Notice: *Fill out COMPLETELY and return to Conservation Division at the address below within 60 days from plugging date.*

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1127917

Form CP-4
March 2009
Type or Print on this Form
Form must be Signed
All blanks must be Filled

WELL PLUGGING RECORD

K.A.R. 82-3-117

OPERATOR: License #: 34151
Name: Brinker Enterprises, LLC
Address 1: 216 S MARSHALL ST
Address 2:
City: GLEN ELDER State: KS Zip: 67446 + ____
Contact Person: Lee Brinker
Phone: (785) 545-3348
Type of Well: *(Check one)* ☐ Oil Well ☐ Gas Well ☐ OG ☑ D&A ☐ Cathodic
☐ Water Supply Well ☐ Other: ☐ SWD Permit #:
☐ ENHR Permit #: ☐ Gas Storage Permit #:
Is ACO-1 filed? ☐ Yes ☑ No If not, is well log attached? ☐ Yes ☐ No
Producing Formation(s): List All *(If needed attach another sheet)*
Attached Depth to Top: Attached Bottom: Attached T.D. Attached
Depth to Top: Bottom: T.D.
Depth to Top: Bottom: T.D.

API No. 15 - 15-163-24103-00-00
Spot Description:
NW - SW - NE - SW Sec. 36 Twp. 7 S. R. 20 ☐ East ☑ West
1943 Feet from ☐ North / ☑ South Line of Section
1628 Feet from ☐ East / ☑ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☐ NE ☐ NW ☐ SE ☑ SW
County: Rooks
Lease Name: KnippSW Well #: 36-1
Date Well Completed:
The plugging proposal was approved on: 03/11/2013 *(Date)*
by: Pat Staab *(KCC **District** Agent's Name)*
Plugging Commenced: 03/14/2013
Plugging Completed: 03/14/2013

Show depth and thickness of all water, oil and gas formations.

Oil, Gas or Water Records		*Casing Record (Surface, Conductor & Production)*			
Formation	Content	Casing	Size	Setting Depth	Pulled Out
		Surface	13.375	40	

Describe in detail the manner in which the well is plugged, indicating where the mud fluid was placed and the method or methods used in introducing it into the hole. If cement or other plugs were used, state the character of same depth placed from (bottom), to (top) for each plug set.

1st Plug, 50 Sx @ 3408, @nd Plug 25 Sx @ 1461, 3rd Plug, 100 sx @ 825, 4th Plug, 20 sx @ 100, 5th Plug, 10 sx @ 40 Wiper, Rathole, 30 sx
60/40 Poz 4% Gel-1/4# per sx flo-seal

Plugging Contractor License #: 33575 Name: WW Drilling, LLC
Address 1: PO BOX 307 Address 2:
City: WAKEENEY State: KS Zip: 67672 + 0307
Phone: (785) 743-6774
Name of Party Responsible for Plugging Fees: Brinker EnterpriseLLC
State of Kansas County, Mitchell , ss.
Lee Brinker *(Print Name)* ☐ Employee of Operator or ☑ Operator on above-described well,

being first duly sworn on oath, says: That I have knowledge of the facts statements, and matters herein contained, and the log of the above-described well is as filed, and the same are true and correct, so help me God.

Submitted Electronically

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	CP4 - Well Plugging Record
Operator	Brinker Enterprises, LLC
Well Name	KnippSW 36-1
Doc ID	1127917

Producing Formations

Formation	Top	Bottom	Total Depth
Anhydrite	1444	1478	
Toronto	3128		
KC	3142	3349	
TD			3520

REMIT TO
RR 1 BOX 90 D
HOXIE, KS 67740

SCHIPPERS OIL FIELD SERVICE L.L.C.

