0.25	2.2	2.68781E-09	20	60	40	AC/Eff.Stress=10,20,30
22-Apr	0.3	0.3	0.3	2.2	3.22537E-09	20	60	40	AC/Eff.Stress=10,20,30
23-Apr	0.3	0.2	0.25	2.2	2.68781E-09	20	60	40	AC/Eff.Stress=10,20,30
24-Apr	0.3	0.2	0.25	2.2	2.68781E-09	20	60	40	AC/Eff.Stress=10,20,30
25-Apr	0.2	0	0.1	2.2	1.07512E-09	20	60	40	AC/Eff.Stress=10,20,30
26-Apr	0.4	0.2	0.3	2.2	3.22537E-09	20	60	40	AC/Eff.Stress=10,20,30

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
27-Apr	0.3	0.2	0.25	2.2	2.68781E-09	20	60	40	AC/Eff.Stress=10,20,30
28-Apr	0.3	0.2	0.25	2.2	2.68781E-09	20	60	40	AC/Eff.Stress=10,20,30
29-Apr	0.3	0.1	0.2	2.2	2.15025E-09	20	60	40	AC/Eff.Stress=10,20,30
30-Apr	0.2	0.1	0.15	2.2	1.61269E-09	20	60	40	AC/Eff.Stress=10,20,30
7-May	0.2	0.1	0.15	2.2	1.61269E-09	20	60	40	AC/Eff.Stress=10,20,30
8-May	0.3	0.5	0.4	2.2	4.3005E-09	20	60	40	AC/Eff.Stress=10,20,30
9-May	0.5	0.1	0.3	2.2	3.22537E-09	30	70	40	AC/Eff.Stress=10,20,30
10-May	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
11-May	0.3	0.1	0.2	2.2	2.15025E-09	30	70	40	AC/Eff.Stress=10,20,30
12-May	0.3	0	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
13-May	0.4	0.1	0.25	2.2	2.68781E-09	30	70	40	AC/Eff.Stress=10,20,30
14-May	0.3	0	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
15-May	0.4	0.1	0.25	2.2	2.68781E-09	30	70	40	AC/Eff.Stress=10,20,30
16-May	0.4	0.2	0.3	2.2	3.22537E-09	30	70	40	AC/Eff.Stress=10,20,30
17-May	0.4	0	0.2	2.2	2.15025E-09	30	70	40	AC/Eff.Stress=10,20,30
18-May	0.4	0.1	0.25	2.2	2.68781E-09	30	70	40	AC/Eff.Stress=10,20,30
19-May	0.4	0.2	0.3	2.2	3.22537E-09	30	70	40	AC/Eff.Stress=10,20,30
20-May	0.3	0.1	0.2	2.2	2.15025E-09	30	70	40	AC/Eff.Stress=10,20,30
21-May	0.4	0.2	0.3	2.2	3.22537E-09	30	70	40	AC/Eff.Stress=10,20,30
22-May	0.4	0.2	0.3	2.2	3.22537E-09	30	70	40	AC/Eff.Stress=10,20,30
23-May	0.4	0.1	0.25	2.2	2.68781E-09	30	70	40	AC/Eff.Stress=10,20,30
24-May	0.6	0.1	0.35	2.2	3.76294E-09	30	70	40	AC/Eff.Stress=10,20,30
25-May	0.6	0.1	0.35	2.2	3.76294E-09	30	70	40	AC/Eff.Stress=10,20,30
26-May	0.4	0.2	0.3	2.2	3.22537E-09	30	70	40	AC/Eff.Stress=10,20,30
27-May	0.4	0.1	0.25	2.2	2.68781E-09	30	70	40	AC/Eff.Stress=10,20,30
28-May	0.3	0.2	0.25	2.2	2.68781E-09	30	70	40	AC/Eff.Stress=10,20,30
29-May	0.3	0.1	0.2	2.2	2.15025E-09	30	70	40	AC/Eff.Stress=10,20,30
30-May	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
31-May	0.3	0	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
1-Jun	0.3	0.1	0.2	2.2	2.15025E-09	30	70	40	AC/Eff.Stress=10,20,30
2-Jun	0.3	0.1	0.2	2.2	2.15025E-09	30	70	40	AC/Eff.Stress=10,20,30
3-Jun	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
4-Jun	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
5-Jun	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
6-Jun	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
7-Jun	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
8-Jun	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
9-Jun	0.1	0.1	0.1	2.2	1.07512E-09	30	70	40	AC/Eff.Stress=10,20,30
10-Jun	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
11-Jun	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
12-Jun	0.1	0.1	0.1	2.2	1.07512E-09	30	70	40	AC/Eff.Stress=10,20,30
13-Jun	0.2	0	0.1	2.2	1.07512E-09	30	70	40	AC/Eff.Stress=10,20,30
14-Jun	0.3	0.1	0.2	2.2	2.15025E-09	30	70	40	AC/Eff.Stress=10,20,30
15-Jun	0	0.2	0.1	2.2	1.07512E-09	30	70	40	AC/Eff.Stress=10,20,30
16-Jun	0.2	0	0.1	2.2	1.07512E-09	30	70	40	AC/Eff.Stress=10,20,30
17-Jun	0.3	0.1	0.2	2.2	2.15025E-09	30	70	40	AC/Eff.Stress=10,20,30

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
18-Jun	0.1	0.2	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
19-Jun	0.2	0.2	0.2	2.2	2.15025E-09	30	70	40	AC/Eff.Stress=10,20,30
20-Jun	0.1	0	0.05	2.2	5.37562E-10	30	70	40	AC/Eff.Stress=10,20,30
21-Jun	0.1	0.2	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
22-Jun	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
23-Jun	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
24-Jun	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
25-Jun	0.1	0.2	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
26-Jun	0.1	0.1	0.1	2.2	1.07512E-09	30	70	40	AC/Eff.Stress=10,20,30
27-Jun	0.1	0.1	0.1	2.2	1.07512E-09	30	70	40	AC/Eff.Stress=10,20,30
28-Jun	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
29-Jun	0.2	0.1	0.15	2.2	1.61269E-09	30	70	40	AC/Eff.Stress=10,20,30
30-Jun	0.1	0.1	0.1	2.2	1.07512E-09	30	70	40	AC/Eff.Stress=10,20,30
1-Jul	0.2	0.2	0.2	2.2	2.15025E-09	30	70	40	AC/Eff.Stress=10,20,30
2-Jul	0.1	0.1	0.1	2.2	1.07512E-09	30	70	40	AC/Eff.Stress=10,20,30
End	0.1	0.1	0.1	2.2	1.07512E-09	30	70	40	AC/Eff.Stress=10,20,30
	0.2	0	0.1	2.2	1.07512E-09	30	70	40	AC/Eff.Stress=10,20,30
Sample 108									
29-Jun									
30-Jun	?								
1-Jul	14.7	15	14.85	2.2	1.03011E-07	10	50	40	AC/NaAsh/Dry
2-Jul	13.23	13	13.115	2.2	9.09757E-08	10	50	40	AC/NaAsh/Dry
3-Jul	10.78	12	11.39	2.2	7.90098E-08	10	50	40	AC/NaAsh/Dry
4-Jul	7.35	6.5	6.925	2.2	4.80371E-08	10	50	40	AC/NaAsh/Dry
5-Jul	6.37	6.5	6.435	2.2	4.46381E-08	10	50	40	AC/NaAsh/Dry
6-Jul	8.33	8	8.165	2.2	5.66387E-08	10	50	40	AC/NaAsh/Dry
7-Jul	6.37	7	6.685	2.2	4.63723E-08	10	50	40	AC/NaAsh/Dry
8-Jul	6.86	6.5	6.68	2.2	4.63376E-08	10	50	40	AC/NaAsh/Dry
9-Jul	6.37	6.5	6.435	2.2	4.46381E-08	10	50	40	AC/NaAsh/Dry
10-Jul	6.37	6	6.185	2.2	4.29039E-08	10	50	40	AC/NaAsh/Dry
11-Jul	5.39	6.5	5.945	2.2	4.12391E-08	10	50	40	AC/NaAsh/Dry
12-Jul	3.43	5.5	4.465	2.2	3.09727E-08	10	50	40	AC/NaAsh/Dry
13-Jul	7.84	5.5	6.67	2.2	4.62682E-08	10	50	40	AC/NaAsh/Dry
14-Jul	5.88	5.5	5.69	2.2	3.94702E-08	10	50	40	AC/NaAsh/Dry
15-Jul	6.37	6.5	6.435	2.2	4.46381E-08	10	50	40	AC/NaAsh/Dry
16-Jul	6.37	6.5	6.435	2.2	4.46381E-08	10	50	40	AC/NaAsh/Dry
17-Jul	6.37	6.5	6.435	2.2	4.46381E-08	10	50	40	AC/NaAsh/Dry
18-Jul	6.37	6	6.185	2.2	4.29039E-08	10	50	40	AC/NaAsh/Dry
19-Jul	5.88	6.5	6.19	2.2	4.29386E-08	10	50	40	AC/NaAsh/Dry
20-Jul	6.37	6	6.185	2.2	4.29039E-08	10	50	40	AC/NaAsh/Dry
21-Jul	6.86	7.5	7.18	2.2	4.9806E-08	10	50	40	AC/NaAsh/Dry
22-Jul	6.37	7	6.685	2.2	4.63723E-08	10	50	40	AC/NaAsh/Dry
23-Jul	6.86	6.5	6.68	2.2	4.63376E-08	10	50	40	AC/NaAsh/Dry
24-Jul	6.86	6.5	6.68	2.2	4.63376E-08	10	50	40	AC/NaAsh/Dry
25-Jul	6.37	7	6.685	2.2	4.63723E-08	10	50	40	AC/NaAsh/Dry

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
26-Jul	6.37	6.5	6.435	2.2	4.46381E-08	10	50	40	AC/NaAsh/Dry
27-Jul	6.37	6.5	6.435	2.2	4.46381E-08	10	50	40	AC/NaAsh/Dry
28-Jul	6.37	6	6.185	2.2	4.29039E-08	10	50	40	AC/NaAsh/Dry
29-Jul	7.35	7.5	7.425	2.2	5.15055E-08	10	50	40	AC/NaAsh/Dry
30-Jul	6.86	7	6.93	2.2	4.80718E-08	10	50	40	AC/NaAsh/Dry
31-Jul	6.86	7	6.93	2.2	4.80718E-08	10	50	40	AC/NaAsh/Dry
1-Aug	6.37	7	6.685	2.2	4.63723E-08	10	50	40	AC/NaAsh/Dry
2-Aug	6.37	7	6.685	2.2	4.63723E-08	10	50	40	AC/NaAsh/Dry
3-Aug	6.86	6.5	6.68	2.2	4.63376E-08	10	50	40	AC/NaAsh/Dry
4-Aug	6.37	6.5	6.435	2.2	4.46381E-08	10	50	40	AC/NaAsh/Dry
5-Aug	11.27	11.5	11.385	2.2	7.89751E-08	10	50	40	AC/NaAsh/Dry
6-Aug	10.78	11	10.89	2.2	7.55414E-08	10	50	40	AC/NaAsh/Dry
7-Aug	10.78	10.5	10.64	2.2	7.38072E-08	10	50	40	AC/NaAsh/Dry
8-Aug	6.86	6.5	6.68	2.2	4.63376E-08	10	50	40	AC/NaAsh/Dry
9-Aug	6.86	7	6.93	2.2	4.80718E-08	10	50	40	AC/NaAsh/Dry
10-Aug	7.84	7.5	7.67	2.2	5.3205E-08	10	50	40	AC/NaAsh/Dry
11-Aug	7.35	7.5	7.425	2.2	5.15055E-08	10	50	40	AC/NaAsh/Dry
12-Aug	7.35	7	7.175	2.2	4.97713E-08	10	50	40	AC/NaAsh/Dry
13-Aug	6.86	7	6.93	2.2	4.80718E-08	10	50	40	AC/NaAsh/Dry
14-Aug	6.86	7	6.93	2.2	4.80718E-08	10	50	40	AC/NaAsh/Dry
15-Aug	8.33	8	8.165	2.2	5.66387E-08	10	50	40	AC/NaAsh/Dry
16-Aug	7.84	7.5	7.67	2.2	5.3205E-08	10	50	40	AC/NaAsh/Dry
17-Aug	7.35	7.5	7.425	2.2	5.15055E-08	10	50	40	AC/NaAsh/Dry
18-Aug	7.35	7.5	7.425	2.2	5.15055E-08	10	50	40	AC/NaAsh/Dry
19-Aug	6.86	7	6.93	2.2	4.80718E-08	10	50	40	AC/NaAsh/Dry
20-Aug	6.86	7	6.93	2.2	4.80718E-08	10	50	40	AC/NaAsh/Dry
21-Aug	6.37	6.5	6.435	2.2	4.46381E-08	10	50	40	AC/NaAsh/Dry
22-Aug	7.84	8	7.92	2.2	5.49392E-08	10	50	40	AC/NaAsh/Dry
23-Aug	7.35	7.5	7.425	2.2	5.15055E-08	10	50	40	AC/NaAsh/Dry
24-Aug	6.86	7	6.93	2.2	4.80718E-08	10	50	40	AC/NaAsh/Dry
25-Aug	6.86	7	6.93	2.2	4.80718E-08	10	50	40	AC/NaAsh/Dry
26-Aug	6.86	6.5	6.68	2.2	4.63376E-08	10	50	40	AC/NaAsh/Dry
27-Aug	6.37	6.5	6.435	2.2	4.46381E-08	10	50	40	AC/NaAsh/Dry
28-Aug	6.37	6.5	6.435	2.2	4.46381E-08	10	50	40	AC/NaAsh/Dry
29-Aug	7.84	8	7.92	2.2	5.49392E-08	10	50	40	AC/NaAsh/Dry
30-Aug	6.86	7.5	7.18	2.2	4.9806E-08	10	50	40	AC/NaAsh/Dry
31-Aug	6.86	7	6.93	2.2	4.80718E-08	10	50	40	AC/NaAsh/Dry
1-Sep	6.86	6.5	6.68	2.2	4.63376E-08	10	50	40	AC/NaAsh/Dry
2-Sep	7.35	7	7.175	2.2	4.97713E-08	10	50	40	AC/NaAsh/Dry
3-Sep	6.86	7	6.93	2.2	4.80718E-08	10	50	40	AC/NaAsh/Dry
4-Sep	6.86	6.5	6.68	2.2	4.63376E-08	10	50	40	AC/NaAsh/Dry
5-Sep	6.86	6.5	6.68	2.2	4.63376E-08	10	50	40	AC/NaAsh/Dry
6-Sep	5.88	6	5.94	2.2	4.12044E-08	10	50	40	AC/NaAsh/Dry
7-Sep	5.39	6	5.695	2.2	3.95049E-08	10	50	40	AC/NaAsh/Dry
8-Sep	5.39	5.5	5.445	2.2	3.77707E-08	10	50	40	AC/NaAsh/Dry
9-Sep	5.39	5.5	5.445	2.2	3.77707E-08	10	50	40	AC/NaAsh/Dry

