Book # 1

Well and Test Hole Logs

United States Geological Survey
and
State Geological Survey

UNIVERSITY OF KANSAS
LAWRENCE, KANSAS

Well or Test Hole Numbers

(1) AEC #4 Test

(2) _____

(3) _____

(4) _____

(5) _____

(6) _____

(7) _____

(8) _____

(9) _____

(10) _____

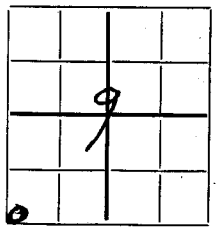
Owner (AEC #4) land owner is Glen Ringler ____ ¼ SW¼ SW¼ sec. 9 T. 11 R. 10

County Lincoln, Kans. Date 5/26/22 Static Water Level ____

Topo. Sheet ____ Elev. 1630 G.L. Depth ____ Yield ____

Location 100' East of corner 100' North

Written log kept from Ground level.



Formation Record

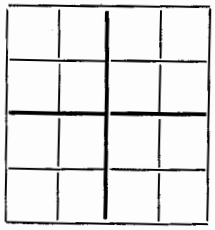
Ft.	From	To	Description
	0	10	clay, chalky, dark brown
	10	20	limestone and limy clay, yellowish brown, effervescent
	20	30	chalky limestone, yellowish brown, crystalline layers
	30	40	do
	40	50	do
	50	52	do
	52	60	limestone, alternating bedded dark gray chalk and chalky shale.
	60	70	do
	70	80	do speckly
	80	90	do
	90	100	do
	100	110	do
	110	120	do
	120	125	do
	125	130	clay shale, dark bluish gray none calcareous
	140	150	do
	150	160	do trace gray siltstone, small amount is shell?
	160	169	do
	169	170	siltstone & gray clay shale (Dakota?)
	170	180	clayey siltstone interm ixed with shale, dark bluish gray
	180	190	clay and sandy siltstone, dark gray, slightly effervescent
	190	200	shaly sandy siltstone, dark gray, effervescent mildly to none at all

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

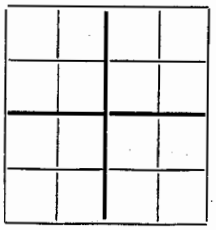
Ft.	From	To	Description
	200	210	do
	210	220	shale, dark black, alternating hard & soft layers, effervescent
	220	230	sandy shales and alternating sandy siltstones, light gray to black, some pyrite, chunks of light brown friable Ss.
	230	240	silty and sandy clay, siltstone, pyritic, chips of friable Ss light brown effervescent freely, light gray to dark gray (poor porosity)
	240	250	do
	250	260	do
	260	270	sandy pyritic shales and Ss with very fine light whitish gray sandy clay, dominate color medium gray mottled to redish brown
	270	280	do more clay, redish brown
	280	290	shale, mottled gray to red
	290	300	do
	300	310	do
	310	320	shales, light gray mottled red
	320	330	do
	330	340	shaley siltstones with layers of pyritic Ss, light whitish gray mottled to red
	340	350	do
	350	360	shaley siltstone, sandy, pyrite, mottled red to whitish gray

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

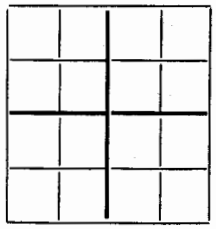
Ft.	From	To	Description
	360	370	do
	370	380	shale, redish gray mottled to whitish gray
	380	390	do
	390	400	do more red
	400	410	shaly siltstone and pyritic Ss. mottled gray to red. some lms, crystalline effervescent. (poor porosity)
	410	420	do (change @ 421)
	420	430	shale, clay, white and red soft and Ss. fine to medium grained (fair porosity)
	430	440	shale & clay, gray, white and red mottled, some SS. streaks
	440	450	do
	450	460	shale with soft clay, gray to white
	460	470	do
	470	480	shale & pyritic Ss. (fair porosity)
	480	490	pyritic Ss, hard, with shale streaks, calcareous (poor porosity)
	490	500	do
	500	510	Ss, pyritic, light brown to light gray mottled to red very little shale (very hard) Ss is calcareous (poor porosity)
	510	520	do Hard
	520	530	do very very hard, limy siltstone with dark gray shale
			change of drilling @ 528

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

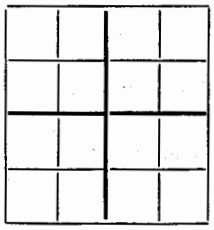
Ft.	From	To	Description
	530	540	shaly pyritic siltstone, light-dark gray with whitish gray shaly lime.
	540	550	shale, whitish gray to medium gray
	550	560	do
	560	570	shale, light gray to whitish gray, limy, with whitish gray siltstone to light brown
	570	580	Sandstones and shales, shales are silty, Ss is friable and calcareous, some siltstone mottled redish gray, pyritic (poor por.)
	580	590	clay siltstone, light gray mottled to redish gray, some chips of lms? effervescent, probably dolomite or calcareous Ss dominate color greenish gray.
	590	595	do
	595	600	shaly siltstones - dark red (Permian red beds)
	600	610	shaly siltstones and cloys, red
	610	620	do
	620	630	do
	630	642	do (stop set casing)
			Roughneck gathered samples from 642 to 740. These samples were scooped from sample catcher into 3 gallon perforated bucket which was placed over a 5 gallon empty bucket. Freshwater was then used to wash sample. Practicaly all fine cutting were

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

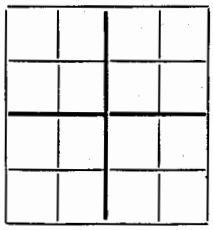
Ft.	From	To	Description
			removed into 5 gallon container where sample was then placed into sample bag. All clays and shales that were drilled during this interval were then thrown away; ∴ these samples are therefore not a true representative of that intervals from 642 to 740
	642	650	clayey shales and siltstones, sandy, dark red
	650	660	clayey shales and siltstones, with light whitish gray anhydrite, some gray dolomite calcareous slightly
	660	670	clay siltstones, dark red mottled gray, with whitish gray anhydritic limestone, effervesses freely, some pyrite.
	670	680	do
	680	690	calcareous siltstone and clays, dark red mottled to dark gray, anhydrite pieces present
	690	700	do
	700	710	calcareous clays, dark red, with light gray siltstones, some anhydrite present, some Ss that is more calcareous
	710	720	do
	720	730	do
	730	740	dark red sandy siltstone, some anhydrite, intermixed with medium gray, silty clays, calcareous