№ 673

DATE 3-8-13	SEC. 36	RANGE/TWP. 7 20	CALLED OUT	ON LOCATION	JOB START 1645	JOB FINISH 1115
					COUNTY Rooks	STATE KS
LEASE Kripp SW			WELL # 36-1			

CONTRACTOR WW Drilling		OWNER Brinker				
TYPE OF JOB Conductor						
HOLE SIZE	T.D. 51.00	CEMENT				
CASING SIZE 13 3/8	DEPTH 43.50	AMONT ORDERED	90sx	com	3%cc 2%gel	
TUBING SIZE	DEPTH					
DRILL PIPE	DEPTH					
TOOL	DEPTH					
PRES. MAX	MINIMUM	COMMON	90	@15.50	1395.00	
DISPLACEMENT 5.25 bbl	SHOE JOINT	POZMIX		@		
CEMENT LEFT IN CSG.	10ft	GEL	2	@26.00	52.00	
PERFS		CHLORIDE	3	@58.00	174.00	
		ASC		@		
EQUIPMENT				@		
				@		
PUMP TRUCK				@		
#				@		
BULK TRUCK				@		
#				@		
BULK TRUCK				@		
#				@		
		HANDLING	95	@2.15	204.25	
		MILEAGE	56	@.10/sk/mi	532.00	
				TOTAL	2357.25	

REMARKS	SERVICE			
Ran 43.50 of 13 3/8 conductor with	DEPT OF JOB	43 1/2'	@	
8 5/8 landing jt	PUMP TRUCK CHARGE	1	@1250.00	1250.00
	EXTRA FOOTAGE		@	
Est Circulation	MILEAGE	56x2	@6.50	728.00
mixed 90sx com 3%cc 2%gel and disp	MANIFOLD		@	
5 1/4 bbls of H20 - shut in @ 100psi	Light Vehicle	56x2	@2.00	224.00
Cement did Circulate to Surface..			TOTAL	2202.00

CHARGES TO: Brinker Enterprises	
STREET	STATE
CITY	ZIP

To: Schippers Oil Field Services L.L.C.
You are hereby requested to rent cementing equipment and furnish staff to assit owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "TERMS AND CONDITIONS" listed on the reverse side.

Thank You..!

PLUG & FLOAT EQUIPMENT	
	@
	@
	@
	@
	@
	TOTAL 4559.25
TAX	
TOTAL CHARGE	
DISCOUNT (IF PAID IN 20 DAYS)	

Hoxie Sentinel Print / Form 411

SIGNATURE Scott Buchholz PRINTED NAME Scott Buchholz

REMIT TO
RR 1 BOX 90 D
HOXIE, KS 67740

SCHIPPERS OIL FIELD SERVICE L.L.C.

№ 675

DATE 3-14-15	SEC. 36	RANGE/TWP. 7 20	CALLED OUT 11:00 a.m.	ON LOCATION 1:30 p.m.	JOB START 2:00 p.m.	JOB FINISH 5:30 p.m.
					COUNTY Rooks	STATE KS
LEASE Knipp			WELL # 36-1			

CONTRACTOR WW #6		OWNER			
TYPE OF JOB Rotary Plug					
HOLE SIZE 7 7/8	T.D. 3350'	CEMENT	235 sks	60/40 4% Gel	
CASING SIZE	DEPTH	AMONT ORDERED	4 lb/sk	Flo-Seal	
TUBING SIZE	DEPTH				
DRILL PIPE 4 1/2	DEPTH				
TOOL	DEPTH				
PRES. MAX	MINIMUM	COMMON	141	@15.50	2185.50
DISPLACEMENT	SHOE JOINT	POZMIX	94	@8.75	822.50
CEMENT LEFT IN CSG.		GEL	8	@26.00	208.00
PERFS		CHLORIDE		@	
		ASC		@	
EQUIPMENT		Flo-Seal	59	@2.25	132.75
				@	
PUMP TRUCK				@	
# 1 Jack				@	
BULK TRUCK				@	
# 1 Jay				@	
BULK TRUCK Pickup				@	
# Jared				@	
		HANDLING	245	@2.15	526.75
		MILEAGE	56	@.10/sk/mi	1372.00
				TOTAL	5247.50

REMARKS		SERVICE			
50 sks @ 3408'		DEPT OF JOB		@	
25 sks @ 1461'		PUMP TRUCK CHARGE	1	@1650.00	1650.00
100 sks @ 825'		EXTRA FOOTAGE		@	
20 sks @ 700'		MILEAGE	56x2	@6.50	728.00
10 sks @ 40'		MANIFOLD		@	
30 sks Rat Hole		Light Vehicle	56x2	@2.00	224.00
235 sks				TOTAL	2602.00
Plugged @ 5:30 p.m.					