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
10-Sep	4.9	5.5	5.2	2.2	3.60712E-08	10	50	40	AC/NaAsh/Dry
11-Sep	4.9	5	4.95	2.2	3.4337E-08	10	50	40	AC/NaAsh/Dry
12-Sep	4.9	4.5	4.7	2.2	3.26028E-08	10	50	40	AC/NaAsh/Dry
13-Sep	4.41	5	4.705	2.2	3.26375E-08	10	50	40	AC/NaAsh/Dry
14-Sep	4.41	4.5	4.455	2.2	3.09033E-08	10	50	40	AC/NaAsh/Dry
15-Sep	4.41	4.5	4.455	2.2	3.09033E-08	10	50	40	AC/NaAsh/Dry
16-Sep	5.39	5.5	5.445	2.2	3.77707E-08	10	50	40	AC/NaAsh/Dry
17-Sep	5.39	5.5	5.445	2.2	3.77707E-08	10	50	40	AC/NaAsh/Dry
18-Sep	4.9	5	4.95	2.2	3.4337E-08	10	50	40	AC/NaAsh/Dry
19-Sep	4.41	5	4.705	2.2	3.26375E-08	10	50	40	AC/NaAsh/Dry
20-Sep	4.41	4.5	4.455	2.2	3.09033E-08	10	50	40	AC/NaAsh/Dry
21-Sep	4.41	4.5	4.455	2.2	3.09033E-08	10	50	40	AC/NaAsh/Dry
22-Sep	3.92	4.5	4.21	2.2	2.92038E-08	10	50	40	AC/NaAsh/Dry
23-Sep	3.92	4	3.96	2.2	2.74696E-08	10	50	40	AC/NaAsh/Dry
24-Sep	3.92	4	3.96	2.2	2.74696E-08	10	50	40	AC/NaAsh/Dry
End	3.43	4	3.715	2.2	2.57701E-08	10	50	40	AC/NaAsh/Dry
	3.92	4	3.96	2.2	2.74696E-08	10	50	40	AC/NaAsh/Dry
Sample 109									
3-Jul									
4-Jul	B-954	?							
5-Jul	0.1	0	0.05	2.2	3.31056E-10	10	50	40	AC/NaAsh/Opt
6-Jul	0.4	0.5	0.45	2.2	2.97951E-09	10	50	40	AC/NaAsh/Opt
7-Jul	0.4	0.4	0.4	2.2	2.64845E-09	10	50	40	AC/NaAsh/Opt
8-Jul	0.5	0.6	0.55	2.2	3.64162E-09	10	50	40	AC/NaAsh/Opt
9-Jul	0.4	0.7	0.55	2.2	3.64162E-09	10	50	40	AC/NaAsh/Opt
10-Jul	0.5	0.6	0.55	2.2	3.64162E-09	10	50	40	AC/NaAsh/Opt
11-Jul	0.5	0.8	0.65	2.2	4.30373E-09	10	50	40	AC/NaAsh/Opt
12-Jul	0.5	0.6	0.55	2.2	3.64162E-09	10	50	40	AC/NaAsh/Opt
13-Jul	0.6	0.5	0.55	2.2	3.64162E-09	10	50	40	AC/NaAsh/Opt
14-Jul	0.6	0.7	0.65	2.2	4.30373E-09	10	50	40	AC/NaAsh/Opt
15-Jul	0.8	0.8	0.8	2.2	5.2969E-09	10	50	40	AC/NaAsh/Opt
16-Jul	0.8	0.8	0.8	2.2	5.2969E-09	10	50	40	AC/NaAsh/Opt
17-Jul	0.7	0.8	0.75	2.2	4.96584E-09	10	50	40	AC/NaAsh/Opt
18-Jul	1.1	1	1.05	2.2	6.95218E-09	10	50	40	AC/NaAsh/Opt
19-Jul	0.9	1	0.95	2.2	6.29007E-09	10	50	40	AC/NaAsh/Opt
20-Jul	0.9	0.8	0.85	2.2	5.62795E-09	10	50	40	AC/NaAsh/Opt
21-Jul	0.9	0.5	0.7	2.2	4.63479E-09	10	50	40	AC/NaAsh/Opt
22-Jul	1	1.4	1.2	2.2	7.94535E-09	10	50	40	AC/NaAsh/Opt
23-Jul	0.9	0.9	0.9	2.2	5.95901E-09	10	50	40	AC/NaAsh/Opt
24-Jul	0.9	0.9	0.9	2.2	5.95901E-09	10	50	40	AC/NaAsh/Opt
25-Jul	0.9	0.9	0.9	2.2	5.95901E-09	10	50	40	AC/NaAsh/Opt
26-Jul	0.9	0.9	0.9	2.2	5.95901E-09	10	50	40	AC/NaAsh/Opt
27-Jul	0.9	0.9	0.9	2.2	5.95901E-09	10	50	40	AC/NaAsh/Opt
28-Jul	0.9	0.9	0.9	2.2	5.95901E-09	10	50	40	AC/NaAsh/Opt
29-Jul	1.2	1	1.1	2.2	7.28323E-09	10	50	40	AC/NaAsh/Opt

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
30-Jul	1.1	1	1.05	2.2	6.95218E-09	10	50	40	AC/NaAsh/Opt
31-Jul	1.1	1	1.05	2.2	6.95218E-09	10	50	40	AC/NaAsh/Opt
1-Aug	1	1.2	1.1	2.2	7.28323E-09	10	50	40	AC/NaAsh/Opt
2-Aug	1	1	1	2.2	6.62112E-09	10	50	40	AC/NaAsh/Opt
3-Aug	1	1	1	2.2	6.62112E-09	10	50	40	AC/NaAsh/Opt
4-Aug	1.1	0.9	1	2.2	6.62112E-09	10	50	40	AC/NaAsh/Opt
5-Aug	3.4	3.8	3.6	2.2	2.3836E-08	10	50	40	AC/NaAsh/Opt
6-Aug	3.4	3.7	3.55	2.2	2.3505E-08	10	50	40	AC/NaAsh/Opt
7-Aug	3.4	3.8	3.6	2.2	2.3836E-08	10	50	40	AC/NaAsh/Opt
8-Aug	1.6	1.2	1.4	2.2	9.26957E-09	10	50	40	AC/NaAsh/Opt
9-Aug	1.6	1.4	1.5	2.2	9.93168E-09	10	50	40	AC/NaAsh/Opt
10-Aug	1.4	1.2	1.3	2.2	8.60746E-09	10	50	40	AC/NaAsh/Opt
11-Aug	1.3	1.3	1.3	2.2	8.60746E-09	10	50	40	AC/NaAsh/Opt
12-Aug	1.3	1.3	1.3	2.2	8.60746E-09	10	50	40	AC/NaAsh/Opt
13-Aug	1.3	1.2	1.25	2.2	8.2764E-09	10	50	40	AC/NaAsh/Opt
14-Aug	1.3	1.2	1.25	2.2	8.2764E-09	10	50	40	AC/NaAsh/Opt
15-Aug	1.4	1.4	1.4	2.2	9.26957E-09	10	50	40	AC/NaAsh/Opt
16-Aug	1.5	1.3	1.4	2.2	9.26957E-09	10	50	40	AC/NaAsh/Opt
17-Aug	1.3	1.4	1.35	2.2	8.93852E-09	10	50	40	AC/NaAsh/Opt
18-Aug	1.3	1.3	1.3	2.2	8.60746E-09	10	50	40	AC/NaAsh/Opt
19-Aug	1.3	1.3	1.3	2.2	8.60746E-09	10	50	40	AC/NaAsh/Opt
20-Aug	1.2	1.3	1.25	2.2	8.2764E-09	10	50	40	AC/NaAsh/Opt
21-Aug	1.2	1.2	1.2	2.2	7.94535E-09	10	50	40	AC/NaAsh/Opt
22-Aug	1.8	1.8	1.8	2.2	1.1918E-08	10	50	40	AC/NaAsh/Opt
23-Aug	1.6	1.4	1.5	2.2	9.93168E-09	10	50	40	AC/NaAsh/Opt
24-Aug	1.5	1.6	1.55	2.2	1.02627E-08	10	50	40	AC/NaAsh/Opt
25-Aug	1.3	1.4	1.35	2.2	8.93852E-09	10	50	40	AC/NaAsh/Opt
26-Aug	1.4	1.4	1.4	2.2	9.26957E-09	10	50	40	AC/NaAsh/Opt
27-Aug	1.3	1.3	1.3	2.2	8.60746E-09	10	50	40	AC/NaAsh/Opt
28-Aug	1.3	1.3	1.3	2.2	8.60746E-09	10	50	40	AC/NaAsh/Opt
29-Aug	1.7	1.7	1.7	2.2	1.12559E-08	10	50	40	AC/NaAsh/Opt
30-Aug	1.6	1.5	1.55	2.2	1.02627E-08	10	50	40	AC/NaAsh/Opt
31-Aug	1.5	1.5	1.5	2.2	9.93168E-09	10	50	40	AC/NaAsh/Opt
1-Sep	1.3	1.5	1.4	2.2	9.26957E-09	10	50	40	AC/NaAsh/Opt
2-Sep	1.5	1.5	1.5	2.2	9.93168E-09	10	50	40	AC/NaAsh/Opt
3-Sep	1.5	1.4	1.45	2.2	9.60063E-09	10	50	40	AC/NaAsh/Opt
4-Sep	1.5	1.4	1.45	2.2	9.60063E-09	10	50	40	AC/NaAsh/Opt
5-Sep	1.4	1.4	1.4	2.2	9.26957E-09	10	50	40	AC/NaAsh/Opt
6-Sep	1.4	1.4	1.4	2.2	9.26957E-09	10	50	40	AC/NaAsh/Opt
7-Sep	1.4	1.3	1.35	2.2	8.93852E-09	10	50	40	AC/NaAsh/Opt
8-Sep	1.3	1.4	1.35	2.2	8.93852E-09	10	50	40	AC/NaAsh/Opt
9-Sep	1.3	1.3	1.3	2.2	8.60746E-09	10	50	40	AC/NaAsh/Opt
10-Sep	1.3	1.4	1.35	2.2	8.93852E-09	10	50	40	AC/NaAsh/Opt
11-Sep	1.2	1.3	1.25	2.2	8.2764E-09	10	50	40	AC/NaAsh/Opt
12-Sep	1.2	1.2	1.2	2.2	7.94535E-09	10	50	40	AC/NaAsh/Opt
13-Sep	1.3	1.2	1.25	2.2	8.2764E-09	10	50	40	AC/NaAsh/Opt