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

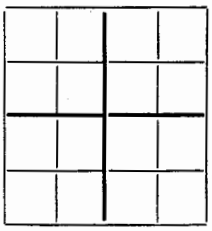
Ft.	From	To	Description
	740	750	dark red cloyey siltstone mottled to medium gray with whitish gray anhydrites, slightly calcareous
	750	760	dark red cloyey sandy siltstone with light gray anhydritic siltstone, slightly calcareous
	760	770	anhydritic cloys, silty, dark red mottled to light greenish gray
	770	780	anhydritic cloys and siltstones, dark red mottled to medium gray, slightly calcareous
	780	790	do less anhydrite, less calcareous.
	790	800	shaley cloy siltstones, dark red mottled dark gray, laminated NONE calcareous, some whitish gray anhydrite
	800	810	red siltstones with dark gray cloy shales, laminated that have gypsum, selenite and white gray anhydrites
	810	820	gypsiferous cloyshales and sandy siltstones, dark gray, with some redish brown hard siltstones, laminated, mottling greenish-gray, white anhydrites. All is slightly calcareous
	820	830	do more anhydrite
	830	840	sandy cloy shales and siltstones, whitish gray to dark gray with some crystalline dolomite, gypsum present + anhydrite all is slightly calcareous.
	840	850	shaly cloys, redish brown to greenish gray, little whitish gray anhydrite with some siltstone and gypsum

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

Ft.	From	To	Description
	850	860	gypsiferous clayey shales and siltstones, greenish gray to dark reddish brown with whitish gray anhydrite
	860	870	do no anhydrite
	870	880	gypsiferous shaly siltstones, dark reddish brown to dark bluish gray,
	880	890	dolomite, light gray, with interbedded clay siltstones and shales with light whitish gray anhydrite, dark reddish brown mottled greenish gray.
	890	900	dolomitic siltstones and shales, dark gray
	900	910	dolomitic shales and siltstone, dark greenish gray mottled dark red
	910	920	dolomitic (I say dolomitic mainly because of slight effervescent) shales and siltstones, dark gray.
	920	930	shale, dark gray mottled greenish gray
	930	940	do
	940	950	shale, slightly to none calcareous, very dark gray
	950	960	shale, dark gray with some whitish gray anhydrite
	960	970	do
	970	980	do no anhydrite, more siltstone
	980	990	shales and siltstones with some dolomitic siltstone, dark gray to dark reddish brown.
	Stop	990	Stopped coring @ 9:45 P.M. May 29, 1972

0 - 52 Carlile
52 - 125 Greenhorn
125 - 169 Graneros
169 - 595 Dakota - Kiowa - Cheyenne?

picks - 690 St. Corral.

picks 1060 NaCl

194 quote bottom NaCl
thickness

1021 NaCl Top
1215 Base
43'
1258 could be Base. B-18 shale?
more NaCl below?
Be adamate about this below.

15

1014 Book 2
1' 1014
1' 1015

1029
29.5
1108.5

52
127

Well and Test Hole Logs

United States Geological Survey
and
State Geological Survey.

UNIVERSITY OF KANSAS 29.5
LAWRENCE, KANSAS 1029.0 1005.5

First Field Book
given to Stubbs.

Well or Test Hole Numbers

(1) Field Book DEC #4
(2)
(3) First Field Book to Pete
(4) Stubbs of Walters
(5) Drilling Company of
(6) Wichita, Kansas
(7)
(8)
(9)
(10)

Owner ---------- 25.4 / 14.5 / 39.9

¼ ---- ¼ ---- ¼ sec. ---- T. ---- R. ---- 23

County ---------- 3'0 / 47.0 ---------- Date ----------

Static Water Level ---------- 82 / 91

Topo. Sheet ---------- 29.5 / 11.5 ---------- Elev. ----------

Depth ---------- Yield ----------

Location ---------- 1129.0 / 11.5 / 1111.5 +16.5 ---------- 1123.5 / 1116.5 / 7.0

Formation Record

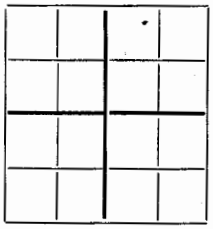
Ft.	From	To	Description
24	Core	# 1	990 to 1014 return 8.6' loss 15.4'
28	Core	# 2	~~Top 1015~~ ~~Bot~~ to 1042 Returns ~~23~~ 28' loss from 2.9 to 5
	~~Core~~	~~# 3~~	~~Top 1042~~ cable runs down to 1032.5 ~~so 4 to 4.5'~~ of core left in hole. loss 2.9'
40	Core #	3	1042 - 1082 return 40' loss. believe 5' left in hole Halliburton called at 9:15 PM arrived at 10:10 P.M. Line dropped and stopped at 1079.
	Core #	4	1082 - 1123 41 foot cored return 29.5 loss 5' core 1123 minus 11.5 = 1111.5 Halliburton line to 1116.5 so have 5 foot loss of core here.
	Core #	5	1123 to 1161 Full barrell indicated so. if barrell is 53' full cored 38 should have 15' extra this belong to core # 4. Core 38' recovered 42.7' no Halliburton line run do not know How much is left in hole.
	Core #	6	1161 - 1204 = 43 feet cored. Core engineer thinks that 10' of top of core # 5 was left in barrell before coring # 6. Recovered 53.0
	Core #	7	1204 - 1217 ~~return~~ 13' cored recovered 12.7' Stop coring drill from 1217-1275

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

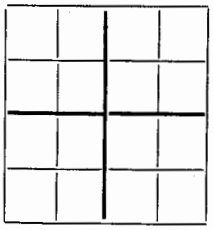
Ft.	From	To	Description
	core # 2,		23.0'
~~2.~~	1013.9	1016.9	anhydrite shales, banded grayish red to whitish gray anhydrite crystals present, some intermixed red salt crystals.
1.7	1016.9	1018.6	shaly anhydrite with red crystalline salt banded, whitish gray to greenish gray
2.3	1018.6	1020.9	shaly anhydrites with red salt Banded 30-40° dip from horizontal banded layers dark gray to whitish gray last .4 of this section is brecciated shales and anhydrites this connects to top of salt
11.5 11.5	1020.9	1032.4	Salt, dark gray to whitish gray (some red) with banded .05' shaly anhydrite white gray. 4 zones of .05' = .2
1.0	1032.4	1033.4	shaly anhydrite, banded, dark gray to whitish gray
2.0	1033.4	1035.4	salt, banded, light to dark gray with 2 ¼ to ½" layers of shaly anhydrite
.8	1035.4	1036.2	shaly anhydrite banded whitish gray to greenish gray
.6	1036.2	1036.8	shaly salt, very dirty, dark gray.
			≈ 8:00 A.M to 8:15 A.M. wait on Halliburton line to check if 5' of core left at bottom