CHARGES TO: Brinkel	
STREET	STATE
CITY	ZIP

PLUG & FLOAT EQUIPMENT	
9 5/8 Plug	@79.00
	@
	@
	@
	@
	TOTAL 7928.50
TAX	
TOTAL CHARGE	
DISCOUNT (IF PAID IN 20 DAYS)	

To: Schippers Oil Field Services L.L.C.
You are hereby requested to rent cementing equipment and furnish staff to assit owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "TERMS AND CONDITIONS" listed on the reverse side.

Hoxie Sentinel Print / Form 411

SIGNATURE _____ PRINTED NAME _____

7:76pm

OPERATOR

Company:	BRINKER ENTERPRISES, LLC		
Address:	216 S MARSHALL ST GLEN ELDER, KS 67446		
Contact Geologist:	LEE BRINKER		
Contact Phone Nbr:	(785) 545-3348		
Well Name:	KNIPPSW #36-1		
Location:	NW SW NE SW Sec. 36-7S-20W	API:	15-163-24103-00-00
Pool:		Field:	WILDCAT
State:	KANSAS	Country:	USA

Scale 1:240 Imperial

Well Name:	KNIPPSW #36-1		
Surface Location:	NW SW NE SW Sec. 36-7S-20W		
Bottom Location:			
API:	15-163-24103-00-00		
License Number:	34151		
Spud Date:	3/8/2013	Time:	11:00 PM
Region:	ROOKS COUNTY		
Drilling Completed:	9/12/2012	Time:	5:50 PM
Surface Coordinates:	1943' FSL & 1628' FWL		
Bottom Hole Coordinates:			
Ground Elevation:	1925.00ft		
K.B. Elevation:	1930.00ft		
Logged Interval:	0.00ft	To:	0.00ft
Total Depth:	0.00ft		
Formation:	LANSING-KANSAS CITY		
Drilling Fluid Type:	FRESH WATER / CHEMICAL GEL		

SURFACE CO-ORDINATES

Well Type:	Vertical		
Longitude:	-99.5040433	Latitude:	39.3993644
N/S Co-ord:	1943' FSL		
E/W Co-ord:	1628' FWL		

LOGGED BY

SOLUTIONS CONSULTING

Company:	SOLUTIONS CONSULTING, INC.		
Address:	108 W 35TH HAYS, KS 67601		
Phone Nbr:	(785)259-3737		
Logged By:	Geologist	Name:	JEFF LAWLER

CONTRACTOR

Contractor:	WW DRILLING, LLC		
Rig #:	6		
Rig Type:	MUD ROTARY		
Spud Date:	3/8/2013	Time:	11:00 PM
TD Date:	9/12/2012	Time:	5:50 PM
Rig Release:		Time:	

ELEVATIONS

K.B. Elevation:	1930.00ft	Ground Elevation:	1925.00ft
K.B. to Ground:	5.00ft		

NOTES

WELL COMPARISON SHEET

	KNIPPSW #36-1				¤ BRUNSON DRILLIN COMPANY WAMHOFF #1 NE NE SE 36-7-20				¤ NATL ASSOC. PETR CO HIGHLEY #1 NE NE 2-8-20				P&A 9-10 BAIRD OIL COMPANY RABOURN #1-26 SW SW NE SE 26-7-20				• BACH OIL PRODUCTION LOWRY #1 NW SE SE NE 34-7-20			
	KB	1930			KB	1938			KB	1906			KB	1980			KB	1927		
	LOG TOPS		SAMPLE TOPS		COMP. CARD		LOG	SMPL.	COMP. CARD		LOG	SMPL.	COMP. CARD		LOG	SMPL.	COMP. CARD		LOG	SMPL.
FORMATION	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.	DEPTH	DATUM	CORR.	CORR.
ANHYDRITE TOP			1444	486	1453	485		+ 1	1440	466		+ 20	1514	466		+ 20	1473	454		+ 32
BASE			1478	452																
NEVA									2370	-464										
TOPEKA			2898	-968	2990	-1052		+ 84	2887	-981		+ 13	2949	-969		+ 1	2896	-969		+ 1
HEEBNER SHALE			3103	-1173	3116	-1178		+ 5	3088	-1182		+ 9	3152	-1172		- 1	3097	-1170		- 3
TORONTO			3128	-1198									3176	-1196		- 2	3122	-1195		- 3
LKC			3142	-1212	3154	-1216		+ 4	3132	-1226		+ 14	3192	-1212		+ 0	3136	-1209		- 3
BKC			3349	-1419	3364	-1426		+ 7	3339	-1433		+ 14	3401	-1421		+ 2	3347	-1420		+ 1
R/W ARBUCKLE									3386	-1480										
ARBUCKLE					3415	-1477			3395	-1489			3442	-1462			3387	-1460		
RTD					3469	-1531			3446	-1540			3481	-1501			3450	-1523		
LTD																	3442	-1515		