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
17-Sep	1.1	1.2	1.15	2.2	7.61429E-09	10	50	40	AC/NaAsh/Opt
18-Sep	1.2	1.2	1.2	2.2	7.94535E-09	10	50	40	AC/NaAsh/Opt
19-Sep	1.5	1.6	1.55	2.2	1.02627E-08	10	50	40	AC/NaAsh/Opt
20-Sep	1.4	1.5	1.45	2.2	9.60063E-09	10	50	40	AC/NaAsh/Opt
21-Sep	1.3	1.4	1.35	2.2	8.93852E-09	10	50	40	AC/NaAsh/Opt
22-Sep	1.4	1.4	1.4	2.2	9.26957E-09	10	50	40	AC/NaAsh/Opt
23-Sep	1.3	1.3	1.3	2.2	8.60746E-09	10	50	40	AC/NaAsh/Opt
24-Sep	1.3	1.3	1.3	2.2	8.60746E-09	10	50	40	AC/NaAsh/Opt
End	1.3	1.3	1.3	2.2	8.60746E-09	10	50	40	AC/NaAsh/Opt
	1.4	1.1	1.25	2.2	8.2764E-09	10	50	40	AC/NaAsh/Opt
Sample 110									
6-Jul									
7-Jul	B-954								
8-Jul	0.3	0.5	0.4	2.2	2.70899E-09	10	50	40	AC/NaAsh/Wet
9-Jul	0.3	0.4	0.35	2.2	2.37037E-09	10	50	40	AC/NaAsh/Wet
10-Jul	0.3	0.4	0.35	2.2	2.37037E-09	10	50	40	AC/NaAsh/Wet
11-Jul	0.4	0.5	0.45	2.2	3.04762E-09	10	50	40	AC/NaAsh/Wet
12-Jul	0.5	0.5	0.5	2.2	3.38624E-09	10	50	40	AC/NaAsh/Wet
13-Jul	0.5	0.5	0.5	2.2	3.38624E-09	10	50	40	AC/NaAsh/Wet
14-Jul	0.5	0.4	0.45	2.2	3.04762E-09	10	50	40	AC/NaAsh/Wet
15-Jul	0.7	0.7	0.7	2.2	4.74074E-09	10	50	40	AC/NaAsh/Wet
16-Jul	0.7	0.7	0.7	2.2	4.74074E-09	10	50	40	AC/NaAsh/Wet
17-Jul	0.7	0.7	0.7	2.2	4.74074E-09	10	50	40	AC/NaAsh/Wet
18-Jul	0.9	0.8	0.85	2.2	5.75661E-09	10	50	40	AC/NaAsh/Wet
19-Jul	0.9	1	0.95	2.2	6.43386E-09	10	50	40	AC/NaAsh/Wet
20-Jul	0.9	0.8	0.85	2.2	5.75661E-09	10	50	40	AC/NaAsh/Wet
21-Jul	0.9	0.9	0.9	2.2	6.09523E-09	10	50	40	AC/NaAsh/Wet
22-Jul	0.9	0.8	0.85	2.2	5.75661E-09	10	50	40	AC/NaAsh/Wet
23-Jul	0.9	0.9	0.9	2.2	6.09523E-09	10	50	40	AC/NaAsh/Wet
24-Jul	0.9	0.8	0.85	2.2	5.75661E-09	10	50	40	AC/NaAsh/Wet
25-Jul	0.8	0.8	0.8	2.2	5.41799E-09	10	50	40	AC/NaAsh/Wet
26-Jul	0.9	1	0.95	2.2	6.43386E-09	10	50	40	AC/NaAsh/Wet
27-Jul	0.9	0.9	0.9	2.2	6.09523E-09	10	50	40	AC/NaAsh/Wet
28-Jul	0.8	0.9	0.85	2.2	5.75661E-09	10	50	40	AC/NaAsh/Wet
29-Jul	1.1	1.1	1.1	2.2	7.44973E-09	10	50	40	AC/NaAsh/Wet
30-Jul	1.1	1	1.05	2.2	7.11111E-09	10	50	40	AC/NaAsh/Wet
31-Jul	1	1	1	2.2	6.77248E-09	10	50	40	AC/NaAsh/Wet
1-Aug	1	1	1	2.2	6.77248E-09	10	50	40	AC/NaAsh/Wet
2-Aug	1	1	1	2.2	6.77248E-09	10	50	40	AC/NaAsh/Wet
3-Aug	1	1	1	2.2	6.77248E-09	10	50	40	AC/NaAsh/Wet
4-Aug	1	0.8	0.9	2.2	6.09523E-09	10	50	40	AC/NaAsh/Wet
5-Aug	2	2.3	2.15	2.2	1.45608E-08	10	50	40	AC/NaAsh/Wet
6-Aug	2	2.2	2.1	2.2	1.42222E-08	10	50	40	AC/NaAsh/Wet
7-Aug	2	2.2	2.1	2.2	1.42222E-08	10	50	40	AC/NaAsh/Wet
8-Aug	1.3	1	1.15	2.2	7.78836E-09	10	50	40	AC/NaAsh/Wet

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
9-Aug	1.1	1.2	1.15	2.2	7.78836E-09	10	50	40	AC/NaAsh/Wet
10-Aug	1.2	1.1	1.15	2.2	7.78836E-09	10	50	40	AC/NaAsh/Wet
11-Aug	1.5	1.2	1.35	2.2	9.14285E-09	10	50	40	AC/NaAsh/Wet
12-Aug	1.3	1.3	1.3	2.2	8.80423E-09	10	50	40	AC/NaAsh/Wet
13-Aug	1.3	1.2	1.25	2.2	8.4656E-09	10	50	40	AC/NaAsh/Wet
14-Aug	1.2	1.2	1.2	2.2	8.12698E-09	10	50	40	AC/NaAsh/Wet
15-Aug	1.3	1.3	1.3	2.2	8.80423E-09	10	50	40	AC/NaAsh/Wet
16-Aug	1.2	1.1	1.15	2.2	7.78836E-09	10	50	40	AC/NaAsh/Wet
17-Aug	1.2	1.3	1.25	2.2	8.4656E-09	10	50	40	AC/NaAsh/Wet
18-Aug	1.2	1.2	1.2	2.2	8.12698E-09	10	50	40	AC/NaAsh/Wet
19-Aug	1.1	1.2	1.15	2.2	7.78836E-09	10	50	40	AC/NaAsh/Wet
20-Aug	1.2	1.2	1.2	2.2	8.12698E-09	10	50	40	AC/NaAsh/Wet
21-Aug	1.1	1.1	1.1	2.2	7.44973E-09	10	50	40	AC/NaAsh/Wet
22-Aug	1.8	1.7	1.75	2.2	1.18518E-08	10	50	40	AC/NaAsh/Wet
23-Aug	1.5	1.4	1.45	2.2	9.8201E-09	10	50	40	AC/NaAsh/Wet
24-Aug	1.4	1.5	1.45	2.2	9.8201E-09	10	50	40	AC/NaAsh/Wet
25-Aug	1.3	1.4	1.35	2.2	9.14285E-09	10	50	40	AC/NaAsh/Wet
26-Aug	1.3	1.3	1.3	2.2	8.80423E-09	10	50	40	AC/NaAsh/Wet
27-Aug	1.3	1.2	1.25	2.2	8.4656E-09	10	50	40	AC/NaAsh/Wet
28-Aug	1.3	1.2	1.25	2.2	8.4656E-09	10	50	40	AC/NaAsh/Wet
29-Aug	1.9	1.7	1.8	2.2	1.21905E-08	10	50	40	AC/NaAsh/Wet
30-Aug	1.4	1.5	1.45	2.2	9.8201E-09	10	50	40	AC/NaAsh/Wet
31-Aug	1.5	1.4	1.45	2.2	9.8201E-09	10	50	40	AC/NaAsh/Wet
1-Sep	1.3	1.5	1.4	2.2	9.48148E-09	10	50	40	AC/NaAsh/Wet
2-Sep	1.4	1.4	1.4	2.2	9.48148E-09	10	50	40	AC/NaAsh/Wet
3-Sep	1.4	1.3	1.35	2.2	9.14285E-09	10	50	40	AC/NaAsh/Wet
4-Sep	1.4	1.3	1.35	2.2	9.14285E-09	10	50	40	AC/NaAsh/Wet
5-Sep	1.4	1.3	1.35	2.2	9.14285E-09	10	50	40	AC/NaAsh/Wet
6-Sep	1.4	1.3	1.35	2.2	9.14285E-09	10	50	40	AC/NaAsh/Wet
7-Sep	1.3	1.3	1.3	2.2	8.80423E-09	10	50	40	AC/NaAsh/Wet
8-Sep	1.3	1.3	1.3	2.2	8.80423E-09	10	50	40	AC/NaAsh/Wet
9-Sep	1.2	1.3	1.25	2.2	8.4656E-09	10	50	40	AC/NaAsh/Wet
10-Sep	1.2	1.3	1.25	2.2	8.4656E-09	10	50	40	AC/NaAsh/Wet
11-Sep	1.2	1.2	1.2	2.2	8.12698E-09	10	50	40	AC/NaAsh/Wet
12-Sep	1.2	1.3	1.25	2.2	8.4656E-09	10	50	40	AC/NaAsh/Wet
13-Sep	1.3	1.1	1.2	2.2	8.12698E-09	10	50	40	AC/NaAsh/Wet
14-Sep	1.1	1.2	1.15	2.2	7.78836E-09	10	50	40	AC/NaAsh/Wet
15-Sep	1.2	1.2	1.2	2.2	8.12698E-09	10	50	40	AC/NaAsh/Wet
16-Sep	1.5	1.4	1.45	2.2	9.8201E-09	10	50	40	AC/NaAsh/Wet
17-Sep	1.5	1.4	1.45	2.2	9.8201E-09	10	50	40	AC/NaAsh/Wet
18-Sep	1.4	1.4	1.4	2.2	9.48148E-09	10	50	40	AC/NaAsh/Wet
19-Sep	1.3	1.5	1.4	2.2	9.48148E-09	10	50	40	AC/NaAsh/Wet
20-Sep	1.3	1.4	1.35	2.2	9.14285E-09	10	50	40	AC/NaAsh/Wet
21-Sep	1.2	1.4	1.3	2.2	8.80423E-09	10	50	40	AC/NaAsh/Wet
22-Sep	1.5	1.3	1.4	2.2	9.48148E-09	10	50	40	AC/NaAsh/Wet
23-Sep	1.4	1.4	1.4	2.2	9.48148E-09	10	50	40	AC/NaAsh/Wet