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

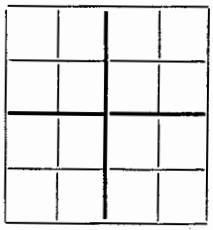
Ft.	From	To	Description
	Core #3		Diamond bit changed. A new bit was used for AEC #3 and for the first 2 cores on AEC #4. The diameter of core was found on core #2 of AEC #4 to be 1/16" smaller than 3½". Used diamond bit is now being used on core 3 AEC #4 because it was felt that we would core a larger diameter core than catching all of the core.
	1042	1082	should have 44.5' of core in barrel. Note change in drilling time because of used diamond bit on strip log for coring times. Core engineer thought that when he pulled off of bottom he left 5' of core in hole. Halliburton called @ 9:15 P.M 5/31/72 40 ft cored Return 40' but top 2.5 ft of this core is broken and worn with core bit grooves in the shale. Halliburton line to bottom 1079 3 foot in Hole yet.

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

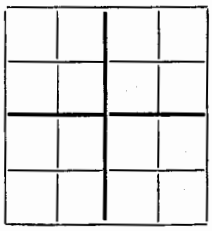
Ft.	From	To	Description
.5	1036.8	1037.2	Void looks like loss of shaly salt section.
.3	1037.2	1037.6	Shaly salt, dark gray
.4	1037.6	1038.0	shaly anhydrite, banded, greenish gray
.2	1038.0	1038.2	Salt, light gray grad.
2.6	1038.2	1040.8	According to drilling core time should be salt but was crushed & rolled up from being in hole & dropping core ~~barrell~~ over it.
			2 pieces in this interval have evidence of bit marking grooves that appear normal. These ~~two~~ (2) pieces are salty shale and shaly anhydrite.
1.0	1040.8	1041.8	shale, anhydrite with streaks of red salt at random dispersed throughout matrix broken up. So may have a small loss from here.
.3	1041.8	1042.1	anhydrite red shale banded, light gray
1.3	1042.1	1043.4	Salt, banded, light gray to light orange
.2	1043.4	1043.6	Shaly anhydrite, light gray
4.9	1043.6	1048.5	salt, banded, light whitish gray to dark gray
1.5	1048.5	1050.0	salt, with light gray anhydrite intermixed, banded
10.5	1050.0	1060.5	salt, shaly to clear, white to very dark gray banded
3.8	1060.5	1064.3	Salt, some banding shaly, color change to white salt to reddish orange to dark gray

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

Ft.	From	To	Description
.7	1064.3	1065	shaly anhydrite with anhydrite veins/scale and some scattered red salt.
2.0	1065	1067	Salt, banded, clear to shaly, white to dark gray .5 at 1065 to 1065.5 reddish hue.
2.0	1067	1069	shaly anhydrite with intermixed red salt light greenish gray banded.
.9	1069	1069.9	shaly anhydrite dark gray mottled to reddish brown & light gray
9.1	1069.9	1079.0	Salt, very shaly at top of this section gets progressively cleaner towards base where very good salt occurs between 1074 – 1075 have 3 anhydrite shale partings amounting to .3' thickness whitish gray to dark blackish gray to reddish hue in banded salt layers.
			Total Recovery 39.9' my description 39.6. so .3 loss between 1040.8 to 1041.8.
			At this pt. Core Eng. put new catcher in barrel.

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____

_____

Formation Record

Ft.	From	To	Description
	Core #	4	1082 – 1123 41 feet cored 29.5 feet return
			Halliburton Called @ 8:30 A.M. Jan 7, 1972 arrived 10:30
			1116.5 dropped line to check if 11.5 feet of core left in
			Hole Amount of core left in Hole 6.5'
			looks like we picked up the base of core # 3 and it
			is around 3ft thick of good salt
			29.5 from 41.0 = 11.5 11.5 from 1123 = 1111.5
			Halliburton line to 1116.5 – 1111.5 = 5 ft loss.
			1116.5 from 1123 = 6.5' left in hole.
			Connection @ 1103 evidence of catcher mark @ 1103
1.8	1079.	1080.8	
.1	1080.8	1080.9	
1.1	1080.9	1082.0	
5.4	1082.0	1087.4	
.1	1087.4		

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____

_____

Formation Record

Ft.	From	To	Description
	Core # 5		1123-1161 38 feet cored. return 42.7 should have an extra 15' of core. Cored till barrell was full. so should have 53' of core.
			No Halliburton line run.
	Core # 6		1161 - 1204 41 feet cored.
			Core Engineer believes that 10 feet of top of core # 5 was left in barrell. so should have 51 feet of core. Recovered _____

Book # 2

Well and Test Hole Logs

United States Geological Survey
and
State Geological Survey

UNIVERSITY OF KANSAS
LAWRENCE, KANSAS

Well or Test Hole Numbers

(1) AEC # 4 Test

(2) _____

(3) _____

(4) _____

(5) _____

(6) _____

(7) _____

(8) _____

(9) _____

(10) _____

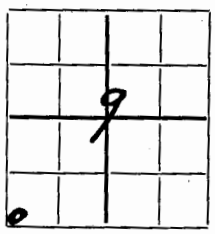
Owner AEC #4 ____ ¼ SW ¼ SW ¼ sec. 9 T. 11 R. 10

County Lincoln, Kans. Date 5/26/22 Static Water Level

Topo. Sheet ____ Elev. 1630.6ft. Depth ____ Yield ____

Location 100' East of Corner 100' North

Written log kept from Ground Level



Formation Record

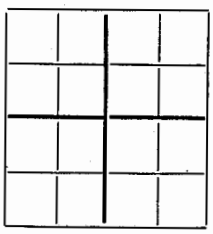
Ft.	From	To	Description	
	Core # 1			
24	990	1014	24 feet cored with shale, dark gray. Halliburton line dropped to check if core standing in hole 50 feet. Had to wait for decissions were made. Mud pit was full of cuttings so rig was shut down to jet pits and remix brine.	a return of 8.6 feet of anhydritic Hole after coring left in hole. None was found have a net loss of core 15.4 4 hours for Halliburton line before
	Core # 2			
28	1014	1042	Return was 23' 1037.5 so ≈ 4 to loss was from .5' to .9'.	Halliburton line ran bottomed at 4.5 feet left in Hole so approximate
3.1	1013.8	1016.9	anhydritic shales, grayish red to whitish gray, banded, anhydrite visicauls present, some intermixed red salt xytals.	
1.7	1016.9	1018.6	shaly anhydrite with red crystalline salt, banded, whitish gray to greenish gray	
2.3	1018.6	1020.9	shaly anhydrites with horizontal banded layers, dark gray to whitish gray, Last .4 of this section is brecciated shale and anhydrites which connects to	red salt, banded 30°-40° dip from is brecciated shale and anhydrites top of salt