DST #1 PLATTSMOUTH 3065' - 3100'

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Brinker Enterprises LLC

216 S Marshall St
Glen Elder Ks 67446

ATTN: Lee Brinker

36-7s-20w Rooks

Knipp SW #36-1

Job Ticket: 50367 **DST#: 1**

Test Start: 2013.03.11 @ 02:50:24

GENERAL INFORMATION:

Formation: **PLATTSMOUTH**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 05:04:04
Time Test Ended: 09:17:48

Test Type: Conventional Bottom Hole (Initial)
Tester: Ray Schwager
Unit No: 42

Interval: **3065.00 ft (KB) To 3100.00 ft (KB) (TVD)**
Total Depth: 3100.00 ft (KB) (TVD)
Hole Diameter: 7.85 inches Hole Condition: Fair

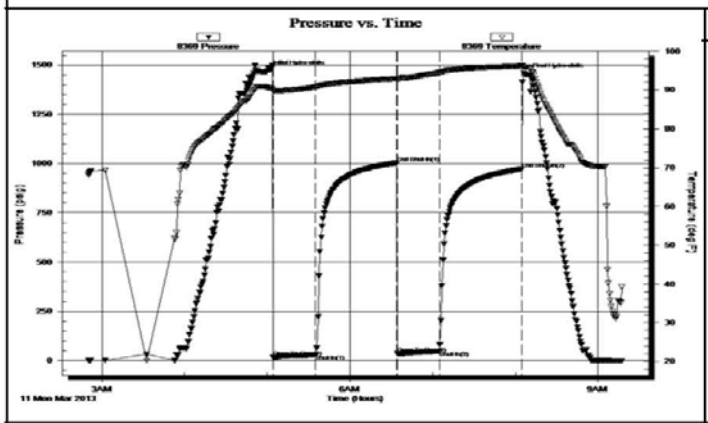
Reference Elevations: 1930.00 ft (KB)
1925.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8369 Inside
Press@RunDepth: 48.32 psig @ 3073.00 ft (KB)
Start Date: 2013.03.11 End Date: 2013.03.11
Start Time: 02:50:24 End Time: 09:17:48

Capacity: 8000.00 psig
Last Calib.: 2013.03.11
Time On Btm: 2013.03.11 @ 04:50:10

Start Time: 02:50:24 End Time: 09:17:48 Time On Btm: 2013.03.11 @ 04:59:19
Time Off Btm: 2013.03.11 @ 08:08:03

TEST COMMENT: 30-IFP-wk bl thru-out 1/4"bl
60-ISIP-no bl bl
30-FFP-wk bl thru-out 1/4"bl
60-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1465.35	90.79	Initial Hydro-static
5	15.49	89.81	Open To Flow(1)
36	28.92	90.79	Shut-In(1)
95	1002.82	92.98	End Shut-In(1)
96	34.39	92.75	Open To Flow(2)
126	48.32	94.51	Shut-In(2)
186	971.15	96.22	End Shut-In(2)
189	1449.10	95.93	Final Hydro-static

Recovery

Length (ft)	Description	Volume(bbl)
65.00	MW 45%M55%W w/show of oil	0.32

Gas Rates

	Choke(inches)	Pressure (psig)	Gas Rate(Mcf/d)

DST #2 TORONTO - LKC 'C' 3100' - 3195'

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Brinker Enterprises LLC

216 S Marshall St
Glen Elder Ks 67446

ATTN: Lee Brinker

36-7s-20w Rooks

Knipp SW #36-1

Job Ticket: 50368 **DST#: 2**

Test Start: 2013.03.11 @ 17:05:10

GENERAL INFORMATION:

Formation: **Toronto-LKC A-C**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 18:53:50
Time Test Ended: 22:56:49