Date	Total	Total	Avg	Grad	Hydraulic	Effec	Confin	Back	Moist
	Outflow	Inflow	Flow	(psi)	Conductivity	Stress	Press	Pres	Cond
24-Sep	1.4	1.3	1.35	2.2	9.14285E-09	10	50	40	AC/NaAsh/Wet
End	1.3	1.3	1.3	2.2	8.80423E-09	10	50	40	AC/NaAsh/Wet
	1.4	1.2	1.3	2.2	8.80423E-09	10	50	40	AC/NaAsh/Wet
977-1									
28-Jan									
29-Jan									
30-Jan	6.37	7.5	6.935	2.2	7.75554E-08	10	50	40	AC/Na ash
31-Jan	6.37	7	6.685	2.2	7.47596E-08	10	50	40	AC/Na ash
1-Feb	4.41	5	4.705	2.2	5.26169E-08	10	50	40	AC/Na ash
2-Feb	4.41	5	4.705	2.2	5.26169E-08	10	50	40	AC/Na ash
3-Feb	4.41	5	4.705	2.2	5.26169E-08	10	50	40	AC/Na ash
4-Feb	4.41	5	4.705	2.2	5.26169E-08	10	50	40	AC/Na ash
5-Feb	4.41	5	4.705	2.2	5.26169E-08	10	50	40	AC/Na ash
6-Feb	4.41	5	4.705	2.2	5.26169E-08	10	50	40	AC/Na ash
7-Feb	4.41	5	4.705	2.2	5.26169E-08	10	50	40	AC/Na ash
8-Feb	3.92	4	3.96	2.2	4.42854E-08	10	50	40	AC/Na ash
9-Feb	2.94	3.5	3.22	2.2	3.60098E-08	10	50	40	AC/Na ash
10-Feb	2.94	3	2.97	2.2	3.3214E-08	10	50	40	AC/Na ash
11-Feb	2.94	3	2.97	2.2	3.3214E-08	10	50	40	AC/Na ash
12-Feb	2.94	3	2.97	2.2	3.3214E-08	10	50	40	AC/Na ash
13-Feb	2.94	3	2.97	2.2	3.3214E-08	10	50	40	AC/Na ash
14-Feb	4.41	3	3.705	2.2	4.14337E-08	10	50	40	AC/Na ash
15-Feb	3.92	2.5	3.21	2.2	3.5898E-08	10	50	40	AC/Na ash
16-Feb	4.9	4	4.45	2.2	4.97652E-08	10	50	40	AC/Na ash
17-Feb	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
18-Feb	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
19-Feb	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
20-Feb	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
21-Feb	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
22-Feb	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
23-Feb	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
24-Feb	3.92	4	3.96	2.2	4.42854E-08	10	50	40	AC/Na ash
26-Feb	3.92	4	3.96	2.2	4.42854E-08	10	50	40	AC/Na ash
27-Feb	3.92	3.5	3.71	2.2	4.14896E-08	10	50	40	AC/Na ash
28-Feb	3.92	3.5	3.71	2.2	4.14896E-08	10	50	40	AC/Na ash
1-Mar	3.43	3.5	3.465	2.2	3.87497E-08	10	50	40	AC/Na ash
2-Mar	3.43	3.5	3.465	2.2	3.87497E-08	10	50	40	AC/Na ash
3-Mar	3.43	3.5	3.465	2.2	3.87497E-08	10	50	40	AC/Na ash
4-Mar	3.43	3.5	3.465	2.2	3.87497E-08	10	50	40	AC/Na ash
5-Mar	3.43	3	3.215	2.2	3.59539E-08	10	50	40	AC/Na ash
6-Mar	3.43	3.5	3.465	2.2	3.87497E-08	10	50	40	AC/Na ash
7-Mar	3.43	3	3.215	2.2	3.59539E-08	10	50	40	AC/Na ash
8-Mar	3.43	3.5	3.465	2.2	3.87497E-08	10	50	40	AC/Na ash
9-Mar	2.94	3	2.97	2.2	3.3214E-08	10	50	40	AC/Na ash
10-Mar	2.94	3	2.97	2.2	3.3214E-08	10	50	40	AC/Na ash

Date	Total	Total	Avg	Grad	Hydraulic	Effec	Confin	Back	Moist
	Outflow	Inflow	Flow	(psi)	Conductivity	Stress	Press	Pres	Cond
11-Mar	3.43	3.5	3.465	2.2	3.87497E-08	10	50	40	AC/Na ash
12-Mar	2.94	3	2.97	2.2	3.3214E-08	10	50	40	AC/Na ash
13-Mar	2.94	3	2.97	2.2	3.3214E-08	10	50	40	AC/Na ash
14-Mar	3.43	3	3.215	2.2	3.59539E-08	10	50	40	AC/Na ash
15-Mar	3.43	3	3.215	2.2	3.59539E-08	10	50	40	AC/Na ash
16-Mar	3.43	3	3.215	2.2	3.59539E-08	10	50	40	AC/Na ash
17-Mar	3.43	3.5	3.465	2.2	3.87497E-08	10	50	40	AC/Na ash
18-Mar	3.43	3	3.215	2.2	3.59539E-08	10	50	40	AC/Na ash
19-Mar	3.43	3	3.215	2.2	3.59539E-08	10	50	40	AC/Na ash
20-Mar	2.94	3	2.97	2.2	3.3214E-08	10	50	40	AC/Na ash
21-Mar	3.43	3	3.215	2.2	3.59539E-08	10	50	40	AC/Na ash
22-Mar	3.92	4	3.96	2.2	4.42854E-08	10	50	40	AC/Na ash
23-Mar	4.41	4.5	4.455	2.2	4.98211E-08	10	50	40	AC/Na ash
24-Mar	3.92	4	3.96	2.2	4.42854E-08	10	50	40	AC/Na ash
25-Mar	3.92	4	3.96	2.2	4.42854E-08	10	50	40	AC/Na ash
26-Mar	4.41	4.5	4.455	2.2	4.98211E-08	10	50	40	AC/Na ash
27-Mar	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
28-Mar	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
29-Mar	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
30-Mar	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
31-Mar	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
1-Apr	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
2-Apr	4.41	4.5	4.455	2.2	4.98211E-08	10	50	40	AC/Na ash
3-Apr	3.92	4.5	4.21	2.2	4.70812E-08	10	50	40	AC/Na ash
4-Apr	3.92	4.5	4.21	2.2	4.70812E-08	10	50	40	AC/Na ash
5-Apr	3.43	3.5	3.465	2.2	3.87497E-08	10	50	40	AC/Na ash
6-Apr	4.41	4.5	4.455	2.2	4.98211E-08	10	50	40	AC/Na ash
7-Apr	4.41	4.5	4.455	2.2	4.98211E-08	10	50	40	AC/Na ash
8-Apr	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
9-Apr	4.41	4.5	4.455	2.2	4.98211E-08	10	50	40	AC/Na ash
10-Apr	4.41	5	4.705	2.2	5.26169E-08	10	50	40	AC/Na ash
11-Apr	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash
12-Apr	4.41	4.5	4.455	2.2	4.98211E-08	10	50	40	AC/Na ash
13-Apr	4.41	4.5	4.455	2.2	4.98211E-08	10	50	40	AC/Na ash
14-Apr	3.92	4	3.96	2.2	4.42854E-08	10	50	40	AC/Na ash
15-Apr	3.92	3.5	3.71	2.2	4.14896E-08	10	50	40	AC/Na ash
16-Apr	3.92	3.5	3.71	2.2	4.14896E-08	10	50	40	AC/Na ash
17-Apr	3.92	3.5	3.71	2.2	4.14896E-08	10	50	40	AC/Na ash
18-Apr	3.92	3.5	3.71	2.2	4.14896E-08	10	50	40	AC/Na ash
19-Apr	3.92	3.5	3.71	2.2	4.14896E-08	10	50	40	AC/Na ash
20-Apr	3.92	3.5	3.71	2.2	4.14896E-08	10	50	40	AC/Na ash
21-Apr	3.43	3.5	3.465	2.2	3.87497E-08	10	50	40	AC/Na ash
22-Apr	3.92	3.5	3.71	2.2	4.14896E-08	10	50	40	AC/Na ash
23-Apr	4.9	5	4.95	2.2	5.53567E-08	10	50	40	AC/Na ash
24-Apr	4.9	4.5	4.7	2.2	5.25609E-08	10	50	40	AC/Na ash
25-Apr	4.41	4	4.205	2.2	4.70253E-08	10	50	40	AC/Na ash

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
977-2									
28-Jan									
29-Jan									
30-Jan	1.09	2.04	1.565	2.2	1.7649E-08	10	50	40	AC/Na ash
31-Jan	0.545	2.04	1.2925	2.2	1.45759E-08	10	50	40	AC/Na ash
1-Feb	1.09	1.63	1.36	2.2	1.53372E-08	10	50	40	AC/Na ash
2-Feb	0.545	1.63	1.0875	2.2	1.22641E-08	10	50	40	AC/Na ash
3-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
4-Feb	1.09	1.63	1.36	2.2	1.53372E-08	10	50	40	AC/Na ash
5-Feb	1.09	1.63	1.36	2.2	1.53372E-08	10	50	40	AC/Na ash
6-Feb	1.09	1.63	1.36	2.2	1.53372E-08	10	50	40	AC/Na ash
7-Feb	0.545	1.02	0.7825	2.2	8.8245E-09	10	50	40	AC/Na ash
8-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
9-Feb	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
10-Feb	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
11-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
12-Feb	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
13-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
14-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
15-Feb	0.545	0.51	0.5275	2.2	5.94879E-09	10	50	40	AC/Na ash
16-Feb	0.545	0.51	0.5275	2.2	5.94879E-09	10	50	40	AC/Na ash
17-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
18-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
19-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
20-Feb	0.545	1.02	0.7825	2.2	8.8245E-09	10	50	40	AC/Na ash
21-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
22-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
23-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
24-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
25-Feb	0.545	1.02	0.7825	2.2	8.8245E-09	10	50	40	AC/Na ash
26-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
27-Feb	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
28-Feb	0.545	0.51	0.5275	2.2	5.94879E-09	10	50	40	AC/Na ash
1-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
2-Mar	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
3-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
4-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
5-Mar	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
6-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
7-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
8-Mar	0.545	1.02	0.7825	2.2	8.8245E-09	10	50	40	AC/Na ash
9-Mar	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
10-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
11-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
12-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
13-Mar	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
14-Mar	0.545	1.02	0.7825	2.2	8.8245E-09	10	50	40	AC/Na ash
15-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
16-Mar	0.545	0.51	0.5275	2.2	5.94879E-09	10	50	40	AC/Na ash
17-Mar	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
18-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
19-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
20-Mar	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
21-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
22-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
23-Mar	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
24-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
25-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
26-Mar	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
27-Mar	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
28-Mar	0.545	1.02	0.7825	2.2	8.8245E-09	10	50	40	AC/Na ash
29-Mar	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
30-Mar	0.545	0.51	0.5275	2.2	5.94879E-09	10	50	40	AC/Na ash
31-Mar	0.545	1.02	0.7825	2.2	8.8245E-09	10	50	40	AC/Na ash
1-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
2-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
3-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
4-Apr	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
5-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
6-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
7-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
8-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
9-Apr	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
10-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
11-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
12-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
13-Apr	1.09	1.63	1.36	2.2	1.53372E-08	10	50	40	AC/Na ash
14-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
15-Apr	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
16-Apr	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
17-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
18-Apr	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
19-Apr	0.545	1.02	0.7825	2.2	8.8245E-09	10	50	40	AC/Na ash
20-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
21-Apr	0.545	1.02	0.7825	2.2	8.8245E-09	10	50	40	AC/Na ash
22-Apr	0.545	1.02	0.7825	2.2	8.8245E-09	10	50	40	AC/Na ash
23-Apr	1.09	1.63	1.36	2.2	1.53372E-08	10	50	40	AC/Na ash
24-Apr	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
25-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
26-Apr	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
27-Apr	1.64	0.51	1.075	2.2	1.21231E-08	10	50	40	AC/Na ash
28-Apr	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash

Date	Total Outflow	Total Inflow	Avg Flow	Grad (psi)	Hydraulic Conductivity	Effec Stress	Confin Press	Back Pres	Moist Cond
29-Apr	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
30-Apr	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
1-May	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
2-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
3-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
4-May	1.64	0.51	1.075	2.2	1.21231E-08	10	50	40	AC/Na ash
5-May	1.09	1.64	1.365	2.2	1.53935E-08	10	50	40	AC/Na ash
6-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
7-May	1.64	0.51	1.075	2.2	1.21231E-08	10	50	40	AC/Na ash
8-May	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
9-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
10-May	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
11-May	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
12-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
13-May	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
14-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
15-May	1.09	0.51	0.8	2.2	9.02186E-09	10	50	40	AC/Na ash
16-May	1.64	0.51	1.075	2.2	1.21231E-08	10	50	40	AC/Na ash
17-May	2.18	1.63	1.905	2.2	2.14833E-08	10	50	40	AC/Na ash
18-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
19-May	2.18	1.02	1.6	2.2	1.80437E-08	10	50	40	AC/Na ash
20-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
21-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
22-May	0.545	1.02	0.7825	2.2	8.8245E-09	10	50	40	AC/Na ash
23-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
24-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
25-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
26-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
27-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
28-May	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
29-May	1.09	1.63	1.36	2.2	1.53372E-08	10	50	40	AC/Na ash
30-May	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
31-May	1.64	0.51	1.075	2.2	1.21231E-08	10	50	40	AC/Na ash
1-Jun	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
2-Jun	1.64	1.63	1.635	2.2	1.84384E-08	10	50	40	AC/Na ash
3-Jun	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
4-Jun	1.64	0	0.82	2.2	9.2474E-09	10	50	40	AC/Na ash
5-Jun	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
6-Jun	1.09	1.02	1.055	2.2	1.18976E-08	10	50	40	AC/Na ash
7-Jun	1.64	0.51	1.075	2.2	1.21231E-08	10	50	40	AC/Na ash
8-Jun	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash
	1.64	1.63	1.635	2.2	1.84384E-08	10	50	40	AC/Na ash
	1.64	1.02	1.33	2.2	1.49988E-08	10	50	40	AC/Na ash