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

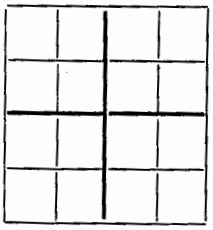
Ft.	From	To	Description
	Core #2		1014 to 1042 cored 28 feet net return was only 23.0 feet cored pulled at 8 AM. 5/31/52. Then Halliburton called at same time to check amount of core left in hole. Halliburton arrived @ 11:15 A.M. Line dropped and stopped at 1032.5 from G. L. So on base of this core, 4 to
28	1014	1042	4.5 was left standing in hole. There was about .3 feet of shale above 1014.
3.1	1013.8	1016.9	anhydritic shales, greyish red to whitish grey, banded anhydrite visicuals with some intermixed red salt crystals.
2.3	1018.6	1020.9	shaly anhydrites with red salt, banded, 30°-40° inclination from horizontal layers, dark grey to whitish grey. Last .4 feet of this section is brecciated shales and anhydrites which are in contact with salt section below.
1.7	1016.9	1018.6	shaly anhydrite with red crystalline salt, banded, whitish grey to greenish grey
11.5	1020.9	1032.4	Salt, dark grey to whitish grey with some red, banded 4 zones .05' thick shaly anhydrite, whitish grey
1.0	1032.4	1033.4	shaly anhydrite, dark grey to whitish grey, banded
2.0	1033.4	1035.4	Salt, light to dark grey, with 2 .025' to .05' layers of shaly anhydrite.
.8	1035.4	1036.2	shaly anhydrite, banded, whitish grey to greenish grey

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

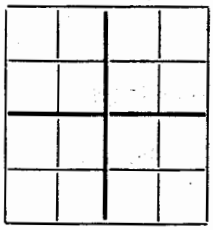
Ft.	From	To	Description	
.6	1036.2	1036.8	shaly salt, dark gray	very dirty
			End of Core #2.	
	Core #	3	Diamond bit change.	A new bit was used for AEC #3 and
40	1042	1082	for the first two cores	on AEC #4. The diameter of core #2
			AEC #4 was found	to be 1/16" smaller than 3½". Used dia-
			mond bit is now coring	this interval 1042-1082 because it
			was felt that it would	core a larger diameter core thus catching
			all the core.	
			Note change in drilling	time because of used diamond bit;
			recorded on drilling	time core strip log.
			Core Eng. Max Vinson	thought that when he pulled off of
			bottom he left 5' of	core in hole
			Halliburton called @	9:15 P.M. 5/31/72
			40ft cored 40' return	but top 2.5' of this core is broken
			and worn with core	bit groves in the shales
			Halliburton arrive @	10:10 P.M. dropped line which stopped
			at 1079 so left	3 ft of core in hole.
			If we would have a	total recovery including the loss of
			core in hole on #2	core should have had 44.5 return

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

Ft.	From	To	Description
.6	1036.8	1037.3	Void looks like loss of shaly salt section
.3	1037.3	1037.6	shaly salt, dark gray
.4	1037.6	1038.0	shaly anhydrite, banded, greenish gray
.2	1038.0	1038.2	Salt, light gray, Good
2.6	1038.2	1040.8	According to core drilling time should be salt but was probably crushed and ground up by core barrel dropping back over it because it was left in hole. Two pieces in this interval have evidence of bit markings + groves on their rounded surfaces that are not normal. These two pieces are salty shale and shaly anhydrite.
1.0	1040.8	1041.8	shale, anhydritic with streaks of red salt randomly dispersed through matrix, broken up, may have loss here
.3	1041.8	1042.1	anhydrite and shale, banded, light gray
1.3	1042.1	1043.4	Salt, light gray to light orange
.2	1043.4	1043.6	shaly anhydrite, light gray
4.9	1043.6	1048.5	Salt, light whitish gray to dark gray, banded
1.5	1048.5	1050.0	Salt, with light gray anhydrite intermixed, banded
10.5	1050.0	1060.5	Salt, shaly to clean, white to very dark gray, banded
3.8	1060.5	1064.3	Salt, some banded layers are shaly, color changes from white salt to reddish orange to dark gray
.7	1064.3	1065	shaly anhydrite with anhydrite visicuals and some scattered red salt

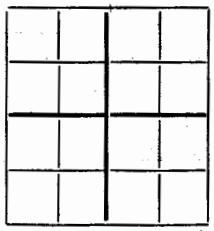
Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____

_____



Formation Record

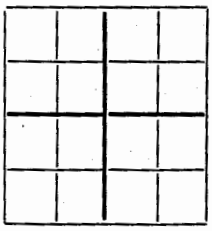
Ft.	From	To	Description
2.0	1065	1067	Salt, clean to shaly, white to dark gray, banded @ 1065 to 1065.5 has reddish hue
2.0	1067	1069	shaly anhydrite with intermixed red salt, light greenish gray, banded
.9	1069	1069.9	shaly anhydrite, light-dark gray mottled to reddish brown.
9.1	1069.9	1079.0	Salt, very shaly at top of this interval and gets progressively cleaner towards base where very good salt occurs between 1074-1075 Have 3 anhydritic shale partings amounting to .3' thickness. Color variations whitish gray to dark gray some reddish Hue in banded layers.
			Total Recovery 39.9' By my description 39.6
			.3 loss I feel is between 1040.8 to 1041.8 interval
			End Core #3

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

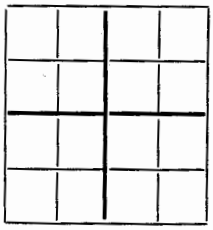
Ft.	From	To	Description
	Core # 4.		
41	1082	1123	41 feet cored 29.5 feet retrieved
			Halliburton called 8:30 A.M. June 1, 1972 arrived 10:30 A.M.
			Dropped line to check if 11.5 feet left in hole 41-29.5 = 11.5
I did not believe this. →			Line dropped to 1116.5 so amount of core left in hole = 6.5
			There was a connection made at 1103. On this core
			there is evidence of core catcher marks. Assumed
			that at this point that it was 1103; counted down from here
			to end of core would be 1108.5 so 1108.5 from 1123 = 14.5'
			I felt was left in hole.
			Also looks like that at top of this core #4 we picked
			up the base 3' of core from core #3. They match!
			Description of core is by the way we marked it and
			used the 3' from top of core 4 to base of core 3.
1.8	1079.0	1080.8	Salt, white to light gray, some anhydrite visicuals present
			banded, clean.
.1	1080.8	1080.9	shaly anhydrite, dark gray
1.1	1080.9	1082.0	Salt, light gray, banded.
		(this	section of 3' belongs to base of core #3 1079 to 1082.