Test Type: Conventional Bottom Hole (Reset)
Tester: Ray Schwager
Unit No: 42

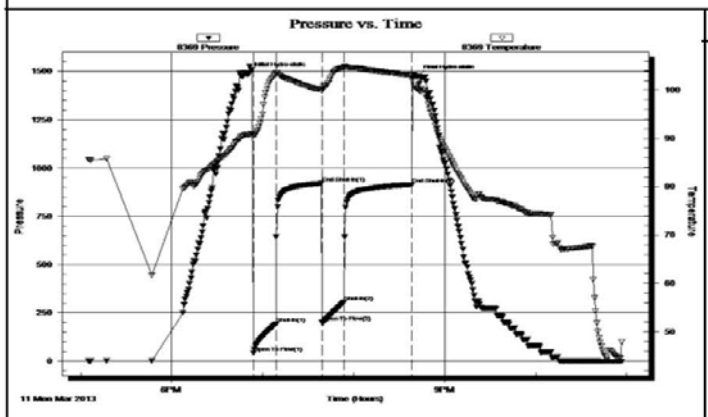
Interval: 3100.00 ft (KB) To 3195.00 ft (KB) (TVD)
Total Depth: 3195.00 ft (KB) (TVD)
Hole Diameter: 7.85 inches Hole Condition: Fair

Reference Elevations: 1930.00 ft (KB)
1925.00 ft (CF)
KB to GR/CF: 5.00 ft

Serial #: 8369 Inside
Press@RunDepth: 303.93 psig @ 3106.00 ft (KB)
Start Date: 2013.03.11 End Date: 2013.03.11
Start Time: 17:05:10 End Time: 22:56:49

Capacity: 8000.00 psig
Last Calib.: 2013.03.11
Time On Btm: 2013.03.11 @ 18:50:05
Time Off Btm: 2013.03.11 @ 20:41:35

TEST COMMENT: 15-IFP-strg bl in 2min
30-ISIP-surface bl bk
15-FFP-strg bl in 3min
45-FSIP-no bl



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1487.71	90.87	Initial Hydro-static
4	42.23	90.60	Open To Flow(1)
19	192.76	103.35	Shut-In(1)
49	920.85	100.10	End Shut-In(1)
50	200.25	99.84	Open To Flow(2)
64	303.93	104.66	Shut-In(2)
108	913.46	103.11	End Shut-In(2)
112	1473.71	100.23	Final Hydro-static

Recovery

Length (ft)	Description	Volume(bbl)
124.00	MW 5%M95%W w/show of oil	0.65
310.00	OCMW 10%O10%M80%W	4.35
124.00	OCWM 10%O40%W50%M	1.74
55.00	HOCM 20%O80%M	0.77

* Recovery from multiple tests

Gas Rates

	Choke(inches)	Pressure (psig)	Gas Rate(Mcf/d)

DST #3 LKC E-G 3206' - 3233'

TRILOBITE TESTING, INC.

DRILL STEM TEST REPORT

Brinker Enterprises LLC

216 S Marshall St
Glen Elder Ks 67446

ATTN: Lee Brinker

36-7s-20w Rooks

Knipp SW #36-1

Job Ticket: 50369 **DST#: 3**

Test Start: 2013.03.12 @ 05:51:03

GENERAL INFORMATION:

Formation: **LKC D-F**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 07:37:13
Time Test Ended: 10:51:42

Test Type: Conventional Bottom Hole (Reset)
Tester: Ray Schwager
Unit No: 42

Interval: 3206.00 ft (KB) To 3233.00 ft (KB) (TVD)

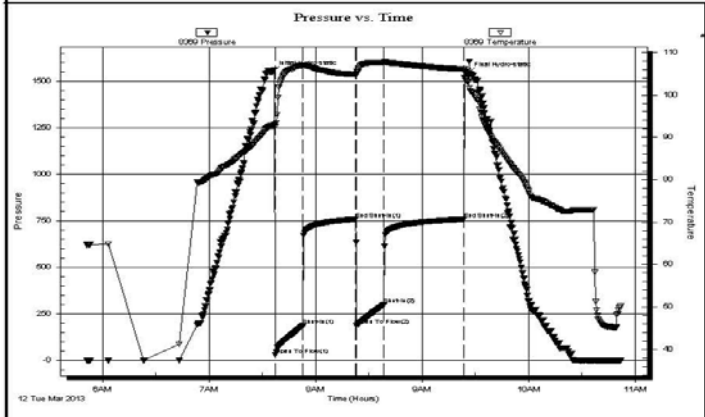
Reference Elevations: 1930.00 ft (KB)