APPENDIX B

ANALYSIS OF SOLUTIONS COLLECTED FROM SODIUM AND CALCIUM INJECTION MATERIALS AND CLAY LINER MATERIALS SYSTEMS

Appendix B. Analysis of Solutions Collected From the Sodium and Calcium Injection Material/Clay Liner Material System

PSC Extract Data	AC-UrAsh120d				AC-CaX120d				AC-NaX120d			
Sample Number>	835-56-30-1	835-56-30-2	835-56-30-3	854-69-30-4	835-56-40-1	835-56-40-2	854-69-40-3	854-69-40-4	835-56-41-1	835-56-41-2	854-69-41-3	854-69-41-4
pH(su)	8.5	7.9	9.3	8.2	8.1	8.1	8.3	8.4	8.4	8	8.3	8.9
EC-25C(mS/cm)	1.86	2.33	1.3	1.9	1.88	2.43	2.44	2.39	1.11	2.27	2.42	2.33
TDS-180C				1800			2540	11600			1940	62000
TDS-Cal	1650	1740	965	623	1530	1680	1480	577	879	1610	1330	792
B(mg/L)	1.51	1	9.93	4.9	2.76	4.96	2.1	1.3	1.19	2.76	2	3.5
F	0.12	0.12	0.08	18.4	0.1	0.09	18.1	1.12	0.07	0.08	58.5	1.83
NO3-1-N				1.35			1.63	1.66			<0.06	1.52
NO2-1-N				<.06			<0.06	<0.06			<0.06	<0.06
PO4-3	<0.01	<0.01	<0.01	<0.6	<0.01	<0.01	<0.6	<0.6	<0.01	<0.01	<0.6	<0.6
SAR	2.9	3.3	6.8	7.85	3.7	4.6	9.43	2.56	2	4.4	9.34	16.6
Tot-Alk as CaCO3	538	819	516	-	645	1080	1090		108	1080	873	
Tot-Hard as "	1060	1280	300	349	851	1000	454	503	450	951	447	273
Tot-Acidity-"	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide+sulfite	2040	54	83	<11	66-<5	114-<5	<11	<11	144-<5	102-<5	<11	<11
Thiosulfate	<30	<30	<30	<3	<30	<30	<3	<3	<5	<5	<3	<3
HCO3-1	656	999	630		787	1310	1150		131	1310	907	
CO3-2	0	0	0		0	0	90		0	0	78	
OH-1	0	0	0		0	0	0		0	0	0	
Cl-	81	129	105	111	93	158	174	182	41	152	193	6.3
Nitrate+Nitrite-N	<0.01	<.06	1.03	1.35	0.4	<0.06	1.63	1.66	0.42	<0.06	<0.06	1.52
SO4-2	668	436	177	76	587	235	64	130	532	174	32	78
Ca	240	240	40	5	10	120	7	12	80	200	24	7
Mg	112	166	49	82	201	171	106	115	61	110	94	62
K	8.8	12	13	12	7	11	10	4	4.5	21	9	9
Na	219	271	271	337	247	336	462	132	96	312	454	630
Al	<0.1	<0.1	<0.1	<0.1	0.4	0.4	<0.1	<0.1	0.5	0.4	<0.1	<0.1
As	<0.05	<0.05	<0.05	<0.005	<0.05	<0.05	<0.005	<0.02	<0.05	<0.05	<0.005	<0.005
Ba	1.4	0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Be	<0.05	<0.05	<0.05	<0.05	<0.005	<0.005	<0.05	<0.05	<0.005	<0.005	<0.05	<0.05
Cd	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cr	<0.03	<0.03	<0.03	<0.01	<0.03	<0.03	<0.01	<0.01	<0.03	<0.03	<0.01	<0.01
Co	<0.03	<0.03	<0.03	<0.02	<0.03	<0.03	<0.02	<0.02	<0.03	<0.03	<0.02	<0.02
Cu	<0.02	<0.02	<0.02	<0.01	<0.02	0.02	<0.01	<0.01	0.02	<0.02	<0.01	<0.01
Fe	<0.05	0.35	<0.05	<0.05	<0.05	<0.05	0.11	<0.05	<0.05	0.3	0.2	<0.05
Pb	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Li	0.1	0.2	0.3	0.22	<0.1	0.2	0.15	0.22	<0.1	0.1	0.16	0.11
Mn	0.2	0.1	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	0.02	<0.02	<0.02	<0.02
Mo	<0.02	<0.02	0.39	0.29	0.05	0.05	0.04	0.06	<0.02	<0.02	<0.02	<0.02
Ni	0.04	0.05	<0.04	<0.02	0.13	0.09	0.03	0.04	0.1	0.07	0.02	0.03
Se	<0.05	<0.05	<0.05	0.007	<0.05	<0.05	<0.005	<0.02	<0.05	<0.05	<0.005	<0.005
Si	21	26	15	11.1	22	27	22.2	24.9	14	26	20.9	22.3
Sr	5.39	7	6.95	0.3	5.2	7.2	0.22	0.41	2.3	6.8	0.9	0.72
V	<0.03	<0.03	<0.03	<0.02	0.05	0.04	<0.02	<0.02	0.05	0.04	<0.02	<0.02
Zn	<0.01	0.01	<0.01	<0.01	<0.03	<0.03	0.1	<0.01	<0.03	<0.03	0.04	<0.01

PSC Extract Data	AC-NaX W/D					AC-NaX F/T			AC-CaX W/D			
Sample Number>	835-56-42-1	854-69-42-2	854-69-42-3	854-69-42-4	854-69-42-5	835-56-43-1	866-36-43-2	866-36-43-3	854-69-47-1	866-36-47-2	854-69-47-3	854-69-47-4
pH(su)	8.1	10.8	10.9	12.4	10.6	8.5	10.5		8.4		9	9.4
EC-25C(mS/cm)	4.1	81.5	25.3	95.6	84.6	10.1	60.5	65.1	3.41	88	3	2.72
TDS-180C		161000	222000	164000	540000			92400	2640		2880	2320
TDS-Cal	3480	123000	95800	239000	92400	8890			2510		1940	1790
B(mg/L)	2.94	482	592	862	526	20.59	344	286	7.6	564	31.7	38
F	0.29	410	874	1530	667	0.67			2.22		19.6	3.09
NO3-1-N		460	754	967	1130				2.62		2.54	2.6
NO2-1-N		75.3	64.1	38.3	88.8				0.6		<0.11	<.11
PO4-3	<0.01	88.4	278	1170	<306	<0.01			<1.1		<1.1	<1.1
SAR	5	2100	884	17900	757	25.9	1130	823	15.2		29.7	42.7
Tot-Alk as CaCO3	269			72100		430			187		908	787
Tot-Hard as "	1890	120	65	5	79	1550	151	323	380		117	49
Tot-Acidity-"	<1	<1	<1	<1	<1	<1			<1		<1	<1
Sulfide+sulfite	83-<30	<38	<11	<11	<11	22-<30			<11		<11	<11
Thiosulfate	<5	<150	<51	<150	<150	<5			<5.5		<5.5	<5.5
HCO3-1	328			70100		525	370		126		813	415
CO3-2	0			8810		0	11000		50		145	262
OH-1	0			0		0	0		0		0	0
Cl-	112	510	881	443	2260	123			128		176	168
Nitrate+Nitrite-N	43	535	818	1000	1220	48			3.22		2.54	2.6
SO4-2	2020	69200	77600	102000	73400	5600			1430		410	409
Ca	400	7	8	2	15	312	6	14	50		4	3
Mg	217	25	11	<1	10	188	33	70	62		26	10
K	17	60	16	100	16	15	29	47	42	82	39	38
Na	505	52800	16400	92200	15400	2350	34000	34000	679	98000	739	685
Al	<0.1	<0.1	<0.1	32.6	<0.1	<0.3	<0.1	<0.1	<0.1	<1	<0.1	<0.1
As	<0.05	2.53	3.33	6.76	6.47	<0.05	0.808	0.744	0.007	1.85	<0.005	<0.005
Ba	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Be	<0.005	<0.05	<0.05	<0.05	<0.05	<0.005	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cd	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	0.03	0.02	<0.002	0.06	<0.002	<0.002
Cr	<0.03	<0.01	0.02	0.01	0.01	<0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Co	<0.02	<0.02	<0.02	<0.02	0.03	<0.03	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02
Cu	<0.01	0.05	0.04	0.01	0.02	<0.02	0.09	0.09	<0.01	0.1	<0.01	<0.01
Fe	<0.05	0.63	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05
Pb	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1			<0.02		<0.02	<0.02
Li	0.1	0.94	0.86	1.87	0.6	0.1			0.6		0.69	0.68
Mn	0.15	0.02	<0.02	<0.02	<0.02	1.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mo	0.04	2.29	3.41	2.7	3.42	0.3	1.61	1.68	0.2	3	0.27	0.31
Ni	0.15	0.03	0.03	<0.01	0.04	0.19	0.02	0.03	0.01	<0.05	0.01	0.01
Se	0.234	7.73	10.1	12	2.08	0.343	3.52	3.68	0.064	7.29	0.134	0.206
Si	91	18.1	15.1	19	35.7	15	13.2	9.8	8.1	172	14.2	16.1
Sr	8.09	0.63	0.43	0.19	1.06	9.2			2.63		0.32	0.88
V	<0.02	1.99	3.27	3.54	2.34	<0.02	1.31	0.94	<0.02	3.2	<0.02	<0.02
Zn	0.04	<0.01	<0.01	0.01	<0.01	0.1	<0.01	0.03	<0.01	<0.01	<0.01	<0.01
												reducing

PSC Extract Data	CaAsh W/D				NaAsh W/D					AC-CaAsh		
Sample Number>	854-69-50-1	854-69-50-2	854-69-50-3	854-69-50-4	854-70-51-1	854-70-51-2	854-70-51-3	854-70-51-4	866-36-53-1	854-70-54-1	854-70-54-1Dup	866-36-54-2
pH(su)	12.1	12	12	11.7	10.2	11.8	12.2	12.2	10.3	8	8	8.8
EC-25C(mS/cm)	11.3	9.58	8.85	4.9	39.4	61.6	80.3	43.6	94.2	3.69	3.69	2.6
TDS-180C	6060	2900	5700	2180	71000	81500	138000	46000		3160	3340	1400
TDS-Cal	3390	2840	2800	1490	152700	84200	143900	44100		16600	2640	8320
B(mg/L)	0.8	0.4	0.5	0.5	156	368	522	133	630	0.7	0.61	0.87
F	3.09	2.02	<0.5	1.37	441	577	941	163	524	4.3	3.76	6.86
NO3-1-N	22.8	17.1	90.6	10.3	512	666	519	140		2.49	2.51	
NO2-1-N	0.9	0.57	<3.6	0.89	12.6	22.3	32.4	2.43		<.11	<0.26	
PO4-3	<5.1	<3.6	<36	<2.6	<15.6	119	1210	21		<1.1	<1.1	
SAR	51.4	43.8	30.8	48.6	3210	9650	15900	7540	2860	23.6	25.3	298
Tot-Alk as CaCO3	2640	2170		1110		29300	45400	18100	30300	208	213	351
Tot-Hard as "	100	102	160	20	5	2.5	2.5	1	159	98	96	117
Tot-Acidity-"	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide+sulfite	<38	<38	<11	<38	<11	<11	<38	<11		<11		
Thiosulfate	41	67	<18	<13	<78	<126	<150	<78	<660	<5.5	<5.5	<5.5
HCO3-1	0	0		0		25900	0	0	1510	253	260	380
CO3-2	209	256		181		4870	54300	10100	17500	0	0	23
OH-1	779	591		276		0	307	456	0	0	0	0
Cl-	161	126	338	60	210	326	438	130	1060	229	230	177
Nitrate+Nitrite-N	23.7	17.7	91.2	11.2	525	688	551	142	1000	2.49	2.51	4.31
SO4-2	177	125	1200	92	16800	30400	58000	15600	76100	1560	1610	481
Ca	40	41	64	8	2	1	1	<1	40	26	25	37
Mg	<1	<1	<1	<1	<1	<1	<1	<1	15	8	8.1	5.9
K	226	215	212	152	200	150	50	10	64	68	72	5.6
Na	1180	1020	895	499	135000	35100	57600	17300	83000	536	568	7400
Al	4.4	1	1.6	1.2	<0.1	3.2	13.5	30.5	<10	<0.3	<0.3	<0.1
As	<0.005	<0.005	<0.005	<0.005	0.712	2.26	3.73	1.22	3.26	<0.005	<0.005	0.088
Ba	10.7	11.5	14.1	4.1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<.5
Be	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.1	<0.05	<0.05	<0.05
Cd	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.05	<0.002	<0.002	<0.002
Cr	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01		<0.01	<0.01	<0.01
Co	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.5	<0.02	<0.02	<0.02
Cu	0.02	0.01	0.02	<0.01	0.03	0.01	<0.01	<0.01	0.5	<0.01	<0.01	0.01
Fe	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05		<0.05	<0.05	<0.05
Pb	0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<2	<0.02	0.08	<0.02
Li	2.64	2.53	2.65	1.93	0.26	0.65	0.95	0.27		0.1	0.09	
Mn	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.36	0.36	<0.02
Mo	0.47	0.36	0.32	0.18	0.92	1.73	1.84	0.56	5	<0.02	<0.02	<0.02
Ni	0.01	<0.01	<0.01	<0.01	0.06	<0.01	<0.01	<0.01	<0.5	0.11	0.1	0.05
Se	0.037	0.024	0.02	0.009	2.35	5.55	6.73	1.98	9.02	<0.005	<0.005	0.109
Si	22.9	16.1	14.9	28.7	19.4	30.5	34.5	46.4	20	10.4	9.8	11.2
Sr	23.7	27.3	35.7	19.3	0.36	0.07	0.09	<0.1	<2	5.1	5.1	1.36
V	<0.02	<0.02	<0.02	<0.02	1.11	2.26	3.51	1.5	0.5	<0.02	<0.02	<0.02
Zn	0.04	0.01	0.04	<0.01	<0.01	<0.01	0.02	0.03	<0.1	0.03	0.03	<0.01