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____

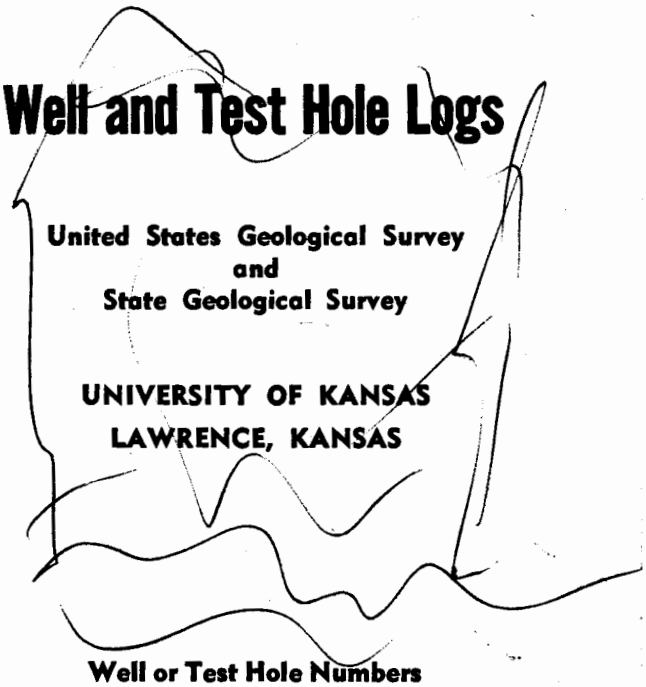


Formation Record

Ft.	From	To	Description
6.4	1082.0	1088.4	Salt, no shale breaks, dark gray to whitish gray, clear, banded, reddish hue salt in last 1.4' of this interval.
.1	1088.4	1088.5	shale, dark gray on top of whitish gray anhydrite.
4.3	1088.5	1092.8	Salt, white to dark gray, banded, 1 to 3mm thick anhydrite streaks, very clean
.5	1092.8	1093.3	shaly salt with 4 bands of anhydritic shale, dark gray
.3	1093.3	1093.6	Salt, reddish hue to cream color, clean
.2	1093.6	1093.8	Shale, dark gray, with some large crystals of salt reddish gray
1.5	1093.8	1095.3	Salt, dark gray, small anhydrite visicuals with 2 mm thick layer of shaley anhydrite, banded.
.3	1095.3	1095.6	shaley anhydrite, light to dark gray, banded with dark gray salt crystals intermixed.
.8	1095.6	1096.4	Salt, light gray to reddish hue, fairly clean
.5	1096.4	1096.9	shaley anhydritic Salt, dark gray
.1	1096.9	1097.0	Shale and anhydrite, light whitish gray to dark gray banded to intermixed
.3	1097.0	1097.3	Shaley anhydritic Salt, dark gray
3.7	1097.3	1101.0	Salt, white to light gray, banded, clean
1.4	1101.0	1102.4	Salty anhydrite, white to light gray, some banding but mostly scattered anhydrite crystals with 2 hard 5mm layers at base composed of shale and anhydrite

Book #3

Well and Test Hole Logs



United States Geological Survey
and
State Geological Survey

UNIVERSITY OF KANSAS
LAWRENCE, KANSAS

Well or Test Hole Numbers

(1) Field Book AEC #4

(2) _____

(3) _____

(4) _____

(5) _____

(6) _____

(7) _____

(8) _____

(9) _____

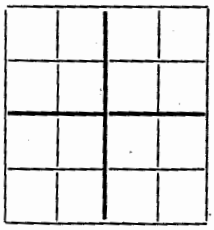
(10) _____

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

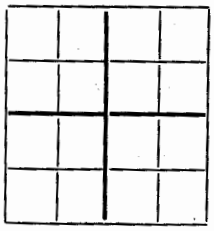
Ft.	From	To	Description
	Core # 4.		
1.8	1079.0	1080.8	Salt, clear, white to light gray, some anhydrite visicals present, banded
.1	1080.8	1080.9	Shaly anhydrite, dark gray
1.1	1080.9	1082.0	salt, light gray, banded this 3' section belongs to base of Core # 3 1079 to 1082
6.4	1082.0 6.4	1088.4	Salt no shale breaks, dark gray to whitish gray clear, banded, reddish hue salt in last 1.4' of this interval
.1	1088.4	1088.5	dark gray shale on top of whitish gray anhydrite
4.3	1088.5 4.3	1092.8	Salt, white to dark gray, banded with 1 to 3 mm thick anhydrite streaks, very clean
.6	1092.8	1093.4	Salt much shale and 4 bands of anhydritic shale dark gray
.3	1093.4	1093.7	Salt, clear, reddish hue to cream color
.2	1093.7	1093.9	Shale, wavey, with some large crystalline salt reddish gray .15 lower part
1.5	1093.9 1.5	1095.3	salt, dark gray, small anhydrite visicals with 2mm thick layer of shaly anhydrite, banded
.3	1095.3	1095.6	Banded shaly anhydrite with dark gray salt xyls intermixed light gray to dark
.8	1095.6	1096.4	Salt fairly clear, light gray with reddish hue
.5	1096.4	1096.9	Shaly anhydritic salt, dark gray

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

Ft.	From	To	Description
.2	1096.9	1097.1	Shale and anhydrite, banded, intermixed, light whitish gray to dark gray
.3	1092	1092.3	Shaly anhydrite salt, dark gray
3.7	1092.3	1101.0	Salt, clear, white to light gray, banded
1.4	1101.0	1102.4	Salty anhydrite white to light gray core banding but mostly scattered around xyts with 2 hard 5mm layers at base composed of shale and anhydrite Depth at this pt. could be 1102? And it is!!
6.0	1102.4	1108.4	Salt slightly dirty to clear, banded white to dark gray with some anhydrite intermixed Evidence of core catcher markings on the top 1' of this section where correct insertion was made @ 1103' by core engineer Running 120-125 rpm through pump End of Core 4 @ 1108.4 Put figures here in zoning that 14.5' of core 14.5 Cost Lease.