Total Depth: 3255.00 ft (KB) (TVD) 1925.00 ft (CF)
Hole Diameter: 7.85 inches Hole Condition: Fair KB to GR/CF: 5.00 ft

Serial #: 8369 **Inside**

Press@RunDepth:	301.54 psig @	3210.00 ft (KB)		Capacity:	8000.00 psig
Start Date:	2013.03.12	End Date:	2013.03.12	Last Calib.:	2013.03.12
Start Time:	05:51:03	End Time:	10:51:42	Time On Btm:	2013.03.12 @ 07:35:28
				Time Off Btm:	2013.03.12 @ 09:25:28

TEST COMMENT: 15-IFP-strg bl in 3min
30-ISIP-no bl bk
15-FFP-strg bl in 4min
45-FSIP-no bl bk



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1551.23	92.69	Initial Hydro-static
2	30.73	92.41	Open To Flow (1)
18	187.85	106.94	Shut-In(1)
47	760.34	104.79	End Shut-In(1)
48	190.87	105.06	Open To Flow (2)
63	301.54	107.65	Shut-In(2)
108	759.90	106.06	End Shut-In(2)
110	1543.57	103.16	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
500.00	Water	5.92
100.00	MW 30%M70%Ww /show of oil	1.40

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Trilobite Testing, Inc Ref. No: 50369 Printed: 2013.03.12 @ 11:15:50

DST #4 LKC H-J 3258' - 3325'

ROCK TYPES

Carbon Sh

ACCESSORIES

STRINGER
Chert
Sandstone

OTHER SYMBOLS

DST
DST Int
DST alt

Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)

Curve Track #1
ROP (min/ft)
Gamma (API)
Cal (in)
1:240 Imperial
Depth | Intervals
Cored Interval
DST Interval
DST
Lithology
Oil Show
Geological Descriptions
Curve Track #3
1:240 Imperial

0 ROP (min/ft) 5
0 Gamma (API) 150
6 Cal (in) 16

2680
2690
2700
2710
2720
2730
2740
2750
2760
2770
2780
2790
2800

0 ROP (min/ft) 5

1' DRILL TIME THROUGH ANHYDRITE FROM 1430' - 1490'
1' DRILL TIME FROM 2700' - RTD
10' WET/DRY SAMPLES FROM 2750' - RTD
GEOLOGICAL SUPERVISON BY JEFF LAWLER FROM 2750' - RTD

8 5/8" PRODUCTION PIPE @ 50'

ANHYDRITE TOP 1444' (+486) E-LOG
BASE 1478' (+452) E-LOG

Lm- Cream Off White, F-Med XLN, oolitic, sl developed w/ mostly consistant XLN & vry fn ppy porosity, well cemented, clean & barren, much gummy argillaceous white & lm green clumps

Sh- A/A w/ sl waxy, unconsolidated & sl pebbley Lm Green chips

Lm- Tan Off White, F-Med, fsl w/ interbedded fusulinids & crinoids, well cemented, poorly developed w/ XLN porosity

Sh- Black Gray Lm Green, soft, very silty, gummy argillaceous clumps

Lm- Cream, FXLN, dense, well cemented, sl fsl, minimal vis. porosity, sctrd secondary recrystallization porosity

Sh- Maroon White Lm Green, abundant gummy argillaceous clumps, sandy white mud supported matrix, chalky lime

0 Gamma (API) 150
6 Cal (in) 16

2810
2820
2830
2840
2850
2860
2870
2880
2890
2900
2910
2920
2930
2940
2950
2960
2970
2980
2990
3000

0 ROP (min/ft) 5
0 Gamma (API) 150
6 Cal (in) 16

3010
3020
3030
3040
3050
3060
CFS 3068'
3070
D S T #1
3080
3090
CFS @ 3100'
3100
3110
3120
3130
3140

Sh- Maroon, gritty & earthy, gummy argillaceous clumps

Lm- Lt Gray Buff, FXLN, dense, well cemented, fsl w/ fragments, tight cherty Ls, sctrd XLN porosity

Sh/Ss- Lt & Drk Gray, soft, silty, some dense & well compacted, calcareous Ss- Dove Gray Lm Green, Fn Grn, friable, sl shaley, mostly consolidated & micaceous, NS