PSC Extract Data	AC-CaAsh			CaAsh F/T				NaAsh F/T				AC-CaCl$_2$trt-CaX W/
Sample Number>	866-36-54-3	866-36-54-4	854-70-55-5	854-70-56-1	854-70-56-2	854-70-56-3	854-70-56-4	854-70-57-1	854-70-57-2	854-70-57-3	854-70-57-4	866-36-58-1
pH(su)	8.8	9	10.6	11.9	12	11.8	11.7	12.1	12.1	12.2	12.1	7.2
EC-25C(mS/cm)	1.67	1.37	0.77	11.7	12.4	6.47	7.41	39.2	39.6	21.3	59.7	31.1
TDS-180C	900	800	800	4080	3880	2820	2360	41500	39900	15600	75300	34900
TDS-Cal	971	779	336	3560	3260	1540	723	38100	40200	13600	80700	23500
B(mg/L)	0.64	0.6	30.3	0.52	0.29	0.26	0.41	154	117	61.2	272	3.83
F	6.31	6.91	0.63	13.9	13.4	1.76	1.68	452	326	106	255	<76
NO3-1-N			2.13	37.2	38.7	25.3	12.6	357	243	117	337	
NO2-1-N			0.23	1.71	0.46	0.38	<0.26	14.5	9.77	3.34	8.67	
PO4-3			<0.6	<5.1	<5.1	<2.6	<2.6	<15.6	<15.6	<10.1	61.8	
SAR	17	21.6	0.99	585	94	27.1	21.2	6400	6560	2340	14000	2
Tot-Alk as CaCO3	654	632	291	2590	2750	1260		12600	10900	7230	23600	24
Tot-Hard as "	85	32	210	<1	30	50	70	1	<1	<1	<1	18800
Tot-Acidity-"	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide+sulfite			<11	<11	<11	<11	<11	<11	<11	<11	<11	
Thiosulfate	<3.0	<3	<3	<26	<26	<13	<13	<78	<78	<50.5	<126	<251
HCO3-1	713	656	0	0	0	0		0	0	0	0	29
CO3-2	41	57	83	208	1490	65		7320	5990	3560	13800	0
OH-1	0	0	52	762	87	392		126	297	442	207	0
Cl-	121	73	6.7	249	81	63	46	228	195	99	269	13300
Nitrate+Nitrite-N	2.32	3.52	2.36	38.9	39.2	25.7	12.6	372	253	120	346	<15
SO4-2	58	26	29	224	203	107	87	15200	18100	3680	33600	2530
Ca	26	11	84	<1	12	20	28	<1	<1	<1	<1	6060
Mg	5	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	907
K	3.7	6.3	5	191	135	123	142	10	20	8	50	30
Na	362	279	33	1350	1180	441	407	14700	15100	5380	32300	624
Al	<0.1	<0.1	4.5	0.8	0.4	<0.1	0.3	25.3	28.8	60	13.1	<0.1
As	0.013	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	0.86	1.08	0.458	2.05	<0.005
Ba	<0.5	<0.5	2.1	4.6	12.5	18.6	21.4	<0.5	<0.5	<0.5	<0.5	<0.5
Be	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cd	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02
Cr	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Co	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Cu	0.02	0.01	<0.01	0.02	0.42	0.29	0.01	0.03	0.02	0.02	0.02	0.03
Fe	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Pb	<0.02	<0.02	<0.02	<0.02	0.04	0.08	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2
Li			0.17	2.79	1.82	1.59	1.82	0.18	0.17	0.11	0.32	
Mn	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	1.36
Mo	<0.02	<0.02	0.66	0.52	0.31	0.13	0.13	0.92	0.72	0.32	1.19	0.05
Ni	0.02	0.03	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.26
Se	<0.005	0.008	0.052	0.049	0.042	0.023	0.017	2.16	1.62	0.59	4.02	0.078
Si	13	26	6.7	18.7	9.9	13.4	15.1	40.8	43.6	58	44.8	5
Sr	0.69	0.35	10.5	7.8	21.4	31.9	38.2	0.1	0.1	<0.1	<0.1	44.8
V	<0.02	<0.02	0.02	<0.02	<0.02	<0.02	0.02	1.21	1.81	1.15	2.37	0.04
Zn	0.01	<0.01	<0.01	0.05	0.29	1.05	0.06	0.01	0.08	0.05	0.01	0.02

PSC Extract Data	aCl$_2$trt-CaX W/D			BaseAsh F/T			???			
Sample Number>	866-36-58-2	866-36-58-3	888-42-58-4	866-36-61-1	866-36-61-2	866-36-61-3	866-36-62-1	866-36-62-2	866-36-62-3	866-36-62-4
pH(su)	8.4	8.1		11.1	8.1		10.1	10.5		10.2
EC-25C(mS/cm)	6.5	4.5		2.9	0.472	0.404	83.6	81.5	95.6	87.4
TDS-180C	5600	2200		700	400		102000	98200		131000
TDS-Cal	4690	3130		574	184		109000	91100		133000
B(mg/L)	18.4	29	39.5	28.3	8.68	9.1	308	349	544	403
F	4.98	3.61	3.25	3.55	1.04	0.93	124	187	680	268
NO3-1-N										
NO2-1-N										
PO4-3			<.05							
SAR	7.2	8.9	31.4	4.6	2.1	0.1	664	884	5150	2650
Tot-Alk as CaCO3	187	82		553	86		8200	16200		16900
Tot-Hard as "	2160	981	101	107	60	55	1070	297	56	73
Tot-Acidity-"	<1	<1		<1	<1		<1	<1		<1
Sulfide+sulfite										
Thiosulfate	<13	<5.5	3.14	<5.5	<3	<3	<560	<560	<660	<560
HCO3-1	212	99		0	105		0	0		1050
CO3-2	7.7	0		149	0		4840	9550		9590
OH-1	0	0		103	0		47	97		0
Cl-	1700	665	356	16	6.6	6.5	16800	11900	4620	2770
Nitrate+Nitrite-N	<15	9.51		10.2	5.93	5.29	623	646	900	702
SO4-2	1230	1370	1110	60	53	34	34900	33700	72700	67200
Ca	752	322	19	43	24	22	18	20	16	21
Mg	70	43	13	<1	<1	<2	250	60	4	5
K	38	29	22	3	5.6	1.1	960	44	75	56
Na	775	643	724	110	37	1.3	50000	35000	89000	52000
Al	<0.1	<0.1	0.1	6.3	0.2	<0.1	<1	<0.1	<0.2	<0.1
As	<0.005	<0.005	0.005	<0.005	<0.005	<0.005	0.835	1.39	3.89	2.31
Ba	<0.5	<0.5	<0.5	5.6	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Be	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cd	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.02	0.02	0.06	0.03
Cr	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Co	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.05	<0.02	<0.02	<0.02
Cu	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	0.08	0.06	0.12	2.48
Fe	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.5	<0.05	<0.05	<0.05
Pb	<0.02	<0.02	<0.02	<0.02	<0.02	<0.04	<0.2	<0.2	<1	<1
Li										
Mn	0.09	0.08	<0.02	<0.02	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02
Mo	0.09	0.13	0.1	0.1	0.12	0.12	2.01	1.73	3.08	2.68
Ni	0.02	0.03	0.01	<0.01	<0.01	<0.01	<0.05	0.01	0.12	0.19
Se	0.03	0.029	0.04	0.049	0.036	0.031	3.86	4.54	8.17	6.88
Si	7.3	12.3	18	7.6	19.7	40.6	60	10.7	17.1	61.4
Sr	7.12	5.64	1.12	17.8	3	4.02	1.9	0.17	0.66	1.1
V	<0.02	<0.02	<0.02	<0.02	0.03	0.04	2	1.63	2.8	1.27
Zn	0.03	0.01	0.02	<0.01	<0.01	<0.01	<0.05	<0.01	0.03	0.13

PSC Extract Data	AC-Ca ash W/D	AC-CaCl-CaX F/T				RC-CaX 120d				RC-UX 120d	
Sample Number>	888-42-63-1	866-36-65-1	866-36-65-2	866-36-65-3	888-42-65-4	888-42-70-1	888-42-70-2	888-42-70-3	888-42-70-4	888-42-71-1	888-42-71-2
pH(su)		7.6		8.2							
EC-25C(mS/cm)		34.3	broke-lost	8.1							
TDS-180C		40700		6800							
TDS-Cal		26300		5020							
B(mg/L)	430	22		29	21.8	2.92	4.26	4.44	6.51	3.48	4.48
F	180	<76		<15	2.24	0.17	0.19	0.19	0.17	0.15	0.05
NO3-1-N											
NO2-1-N											
PO4-3	235				<0.05	<0.05	0.2	0.48	<0.05	<0.05	0.05
SAR	1601	3.4		5.7	8.4	14.9	25.7	27.1	30.8	19.6	20.7
Tot-Alk as CaCO3		108		71							
Tot-Hard as "	99	19800		2860	1230	1070	726	771	2050	1300	1200
Tot-Acidity-"		<1		<1							
Sulfide+sulfite											
Thiosulfate	4.7	<250		<51	<0.5	<0.5	4.72	<0.5	2.62	0.52	2.62
HCO3-1		131		87							
CO3-2		0		0							
OH-1		0		0							
Cl-	218	14900		1720	747	58	172	172	126	75	86
Nitrate+Nitrite-N		183		48.6							
SO4-2	53900	2570		1400	1420	2260	2020	2740	7670	4010	3970
Ca	25	6690		971	408	162	6	14	266	194	121
Mg	9	768		107	52	161	173	179	337	199	219
K	53	23		31	35	26	62	34	36	32	30
Na	36700	1100		700	680	1120	1590	1730	3210	1630	1650
Al	1.1	0.9		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
As		0.175		0.06	<0.005	<0.005			<0.005	<0.005	<0.005
Ba	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Be	<0.05	<0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cd	<0.002	<0.02		<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cr	<0.03	<0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Co	0.06	<0.02		<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cu	0.19	0.02		0.01	0.01	<0.01	0.09	0.01	<0.01	<0.01	<0.01
Fe	0.55	<0.05		<0.05	<0.05	0.06	0.1	0.07	0.05	<0.05	<0.05
Pb	0.02	<0.2		<0.02	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Li											
Mn	0.03	<0.02		<0.02	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Mo	2.56	0.25		0.2	0.23	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Ni	0.26	0.02		0.03	0.09	0.08	0.03	0.02	0.03	0.04	0.01
Se		0.184		0.141	0.113	0.018			0.008	0.022	0.005
Si	35	2.5		10.1	20	35	42	42	39	38	36
Sr	0.83	52.7		12.14	5.75	4.86	0.14	0.6	9.67	7.24	2.81
V	1.9	0.04		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Zn	0.46	<0.01		<0.01	0.43	0.21	0.1	0.01	0.04	0.05	0.02