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____

_____

Formation Record

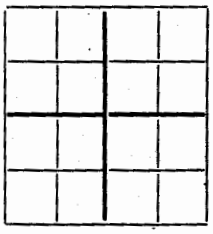
Ft.	From	To	Description
	Core #5.		When cored #6 there was 10ft of core left in barrell from #5 this was on top ~~of core #6~~ of core 5.
	Start core #5.		10.6 feet of this section came from top of core #6 this was left in barrel. Catcher markings completly down this section. Numbers fit and so have core feel confident that this core begins @ 1108.4 to 1108.8 lose of good clear whitish cream salt is I guess .4' between 1108.4 1108.8
			Start of this core shows overlap but I believe washed a .4' loss.
			Described as labled.
	1107.9	1108.3	salt clear at top sally to base creamish white to dark gray
	1108.3	1108.4	anhydritic shaley dark gray
	1108.4	1109.05	shaly salt, with large reddish xyts banded dark gray
	1109.05	1109.10	anhydrite, large xystals, whitish gray to brownish gray
	1109.1	1112.7	Shaly salt with anhydrite visicaals, redish hue clay @ 1110.2 1110.6

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

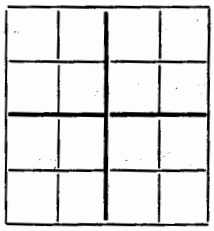
Ft. From	To	Description
1112.7	1118.4	shaly salt, anhydrite visicals scattered throughout whitish gray to dark gray
1118.4	1118.7	Broken & shattered shale interm mixed with salt loss here of ? dark gray
1118.7	1119.6	Shaly salt, very dirty, reddish tone to salt with best. 2 banded anhydrite shale whitish gray
1119.6	1119.9	Salt, whitish gray few small gastlng @ 1119.9 of anhydrite.
1119.9	1121.3	Salt, scattered xyts interm mixed with anhydrite + shale globs
1121.3	1127.5	Salt, banded, some shale and anhydrite visicals whitish gray, to light gray
1127.5	1133.5	Salt, banded cream to whitish gray, good clean.
1133.5	1134.	shaly anhydrite, with 2 small .1 to .05 layers of salt, whitish gray to dark gray
1134	1139	Salt, ~~shaly~~ with scattered shale and anhydrite large xyts Halite fairly clean
1139	1139.1	shaly anhydrite whitish gray
1139.1	1139.5	Salt, clean, whitish gray, with little anhydrite visicals.
1139.5	1139.55	banded shales + anhydrites brownish gray to dark gray
1139.55	1139.9	salt, shaly and anhydrite. whitish gray. banded

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

Ft. From	To	Description
1139.9	1140.4	banded shale at top with small layer of salt to banded shaly anhydrite brownish to light gray
1140.4	1140.6	salt, clear to whitish gray
1140.6	1140.8	banded shales + anhydrite with salt intermixed
1140.8	1142.3	Salt, ~~clear to~~ anhydrite intermixed, fair to medium, banded
1142.3	1143.7	Salt, good, white to whitish gray to white banded large xyts.
1143.7	1144.05	Salty globbular shaly anhydrite, dark gray to red salt
1144.05	1153.2	Salt, slightly shaly at top of interval to clear towards base, Banded, large xyts. with anhydrite micas present but few. white to light gray 1/4 to 1/2 globs of shale + anhydrite.
1153.2	1154.6	anhydritic salt whitish gray to dark gray dirty.
1154.6	1156	Banded intervals of salt and anhydrite + shales whitish gray to dark ~~to~~ gray
1156 (1161.0)	1165.5	Salt, anhydrite globs present ranging in size from .1 to smaller. Anhydrite globs white cream color Salt light gray shaly No banding large xyts.
End of Core 5 @ 1161		

Book #3

Well and Test Hole Logs

United States Geological Survey
and
State Geological Survey

UNIVERSITY OF KANSAS
LAWRENCE, KANSAS

Well or Test Hole Numbers

(1) AEC #4 Test

(2) _____

(3) _____

(4) _____

(5) _____

(6) _____

(7) _____

(8) _____

(9) _____

(10) _____

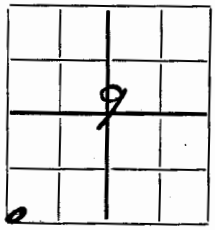
Owner AEC # 4 Land Owner Glen Rinzler ____ ¼ SW ¼ SW ¼ sec. 9 T. 11 R. 10

County Lincoln, Kans. Date 5/26/22 - 6/3/22 Static Water Level ____

Topo. Sheet ____ Elev. 1630 G.L. Depth ____ Yield ____

Location 100' East of corner 100' North

Written log kept from Cuts.



Formation Record

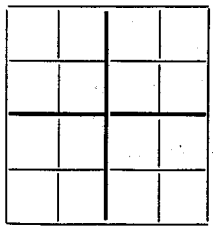
Ft.	From	To	Description
			Continue description of Core #. 4
6.0	1102.4	1108.4	Salt, white to dark, gray with some anhydrite intermixed, slightly dirty to clean, banded, (Evidence of core catcher markings on the top feet of this interval where connection was made at 1103'.
			End Core # 4 loss 14.5 feet that is in Hole.
			CORE # 5 (120 to 125 gpm through barrel while coring.) (53' core barrel)
38	1123	1161	Cored until the core engineer felt that barrell was full. so if full 53-38 = 15' of extra core. So this extra 15 feet would be the loss from core # 4 Return was 42.7 42.7-38 = 4.7 feet gain which belongs to base of core #4. No Halliburton line run so do not know how much core is in Hole.
			Funny thing happened while coring #6 to full barrel Interval cored was 1161 to 1204 = 43 feet cored with return of 53.0 feet. 53-43 = 10 feet extra core + 4.7 feet extra core from core # 5 = our ≈ 14.5 lose from base of core #4. So everything finally came out. This 10 feet extra stayed in core barrel. Had core catcher markings full length. Felt confident to move this 14.7 feet of core to base