Lm- Cream Gray, mix of mud supported, unconsolidated & pebbley and fsl w/ fragments, dense cherty Ls, trashy high-energy mix

Sh/Ss- Abundant gummy argillaceous clumps, red, gray white Ss- Dove Gray, Vf-Fn Grn, sl shaley, loosely cemented, speckled w/ glauconite & sl micaceous

Sh- Gray Maroon, abundant gummy argillaceous clumps

TOPEKA 2898' (-968) E-LOG Lm- Gray Buff, FXLN, dense, well cemented, fsl, trashy high-energy mix

Lm- Cream Off White, FXLN, sl fsl, dense, poorly developed, minimal vis. & sctrd XLN porosity

Sh- Lt Gray White, soft, silty, calcareous, soft white chalk

Lm- Cream Off White, FXLN, loosely cemented, gritty sl dolomitic Ls, dense, minimal vis. porosity

Sh- Black, fissile, carbonaceous, Ss- Dove Gray Fn Grn, friable, sl shaley

Ss- Dove Gray, Vf-Fn Grn, dense, loosely cemented, sl shaley, lt speckled w/ glauconite, NS

Lm- Cream Off White, FXLN, fsl, poorly developed, mostly tight w/ minimal vis. porosity

Sh/Ss- White, much soft white chalk Ss- Dove Gray, Fn Grn, loosely cemented, consolidated & well sorted, mod. developed, lt speckled w/ dark minerals, NS

Lm- Cream Off White, FXLN, dense, mix of lithofied mud matrix w/ sctrd secondary recrystallization & small inclusions, mostly tight & poorly developed. sctrd XLN porosity

Lm- Buff Lt Gray, FXLN, mix of sl cherty Ls, most sl fsl, few chips of gritty sl dolomitic Ls, all w/ minimal vis. to sctrd XLN porosity, most w/ sctrd mottling

Sh- Black Gray White, fissile, slatey, carbonaceous, gummy argillaceous gray & white clumps

Sh- White Maroon, soft white chalk & gummy sandy lime

Lm- Cream Tan, Crypto-FXLN, dense, well cemented, mix of crypto XLN cherty Ls, sl speckled w/ pyrite inclusions, sl fsl, poorly developed, tight w/ minimal vis. porosity & gritty sl dolomitic cherty Ls, sctrd XLN porosity, clean & barren

Sh- Black White Lt Gray Maroon, fissile, carbonaceous, gummy soft chalk, gritty & earthy

Lm- Cream Off White, F-Med XLN, fsl, loosely cemented & crumbley, interbedded fusulinids, sctrd XLN porosity

Dolomite- Cream, Med XLN, well cemented, moderately developed, mostly w/ GD vis. euhedral rhombs, consistant XLn porosity throughout, clean & barren, few chips of lt gray fresh bedded chert

Lm- Cream Off White, Fn Grn, dense, mud supported matrix, heavily mottled

Lm- Cream, Vf Grn & FXLN, mix of lithofied mud supported, moderately developed w/ sctrd ppt porosity & FXLN, dense, packed oolitic, moderately developed w/ sctrd ppt porosity, all w/ DRK SCTRD STN, SL FLAKEY, VRY SL SFO, NO ODR

Lm- Cream Off White, FXLN & Fn Grn, mix of heavily mottled, tight w/ minimal vis. porosity, chalky in part

HEEBNER 3103' (-1173) E-LOG Sh- Black Maroon, vry fissile, carbonaceous, gritty & earthy

Sh- Gray Maroon, gummy argillaceous clumps

TORONTO 3128' (-1198) E-LOG Lm- Off White White, F-MED XLN, fsl & sl oolitic, well developed w/ sctrd ppt porosity, SCTRD DRK BRWN STN, FR SFO, VRY FNT ODR

SHORT TRIP SURVEY 1 dgr. STRAP -0.28

DST #1 OREAD 3065' - 3100'

LKC 3142' (-1212) E-LOG Lm- White Off White, VF-FXLN, dense, well cemented, poorly developed, minimal vis. porosity, vry clean, few chips of Med XLN, well cemented dolomite, mostly consistant XLN porosity, clean & barren

Lm/Chert- White Off White, Crypto-FXLN, dense, well cemented, tight w/ no vis. porosity, few chips of bone white chert & few sl dolomitic chert