PSC Extract Data	RC-UX 120d		RC-CaX 120d						RC-Na ash			
Sample Number>	888-42-71-3	888-42-71-4	888-42-76-1	888-42-76-2	888-42-76-3	888-42-76-3D	888-42-76-4	888-42-76-5	888-42-81-1	888-42-81-1D	888-42-81-2	888-42-81-3
pH(su)												
EC-25C(mS/cm)												
TDS-180C												
TDS-Cal												
B(mg/L)	5.05	5.48	3.12	4.26	4.85	4.73	5.5	5.78	406	406	68.5	12.5
F	0.04	0.06	0.09	0.08	0.17		0.29	0.19	348		89	17
NO3-1-N												
NO2-1-N												
PO4-3	<0.05	0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.32	205	258	7.85	6.71
SAR	18.7	20.4	17.3	21.6	19.6	20	20.2	18.3	2886	2824	980.3	136.9
Tot-Alk as CaCO3												
Tot-Hard as "	1480	1290	943	987	1330	1340	1450	1630	40	40	6	4
Tot-Acidity-"												
Sulfide+sulfite												
Thiosulfate	2.1	1.31	<0.5	4.98	2.62		3.93	4.45	5.76		<0.5	2.1
HCO3-1												
CO3-2												
OH-1												
Cl-	57	115	103	115	126		115	190	477		86	69
Nitrate+Nitrite-N												
SO4-2	4220	4050	2880	3230	3600		4090	4120	48800		4900	350
Ca	220	136	88	61	173	175	195	253	14	14	2.6	1.7
Mg	226	231	176	203	218	220	234	242	1.3	1.3	<1	<1
K	30	30	29	31	31	31	35	33	63	63	5	<.02
Na	1650	1680	1220	1560	1640	1680	1770	1700	42100	41200	5740	648
Al	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	2.2	2.2	32	24
As	0.005	<0.005	<0.005	<0.005	<0.005		<0.005	<0.005	3.32		0.684	0.126
Ba	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Be	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Cd	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cr	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	0.01	<0.01	<0.01
Co	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Cu	<0.01	<0.01	0.02	0.01	<0.01	<0.01	0.04	0.01	0.1	0.11	0.05	0.01
Fe	<0.05	<0.05	0.07	<0.05	0.08	0.09	0.07	0.07	0.2	0.2	0.11	<0.05
Pb	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Li												
Mn	<0.02	<0.02	0.06	<0.02	<0.02	<0.02	<0.02	0.09	<0.02	<0.02	<0.02	<0.02
Mo	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	1.72	1.71	0.23	0.04
Ni	0.02	0.01	0.06	0.02	0.03	0.03	0.03	0.04	<0.01	<0.01	0.01	<0.01
Se	0.016	<0.005	0.029	0.014	0.016		0.008	0.005	0.614		0.51	0.027
Si	32	32	9.6	14	13	13	14	13	34	35	28	17
Sr	6.39	3.99	2.24	1.82	4.09	4.03	5.29	5.85	0.47	0.47	0.03	0.02
V	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	2.47	2.45	1.16	0.31
Zn	0.04	0.03	0.36	0.03	0.05	0.05	0.07	0.08	0.02	0.02	0.02	0.01

PSC Extract Data	RC-Na ash		RC-Ca ash120d
Sample Number>	888-42-81-4	888-42-81-5	888-42-83-1
pH(su)			
EC-25C(mS/cm)			
TDS-180C			
TDS-Cal			
B(mg/L)	10.2	3.76	2.46
F	9.52	3.11	1.75
NO3-1-N			
NO2-1-N			
PO4-3	1.4	1.64	0.26
SAR	122.7	62.7	18.5
Tot-Alk as CaCO3			
Tot-Hard as "	3	2	670
Tot-Acidity-"			
Sulfide+sulfite			
Thiosulfate	<0.5	<0.5	4.19
HCO3-1			
CO3-2			
OH-1			
Cl-	57	10300	155
Nitrate+Nitrite-N			
SO4-2	185	21	1810
Ca	1.2	0.9	178
Mg	<1	<1	55
K	<0.2	<0.2	24
Na	488	216	1100
Al	14	12	<0.1
As	0.106	0.043	0.013
Ba	<0.5	<0.5	<0.5
Be	<0.05	<0.05	<0.05
Cd	<0.002	<0.002	<0.002
Cr	<0.01	<0.01	<0.01
Co	<0.01	<0.01	<0.01
Cu	0.08	0.02	0.01
Fe	<0.05	<0.05	<0.05
Pb	<0.02	<0.02	<0.02
Li			
Mn	<0.02	<0.02	0.29
Mo	0.04	<0.02	0.41
Ni	<0.01	<0.01	0.01
Se	<0.005	0.005	0.19
Si	12	11	67
Sr	<0.02	<0.02	3.91
V	0.29	0.12	0.02
Zn	0.05	0.02	0.02

APPENDIX C

DATA SUMMARY FOR THE STRENGTH CHARACTERISTICS OF THE SYNTHETIC LINER MATERIALS

Table C-1. Data Summary for PVC, 30 Day Conditioning

PROPERTY	UNTREATED		BASELINE		Na_2CO_3		Ca		Na_2C0_3-UREA	
WITH GRAIN	*AVERAGE*	*±CV%*	*AVERAGE*	*±CV%*	*AVERAGE*	*±CV%*	*AVERAGE*	*±CV%*	*AVERAGE*	*±CV%*
Elongation @ Break (%)	443	6	315	10	320	2	330	1	350	0
Breaking Strength (ksi)	3.06	1	2.88	6	3.00	1	2.87	2	3.76	3
Stress @ 100% Elongation (ksi)	1.80	2	1.61	2	1.68	4	1.62	1	1.93	5
Stress @ 200 % Elongation (ksi)	2.5	2	2.20	1	2.27	2	2.18	1	2.76	2
Tear Strength (lb)	26.4	11	25.9	8	25.5	4	25.8	6	27	2
CROSS GRAIN										
Elongation @ Break (%)	437	6	323	6	342	3	355	2	330	9
Breaking Strength (ksi)	2.76	2	2.63	4	2.73	1	2.74	1	3.19	4
Stress @ 100% Elongation (ksi)	1.69	2	1.49	33	1.54	3	1.61	1	1.74	1
Stress@200% Elongation (ksi)	2.25	2	2.00	1	2.08	1	2.0[illegible]	1	2.37	3
Tear Strength (lb)	25.0	6	23.9	5	23.3	3	22.3	7	27	4
Puncture Force (lb)	89	1	90.0	2	85.9	2	88.5	1.1	92.0	1

Table C-2. Data Summary for PVC, 60 Day Conditioning

PROPERTY	**BASELINE**		**Na_2CO_3**		**Ca**		**Na_2CO_3 UREA**	
WITH GRAIN	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***
Elongation @ Break %	377	4	363	3	360	3	367	8
Breaking Strength ksi	2.85	1	2.88	2	3.06	6	2.08	1
Stress @ 100% Elongation ksi	1.73	2	1.74	0	1.84	5	1.22	2
Stress @ 200 % Elongation ksi	2.23	1	2.24	1	2.37	4	1.67	2
Tear Strength lb	23.5	3	25.2	16	25	9	18	7
CROSS GRAIN								
Elongation @ Break %	323	5	277	4	320	5	323	8
Breaking Strength ksi	2.91	2	2.76	2	3.13	4	2.25	4
Stress @ 100% Elongation ksi	1.84	2	1.92	0	1.93	1	1.29	4
Stress @ 200 % Elongation ksi	2.45	1	2.48	1	2.59	0	1.82	3
Tear Strength lb	26.8	11	31	19	26.8	14	18	7
Puncture Force lb	85.5	1	86.4	0	88.2	1	86	0

Table C-3. Data Summary for PVC, 90 Day Conditioning

PROPERTY	BASELINE		Na_2CO_3		Ca		Na_2CO_3 UREA	
	AVERAGE	*±CV%*	*AVERAGE*	*±%CV*	*AVERAGE*	*±%CV*	*AVERAGE*	*±%CV*
WITH GRAIN								
Elongation @ Break %	350	0	450	22	357	3	363	6
Breaking Strength ksi	1.50	3	1.36	2	1.49	0	2.77	1
Stress @ 100% Elongation ksi	0.91	2	0.85	5	0.87	2	1.65	1
Stress @ 200 % Elongation ksi	1.13	0.9	1.07	2	1.14	3	2.20	2
Tear Strength lb	20.5	2	11.2	2	22.3	2	26	5
CROSS GRAIN								
Elongation @ Break %	397	1	300	17	400	0	377	3
Breaking Strength ksi	1.38	2	1.40	13	1.40	2	2.65	1
Stress @ 100% Elongation ksi	0.81	1	0.84	5	0.80	2	1.56	1
Stress @ 200 % Elongation ksi	1.17	9	1.13	3	1.06	3	1.99	0
Tear Strength lb	20.7	3	11.7	5	19.1	4	25.3	8
Puncture Force lb	83	1	42.8	2	84	1	91.4	1

Table C-4. Data Summary for PVC, 120 Day Conditioning

PROPERTY	BASELINE		Na_2CO_3		Ca		Na_2CO_3 UREA	
WITH GRAIN	***AVERAGE***	***±CV%***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***
Elongation @ Break %	313	3	273	17	303	12	333	17
Breaking Strength ksi	3.21	2	3.47	17	2.85	3	2.89	1
Stress @ 100% Elongation ksi	1.80	0	2.23	8	1.80	0	1.80	3
Stress @ 200 % Elongation ksi	2.43	0	2.81	2	2.38	1	2.35	2
Tear Strength lb	25.1	5	26.9	8	29.1	7	27.2	9
CROSS GRAIN								
Elongation @ Break %	307	4	206	5	340	5	323	5
Breaking Strength ksi	2.88	3	3.17	5	2.72	1	2.71	1
Stress @ 100% Elongation ksi	1.68	2	2.60	6	1.68	1	1.71	1
Stress @ 200 % Elongation ksi	2.25	2	3.17	5	2.19	2	2.21	1
Tear Strength lb	26.2	16	22.5	0	24.4	9	26.6	5
Puncture Force lb	101	0	90	1	103	1	100	1

Table C-5. Data Summary for HDPE, 30 Day Conditioning

PROPERTY	UNTREATED		BASELINE		Na_2CO_3		Ca		Na_2C0_3-UREA	
WITH GRAIN	*AVERAGE*	*±CV%*	*AVERAGE*	*±CV%*	*AVERAGE*	*±CV%*	*AVERAGE*	*±CV%*	*AVERAGE*	*±CV%*
Elongation @ Yield (%)	13	8	15.7	13	12.7	4.5	13.3	31	19	6
Elongation @ Break (%)	292	65	548	0	395	42	362	66	660	2
Yield Strength (ksi)	2.95	3	2.83	2	2.83	2.1	2.69	5	1.17	1
Breaking Strength (ksi)	2.1	7	2.78	6	2.05	5.7	2.33	14	1.20	11
Stress @ 100% Elongation (ksi)	1.62	44	2.11	4	1.9	1.6	2.14[1]	2	0.79	1
Stress @ 200 % Elongation (ksi)	2.06[1]	2	2.20	7	1.85	11	2.17[1]	4	0.80	1
Elastic Modulus (ksi)	114	9	119	12	169	15.5	125	11	86.3	23
Tear Strength (lb)	47.2	3	47.7	4	48.4	3	49.9	4	46	4
CROSS GRAIN										
Elongation @ Yield (%)	14.3	4	14.0	0	18.3	42	18.3	19	18	8
Elongation @ Break (%)	478	14	627	2	377	58	243	110	620	5
Yield Strength (ksi)	2.8	3	2.98	1	2.76	3	2.89	6	1.11	1
Breaking Strength (ksi)	2.36	15	2.92	3	2.16	4	2.27[1]	10	1.22	6
Stress @ 100% Elongation (ksi)	2.05	1	1.97	2	2.06	2	1.92[2]		0.80	1
Stress@200% Elongation (ksi)	2.10	2	1.99	2	2.05[1]	3	1.92[2]		0.82	1
Elastic Modulus (ksi)	101	9	125	2	146	20	126	8	77.9	--
Tear Strength (lb)	49.7	3	48.1	2	50.5	5	48.7	6	47	8
Puncture Force (lb)	135	2	133	1	136	2	134	1	140	1

Table C-6. Data Summary for HDPE, 60 Day Conditioning

PROPERTY	BASELINE		Na_2CO_3		Ca		Na_2CO_3 UREA	
WITH GRAIN	***AVERAGE***	***±CV%***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***
Elongation @ Yield %	16.3	7	15.3	10	14.3	4	20.3	3
Elongation @ Break %	242	95	350	45	250	76	460	40
Yield Strength ksi	2.75	4	2.61	2	2.75	0	2.03	1
Breaking Strength ksi	2.00	4	2.03	17	2.08	2	1.50	6
Stress @ 100% Elongation ksi	1.97	2	1.80	1	2.07	2	1.36	1
Stress @ 200 % Elongation ksi	1.95*		1.84	2	2.06*		1.39	1
Elastic Modulus ksi	86.6	0	92.2	0	84	5	78.4	36
Tear Strength lb	46.1	4	45.5	4	46.1	3	33.5	4
CROSS GRAIN								
Elongation @ Yield %	13.0	15	13.7	4	15.0	7	20	3
Elongation @ Break %	393	63	407	45	410	49	303	35
Yield Strength ksi	2.93	2	2.48	3	2.8	4	1.98	2
Breaking Strength ksi	2.18	14	2.02	8	2.04	11	1.51	3
Stress @ 100% Elongation ksi	1.85	12	1.88	2	1.93	7	1.45	0
Stress @ 200 % Elongation ksi	2.06	2	1.47	56	1.98	2	1.48	1
Elastic Modulus ksi	88.6	3	85.1	5	88.2	7	93.9	8
Tear Strength lb	44.2	4	47.2	7	45.3	6	34.6	2
Puncture Force lb	133	6	129	2	138	1	131	0

* Only one data point available, therefore no average or CV.