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

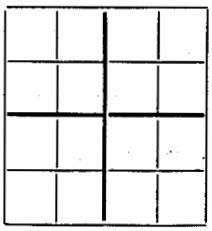
Ft.	From	To	Description
			of core #4. thus making it 1108.4 + 14.7 = 1123.1 to base
			of core 4 which should have been 1123.0.
			Description of core #5 as marked after change of 14.7 feet to
			base of core #4. with some overlap or core loss.
.4	1107.9	1108.3	Salt, creamish white to dark gray, clean at top to shaley at base
.1	1108.3	1108.4	anhydritic shaley, dark gray
.65	1108.4	1109.05	Shaley salt, dark gray with large redish crystals
.05	1109.05	1109.10	anhydrite, whitish gray to brownish gray
3.6	1109.10	1112.7	Shaley salt, gray, with anhydrite visicuals, redish hue
			clay @ 1110.2 - 1110.6
5.7	1112.7	1118.4	Shaley salt, whitish gray to dark gray, anhydrite visicuals scattered
			throughout
.3	1118.4	1118.7	Shale, dark gray, intermixed with salt, broken and shattered
			loss here of?
.9	1118.7	1119.6	Shaly salt, whitish gray to redish hue, very dirty, with last
			.2' banded anhydrite shale.
.3	1119.6	1119.9	Salt, whitish gray, fair, small pantins of anhydrite @ 1119.9
1.4	1119.9	1121.3	Salt, light gray, scattered crystals intermixed with
			anhydrite and shale inclusions.
6.2	1121.3	1127.5	Salt, whitish gray to light gray, some shale and anhydrite
			visicuals, banded.
			End of Core #4 interval @ 1123 in this interval

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

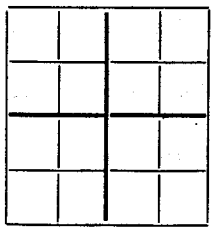
Ft.	From	To	Description
6.0	1127.5	1133.5	Salt, white to whitish gray, banded, clean (good)
.5	1133.5	1134.0	Shaley anhydrite, whitish gray to dark gray, with 2 small .05 to .1 layers of salt
5.0	1134.0	1139.0	Salt, large crystals, fairly clean, with scattered shale and anhydrite.
.1	1139.0	1139.1	Shaly anhydrite, whitish gray
.4	1139.1	1139.5	Salt, whitish gray, with little anhydrite visicuals, clean
.05	1139.5	1139.55	Shales and anhydrites, brownish gray to dark gray, banded
.35	1139.55	1139.9	Salt, whitish gray, shaley and anhydritic, banded
.5	1139.9	1140.4	Shale, dark gray at top, with small layer of salt, banded with shaley anhydrite, brownish gray to light gray
.2	1140.4	1140.6	Salt, whitish gray, clean
.2	1140.6	1140.8	Shales & anhydrites, with salt intermixed, banded
1.5	1140.8	1142.3	Salt, with anhydrite intermixed, fair to medium, banded
1.4	1142.3	1143.7	Salt, whitish gray to white, banded, good.
.35	1143.7	1144.05	shaley anhydrite, salty, dark gray to red salt
9.15	1144.05	1153.2	Salt, white to light gray, large crystals, banded, slightly shaley at top of interval to clean towards base, with anhydrite visicuals present but few. 1/4" to 1/2" inclusions of shale and anhydrite
1.4	1153.2	1154.6	Anhydritic salt, whitish gray to dark gray, dirty

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

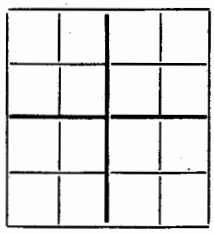
Ft.	From	To	Description
1.4	1154.6	1156.0	Banded or layered intervals of salt, anhydrite and shale whitish gray to dark gray
5.0	1156.0	1161	Salt, anhydrite globs present ranging in size from .4 to smaller. Anhydrite globs white cream color, Salt light gray shaley, no banding with large salt crystals.
			End Core #5.
			Start Core #6. 1161 - 1204 What happened while coring this was explained earlier.
43	1161	1204	Described as marked on core.
4.5	1161.0	1165.5	Salt, anhydrite globs present ranging in size from .4 to smaller. Anhydrite globs white cream color, Salt light gray, shaley, no banding with large salt crystals.
.4	1165.5	1165.9	shales and anhydrites, with small crystals of red salt, banded white to light gray
.1	1165.9	1166.0	Salt, anhydritic, light brownish gray
2.5	1166.0	1168.5	anhydrite and shale, anhydrite white visicuals, scattered with small crystalline red salt. Cream color to light gray 20°-30° inclination at base from horizontal

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

Ft.	From	To	Description
2.5	1168.5	1171.0	Salt, clear, banded, reddish hue at top .4' to light gray at base of this interval.
2.3	1171.0	1173.3	Salt, with anhydrite intermixed, banded, light gray to dark gray, large crystals.
.2	1173.3	1173.5	Anhydrite, white to very light gray
.45	1173.5	1173.95	anhydritic shale, banded dark gray to light gray with some small scattering
.25	1173.95	1174.2	shaley anhydritic salt, light gray, small crystals
.15	1174.2	1174.35	shales and anhydrites, dark to light gray, banded tightly.
.15	1174.35	1174.5	Salt, small crystals, intermixed with anhydrite, whitish gray
.6	1174.5	1175.1	anhydritic salt, white to light gray
.8	1175.1	1175.9	Salt, some anhydrite inclusions intermixed, fairly clean
2.9	1175.9	1178.8	Salt, whitish cream, banded, fairly clean
1.0	1178.8	1179.8	Salt, shaley, dark gray
1.0	1179.8	1180.8	Salt, white, very clean
.7	1180.8	1181.5	salty anhydrite, light whitish gray, small crystals
.3	1181.5	1181.8	shale with red inclusions of salt, dark gray
.8	1181.8	1182.6	shaley anhydrite, light whitish gray
4.4	1182.6	1187.0	Salt, with anhydrite scattered throughout, large crystals fairly clean, light gray
3.0	1187.0	1190	Shaley anhydrite, with red salt inclusions, dark gray to whitish gray, Banded to mixed

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____

_____

Formation Record

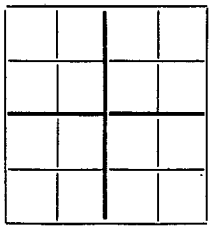
Ft.	From	To	Description
1.8	1190.0	1191.8	Anhydrite, light gray, banded
11.8	1191.8	1203.6	Shales and anhydrites, banded, with red salt inclusions.
.4	1203.6	1204	Salt, shaley and anhydritic, light gray to reddish brown
.1	1204	1204.1	Shaley anhydrite, light whitish gray
			End Core #6.
	Start Core #7		
15.	1204	1217	Interval cored 1204 - 1217 Return 12.85 No Problems!!
			Described as marked on core.
.2	1204.1	1204.3	Shale, dark gray
.2	1204.3	1204.5	anhydrite with shale, salt crystals come up from 1204.6 into this interval, whitish gray to reddish brown
.7	1204.5	1205.2	salty shaley anhydrite, salt crystals are reddish brown intermixed .3' top to bottom to banded layers of shaley anhydrite whitish gray to light gray
.5	1205.2	1205.7	salty shale, dark gray, with some anhydrite visicuals, salt reddish brown small crystals to longer at base of this interval
1.0	1205.7	1206.7	anhydrite, shaley, banded wavey, whitish gray to light gray
.8	1206.7	1207.5	shale, dark gray, with red salt inclusions running through
			upper interval, mixed at random, banding chaotic.
2.3	1207.5	1209.8	Shales and Anhydrites, whitish gray to dark gray, banded.
.8	1209.8	1210.6	shaley anhydrite, anhydrite visicuals numerous, white