Lm- Cream Off White, FXLN, dense, well cemented, poorly developed w/ sctrd XLN porosity, sl chalky in part

Sh- Maroon Lt Gray Lm Green, gritty & earthy, gummy argillaceous clumps

Lm- Off White White, Med XLN, fsl & oolitic, well developed w/ GD mostly consistant ppt interoolitic porosity, SCTRD BRWN STN, SL SFO, SL SCUM ON TOP ON WET CUP, FR-GD ODR

Sh- Maroon, girty & earthy, few argillaceous clumps

Lm- Cream Tan, FXLN & Vf Grn, dense poorly developed mix, some sl chalky & crumbley w/ minimal vis. porosity, others w/ sctrd XLN porosity, clean & barren

Lm- Cream Off White, Fn Grn, dense, sl chalky in part, minimal vis. porosity

Lm- Cream Tan, FXLN, loosely cemented, well developed w/ consistant vry fn ppt porosity, SCTD STN, SL-FR SFO, GD ODR

Lm- Cream Off White, F-Med XLN, fsl & oolitic, sctrd development, sctrd XLN to sctrd ppt interoolitic porosity, some recrystallization inclusions & inter porosity recrystallization, SCTRD DRK STN, SL SFO, FR-GD ODR

Lm- White Off White, FXLN, dense, poorly developed, some chalky in part, minimal vis. to sctrd XLN porosity, vry clean & barren

Sh- Black Maroon Gray, fissile, carbonaceous, gummy gray clumps, gritty & earthy

Lm- Cream Tan, F-MED XLN, mix of well developed oolitic w/ GD interoolitic ppt porosity, SCTRD DRK STN, SL SFO, FR-GD ODR, gradates into well developed vry fn ppt porosity throughout, loosely cemented, SAT DRK STN, GD SFO, FEW BLEEDING, FR-GD ODR

Lm- Cream w/ Lt Green tint, Vf Grn, dense algal Ls, no vis. porosity

Sh- Gray Lm Green Maroon, gritty slivers, gritty & earthy, sl waxy

Lm- Tan, Vf Grn, dense, well cemented, lithofied mud matrix, sctrd development w/ sctrd vry fn ppt porosity, SCTRD DRK STN, VRY SL SFO, PR-FR ODR

Sh- Maroon Gray, gritty & earthy

Lm- Cream Off White, F-Med XLN, fsl & oolitic, moderately developed w/ sctrd fn ppt interoolitic porosity, some w/ only XLN, sl chalky in part, WK SPOTTY FLAKEY STN, NO SFO, PR ODR

Lm- Off White, VF-FXLN, moderately developed, well cemented, sctrd fn ppt porosity, SCTRD DRK STN, SL-FR SFO, SOME GASYY BUBBLES, FR ODR

Sh- Black Maroon Lm Green Gray, fissile, sl silty, carbonaceous, soft, calcareous, gummy argillaceous red clumps, gritty & earthy

Lm- Ivory Cream, VF-Med XLN, mix of tight VFXLN w/o vis. porosity, sctrd soft white chalk, & sl fsl, sl developed w/ sctrd fn ppt porosity, loosely cemented, SCTRD LT STN, SL SFO, FEW GAS BUBBLES, FNT-PR ODR

Sh- Black Gray Maroon, fissile, carbonaceous, gritty & earthy, sl waxy

Lm- Cream, FXLN, dense, sl fsl, loosely cemented, sctrd XLN porosity, clean & barren

BKC 3349' (-1419) E-LOG Sh- Red, gummy argillaceous clumps, sandy shaley & lime

Conglomerate- White shaley conglomerate, some sl sandy

Lm- White Off White, FXLN, sl oolitic, poorly developed w/ sctrd XLN porosity & rare fn ppt interoolitic porosity, well cemented, WK SPOTTY STN, NO SFO, NO ODR

Sand- Clear to Sl Frosted, angular to sub-angular, mostly loose ind. grains, 3-4 friable clusters w/ minimal dolomitic cementation & rare glauconite inclusions/speckling, NO VIS. STN, NO SFO, PR-FR ODR, CLUSTERS W/ STREAMING YELLOW FLOR & HALO WET CUT

DST #2
TORONTO & LKC A-C
3100' - 3195'

DST #3
LKC E-G
3206' - 3233'

DST #4
LKC H-J
3258' - 3325'


3490
3500
3510