Table C-7. Data Summary for HDPE, 90 Day Conditioning

PROPERTY	**BASELINE**		**Na_2CO_3**		**Ca**		**Na_2CO_3 UREA**	
WITH GRAIN	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***
Elongation @ Yield %	17.7	12	22	20	30	47	19.7	3
Elongation @ Break %	587	4	640	9	540	13	435	66
Yield Strength ksi	2.88	1	2.92	1	2.78	3	2.76	2
Breaking Strength ksi	2.82	7	2.93	4	2.38	17	2.27	7
Stress @ 100% Elongation ksi	1.94	1	1.86	0	1.84	3	1.80	0
Stress @ 200 % Elongation ksi	2.01	2	1.92	2	1.96	1	1.85	1
Elastic Modulus ksi	88.1	2	93.9	5	125.7	8	104.8	1
Tear Strength lb	44.2	1	45.3	8	45.5	9	49.8	4
CROSS GRAIN								
Elongation @ Yield %	20	0	19.3	5	26	16	19.3	3
Elongation @ Break %	503	18	562	7	568	1	463	47
Yield Strength ksi	2.80	1	2.79	0	2.77	1	2.65	0
Breaking Strength ksi	2.44	16	2.84	1	2.61	8	2.44	8
Stress @ 100% Elongation ksi	2.03	0	1.99	1	2.03	1	1.92	2
Stress @ 200 % Elongation ksi	2.06	1	2.05	1	2.05	0	1.98	
Elastic Modulus ksi	96	1	90.6	4	84	0	96.8	5
Tear Strength lb	47.3	4	47.3	1	46.6	4	52.3	17
Puncture Force lb	132.1	0	132.7	1	>121.2	>7	128	0

Table C-8. Data Summary for HDPE, 120 Day Conditioning

PROPERTY	**BASELINE**		**Na_2CO_3**		**Ca**		**Na_2CO_3 UREA**	
WITH GRAIN	***AVERAGE***	***±CV%***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***
Elongation @ Yield %	18.3	6	19.3	6	20	0	19.3	6
Elongation @ Break %	557	7	603	8	380	54	427	51
Yield Strength ksi	2.79	0	2.73	3	2.82	2	2.69	4
Breaking Strength ksi	2.52	16	2.66	15	1.99	10	1.97	10
Stress @ 100% Elongation ksi	1.98	1	1.95	5	1.85	3	1.77	2
Stress @ 200 % Elongation ksi	2.00	1	1.72	23	1.91	0	1.83	2
Elastic Modulus ksi	85.1	1	99.3	2	101	1	96.8	0
Tear Strength lb	42.7	3	51.3	5	45.5	11	43	4
CROSS GRAIN								
Elongation @ Yield %	19.3	5	19	5	20.3	3	20	0
Elongation @ Break %	543	16	617	5	423	26	327	75
Yield Strength ksi	2.87	1	2.8	3	2.70	1	2.70	4
Breaking Strength ksi	2.30	17	2.73	11	2.00	1	1.98	4
Stress @ 100% Elongation ksi	1.83	3	1.83	5	1.93	1	1.92	0
Stress @ 200 % Elongation ksi	1.88	2	1.87	5	1.98	1	1.95	0
Elastic Modulus ksi	95	2	101.2	1	94.7	2	95.6	4
Tear Strength lb	44.2	9	42.6	7	50.9	5	47.5	11
Puncture Force lb	137	0	133	0	144	0	145	0

Table C-9. Data Summary for VDPE, 30 Day Conditioning

PROPERTY	UNTREATED		BASELINE		Na_2CO_3		Ca		Na_2CO_3-UREA	
WITH GRAIN	*AVERAGE*	*±CV%*	*AVERAGE*	*±CV%*	*AVERAGE*	*±CV%*	*AVERAGE*	*±CV%*	*AVERAGE*	*±CV%*
Elongation @ Yield (%)	18	10	15	7	15.7	4	14.0	12	20	0
Elongation @ Break (%)	490	40	>630		>630	1	>622		660	2
Yield Strength (ksi)	1.22	3	1.16	3	1.18	2	1.18	3	1.13	0
Breaking Strength (ksi)	2.03	34	>2.82		>2.95		>2.72		3.08	1
Stress @ 100% Elongation (ksi)	1.22	3	1.20	2	1.22	2	1.17	2	1.25	1
Stress @ 200 % Elongation (ksi)	1.24	3	1.17	1	1.19	2	1.20	2	1.21	0
Elastic Modulus (ksi)	30.5	2	41.8	3	52.9	1	39.4	13	24.0	19
Tear Strength (lb)	20.8	7	21.7	4	20.1	3	22.8	8	21	5
CROSS GRAIN										
Elongation @ Yield (%)	16.0	6	17.0	10	19.7	15	15.3	4	19	7
Elongation @ Break (%)	>570		>615		>645	3	>625		677	2
Yield Strength (ksi)	1.25	1	1.15	0	1.17	3	1.18	2	1.12	4
Breaking Strength (ksi)	>3.29		>2.84		>2.92		>2.76		2.89	2
Stress @ 100% Elongation (ksi)	1.21	0	1.24	2	1.20	2	1.19	1	1.20	2
Stress@200% Elongation (ksi)	1.25	3	1.22	0	1.20	2	1.22	1	1.16	3
Elastic Modulus (ksi)	31.5	7	38.2	8	48.2	7	42.0	1	31.6	9
Tear Strength (lb)	18.3	2	24.6	11	20.8	3	22.8	6	21	8
Puncture Force (lb)	58.0	2	62.7	0	60.3	4	62.7	1	67	1

* Only one data point available, therefore no average or CV.

Table C-10. Data Summary for VDPE, 60 Day Conditioning

PROPERTY	BASELINE		Na_2CO_3		Ca		Na_2CO_3 UREA	
WITH GRAIN	***AVERAGE***	***±CV%***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***
Elongation @ Yield %	17.7	3	17.0	6	15.7	4	19	5
Elongation @ Break %	>635*		611	2	>615*		>670	>9
Yield Strength ksi	1.18	3	1.19	3	1.18	0	0.84	0
Breaking Strength ksi	>2.60*		2.63	4	>2.55*		>2.1	15
Stress @ 100% Elongation ksi	1.20	2	1.23	2	1.19	1	0.86	1
Stress @ 200 % Elongation ksi	1.17	3	1.22	3	1.18	0	0.88	0
Elastic Modulus ksi	29.8	10	24.2	13	25.0	24	34.2	7
Tear Strength lb	20.7	2	22.9	5	21.7	8	13.7	15
CROSS GRAIN								
Elongation @ Yield %	17.3	9	19.3	3	17.3	3	18	14
Elongation @ Break %	>620*		588	6	>620*		670	2
Yield Strength ksi	1.18	1	1.17	1	1.16	1	0.85	1
Breaking Strength ksi	>2.69*		2.46	11	>2.63*		>2.3	3
Stress @ 100% Elongation ksi	1.22	1	1.22	2	1.18	2	0.92	1
Stress @ 200 % Elongation ksi	1.21	1	1.19	1	1.18	2	0.90	1
Elastic Modulus ksi	25.7	8	25.0	18	26.5	5	28.4	15
Tear Strength lb	20.8	1	20.2	4	23.1	6	13.8	6
Puncture Force lb	60.1	0	62.4	0	63.8	3	49	17

* Only one data point available, therefore no average or CV.

Table C-11. Data Summary for VDPE, 90 Day Conditioning

PROPERTY	BASELINE		Na_2CO_3		Ca		Na_2CO_3 UREA	
WITH GRAIN	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***
Elongation @ Yield %	15.7	6	32	19	20.3	6	20	5
Elongation @ Break %	>590*		>673	>6	>615	0	>653	1
Yield Strength ksi	1.13	2	1.16	3	1.17	1	1.16	3
Breaking Strength ksi	>2.49*		2.7	11	>2.48*		2.54	2
Stress @ 100% Elongation ksi	1.15	0	1.19	2	1.17	1	1.14	3
Stress @ 200 % Elongation ksi	1.15	0	1.20	4	1.17	3	1.12	2
Elastic Modulus ksi	32.3	10	34.6	16	34.5	1	38.9	5
Tear Strength lb	23.8	13	21.4	3	22.8	8	20.4	8
CROSS GRAIN								
Elongation @ Yield %	18	4	28	3	18.3	3	17.3	3
Elongation @ Break %	>590*		>617	>14	>615*		>647	1
Yield Strength ksi	1.11	0	1.09	5	1.16	3	1.15	3
Breaking Strength ksi	>2.50*		2.08	24	>2.40*		2.64	1
Stress @ 100% Elongation ksi	1.17	1	1.14	0	1.19	3	1.13	3
Stress @ 200 % Elongation ksi	1.14	1	1.10	4	1.14	3	1.09	2
Elastic Modulus ksi	35.5	8	33	1	34.6	5	31.4	9
Tear Strength lb	20	0	22.2	5	20.5	3	20.7	14
Puncture Force lb	59	2	59	1	58	2	67.8	1

* Only one data point available, therefore no average or CV.

Table C-12. Data Summary for VDPE, 120 Day Conditioning

PROPERTY	BASELINE		Na_2CO_3		Ca		Na_2CO_3 UREA	
WITH GRAIN	***AVERAGE***	***±CV%***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***	***AVERAGE***	***±%CV***
Elongation @ Yield %	18.7	12	21.7	13	19.7	3	18.7	6
Elongation @ Break %	>710	1	>510	47	>710	0	>640	3
Yield Strength ksi	1.14	3	1.26	3	1.19	6	1.01	7
Breaking Strength ksi	3.20	3	>2.3	61	3.10	4	2.32	3
Stress @ 100% Elongation ksi	1.14	3	1.25	3	1.14	3	1.05	4
Stress @ 200 % Elongation ksi	1.20	2	1.21	15	1.19	3	1.03	5
Elastic Modulus ksi	32.4	6	31.0	14	25.4	11	25.0	5
Tear Strength lb	20.6	2	19.4	2	20.7	5	19.5	2
CROSS GRAIN								
Elongation @ Yield %	20.3	3	20	0	19	9	20	0
Elongation @ Break %	>673	2	>693	4	>680	3	>647	1
Yield Strength ksi	1.20	4	1.23	6	1.18	5	1.09	8
Breaking Strength ksi	3.17	2	>3.16	2	3.17	3	>2.38	1
Stress @ 100% Elongation ksi	1.19	3	1.20	4	1.22	2	1.12	4
Stress @ 200 % Elongation ksi	1.26	3	1.23	7	1.26	3	1.11	8
Elastic Modulus ksi	28.8	2	33.3	7	24.5	42	28.1	4
Tear Strength lb	20.8	1	18.9	2	21.7	8	21.6	3
Puncture Force lb	70	2	58.2	2	70	2	57	1