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

Ft.	From	To	Description
2.2	1210.6	1212.8	Shale, dark gray, large white anhydrite xxicuals with reddish salt inclusions, banded
1.6	1212.8	1214.4	Shales and anhydrites, banded, dark gray to white
2.1	1214.4	1216.5	anhydrite, banded white
.4	1216.5	1216.9	shale, dark gray.
			End Core #7
58			Stop coring Reem Salt, Drill from 1216.9 to 1275
			Described from 10' samples Salt Stant 1020.9 End 1187 = 166.1 Gross
	1216.9		Net Salt 143.70 by Lithology
			86.51% Salt loss of 3.1' of
			salt section 98.13% Recovery in Salt.
			Total amount cored 990 to 1216.9 = 226.9
			Total of core recovered 208.4
			% of Total amount cored to return = 91.67%
	1216.9	1275	Shales & anhydrites, dark gray to whitish gray.
			End Hole 1275'

Book #4

Well and Test Hole Logs

United States Geological Survey
and
State Geological Survey

UNIVERSITY OF KANSAS
LAWRENCE, KANSAS

Well or Test Hole Numbers

(1) Field Book AEC #4

(2) _____

(3) _____

(4) _____

(5) _____

(6) _____

(7) _____

(8) _____

(9) _____

(10) _____

Owner Glen Ringler

County _____ Date _____

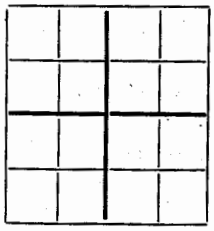
Topo. Sheet _____ Elev. _____

Location _____

_____ ¼ _____ ¼ _____ ¼ sec. _____ T. _____ R. _____

Static Water Level _____

Depth _____ Yield _____



Formation Record

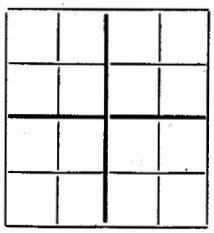
Ft.	From	To	Description
	Core # 6	1161 - 1204	Recovered 53 feet
	1161	1165.5	same as base of core # 5
	1165.5	1165.9	banded shales and anhydrites small xyts of red salt. white to light gray
	1165.9	1166.0	salt, - anhydrite light brownish gray
	1166.0	1168.5	anhydrite and shale, anhydrite white. visicals scattered with small xysts of red salt. cream to light gray 20°-30° inclination at base
	1168.5	1171	Salt, banded, clear, reddish hue at top. 4 to light gray at base of this interval.
	1171	1173.3	Salt, banded, with anhydrite intermixed light gray to white to dark gray large xysts.
	1173.3	1173.5	anhydrite, white to Very light gray
	1173.5	1173.95	anhydrite shale, banded dark gray to light gray some small scattering of red salt xysts.
	1173.95	1174.2	shaly anhydrite salt, light gray, small xysts.
	1174.2	1174.35	banded tightly shales and anhydrites, dark to light gray
	1174.35	1174.5	salt, small xysts intermixed with anhydrite whitish gray
	1174.5	1175.1	anhydrite salt white to light gray

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

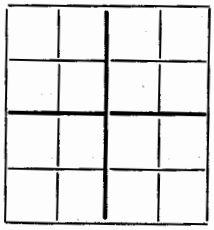
Ft. From	To	Description
1175.1	1175.9	Salt, fairly clean some anhydrite intermixed.
1175.9	1178.8	Salt, very good white, banded
1178.8	1179.8	Salt, shaly, dark gray
1179.8	1180.8	Salt, very good, white
1180.8	1181.5	salty anhydrite, small xysts. light whitish gray
1181.5	1181.8	shale with red runners of salt dark gray
1181.8	1182.6	shaley anhydrite light whitish gray
1182.6	1182.0	Salt, fairly clean, anhydrite scattered throughout large xysts. light gray.
1187.	1190	shaly anhydrite with red salt inclusions dark gray to whitish gray Banded to mixed
1190	1191.8	Anhydrite, light gray Banded.
1191.8	1203.6	Shale & anhydrite, banded, with red salt or anhydrite inclusions
1203.6	1204	Salt, shaly & anhydrite, light gray to reddish brown
1204.	1204.1	shaly anhydrite light whitish gray
		End of Core #6

Owner _____ _____¼ _____¼ _____¼ sec. _____ T. _____ R. _____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

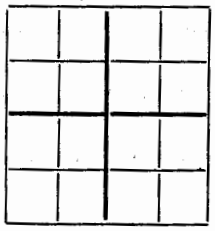
Ft. From	To	Description
		Core 7 from 1204 to 1217 cored 13' recovered 12.85
1204.1	1204.3	shale, dark gray
1204.3	1204.5	anhydrite with shale - salt xyts common from 1204.6 in to this interval. whitish gray to reddish brown
1204.5	1205.2	salty shaly anhydrite, salt xyts are redish brown intermixed .3 top' then to banded layers of shaly anhydrite - salt etc. whitish gray to light gray
1205.2	1205.7	salty shale, dark gray, with some anhydrite ~~stats~~ visicuals. salt redish brown small xyts to larger at base of this interval.
1205.7	1206.7	anhydrite, shaly banded wavey. whitish gray to light gray
1206.7	1207.5	shale, dark gray with red salt inclusions running through upper interval. mixed at random banding chaotic etc
1207.5	1209.8	shales & anhydrite, banded, whitish gray to dark gray
1209.8	1210.6	shaly anhydrite, white anhydrite visicuals numerous
1210.6	1212.8	shale, dark gray, white large ~~one~~ white anhydrite visicuals with red salt inclusions. banded.

Owner _____ ____¼ ____¼ ____¼ sec. ____ T. ____ R. ____

County _____ Date _____ Static Water Level _____

Topo. Sheet _____ Elev. _____ Depth _____ Yield _____

Location _____



Formation Record

Ft. From	To	Description
1212.8	1214.4	shale & anhydrite, banded, dark gray to white
1214.4	1216.5	anhydrite, banded white
1216.5	1216.9	shale, dark gray
		End Core #7
	Stop	boring, ream, go from 1216.9 to 1205