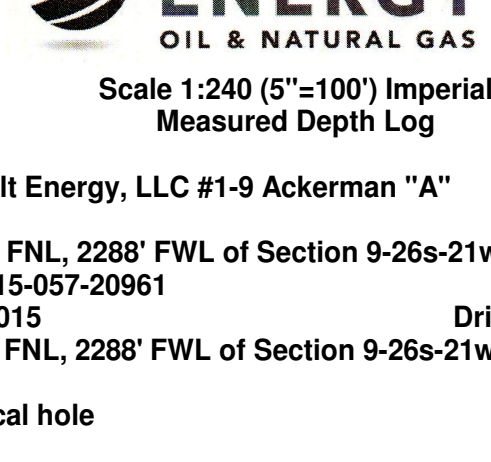


WESLEY D. HANSEN Consulting Petroleum Geologist

212 N. Market, Suite 257, Wichita, KS 67202  
Office: 316-267-7313 Cellular: 316-772-6188

KGS  
AAPG  
Kansas License #418



Scale 1:240 (5"=100') Imperial  
Measured Depth Log

Well Name: Cobalt Energy, LLC #1-9 Ackerman "A"  
Well Id:  
Location: 2236' FNL, 2288' FWL of Section 9-26S-21W  
License Number: API: 15-057-20961  
Spud Date: 5-1-2015  
Surface Coordinates: 2236' FNL, 2288' FWL of Section 9-26S-21W  
Region: Ford County, Kansas  
Drilling Completed: 5-9-2015

Bottom Hole Coordinates: Vertical hole  
Ground Elevation (ft): 2303' K.B. Elevation (ft): 2308'  
Logged Interval (ft): 3800' To: RTD Total Depth (ft): 4900'  
Formation: Mississippian at RTD  
Type of Drilling Fluid: Chemical - Displaced at 3577'  
Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Cobalt Energy, LLC  
Address: 115 S. Belmont #12  
P.O. Box 8037  
Wichita, KS 67208

GEOLOGIST

Name: Wesley D. Hansen  
Company: Wesley D. Hansen - Consulting Petroleum Geologist  
Address: 212 N. Market, Suite 257  
Wichita, KS 67202  
Office: 316-263-7313 Cellular: 316-772-6188

COMMENTS

Contractor: Murfin Drilling Co., Inc. Rig #16  
Pusher: Andy Dinkel

Surface Casing: 8 5/8" set at 345' w/225 sx  
Production Casing: P&A

Mud by: Morgan Mud - Justin Whiting and Brad Bortz were the engineers.

DST's by: Trilobite - Ryan Reynolds was the tester.

Logs by: Tucker Energy Services (DIL, CN-CD, MEL, BHCS)

Deviation Surveys: 1/4 deg. @ 346'; 1 1/8 deg. @ 4800'

NOTE: Log tops were 4' to 8' higher than drill time/sample tops

BIT RECORD

Bit #	Size	MFG	Type	Depth Out	Footage Cut	Hours on bit
1	12 1/4"	Reed	TC11rr	346'	346'	4 1/2
2	7 7/8"	HTC	GX20C	4800'	4454'	112
3	7 7/8"	HTC	GX20Crr	4900'	100'	79 + 3

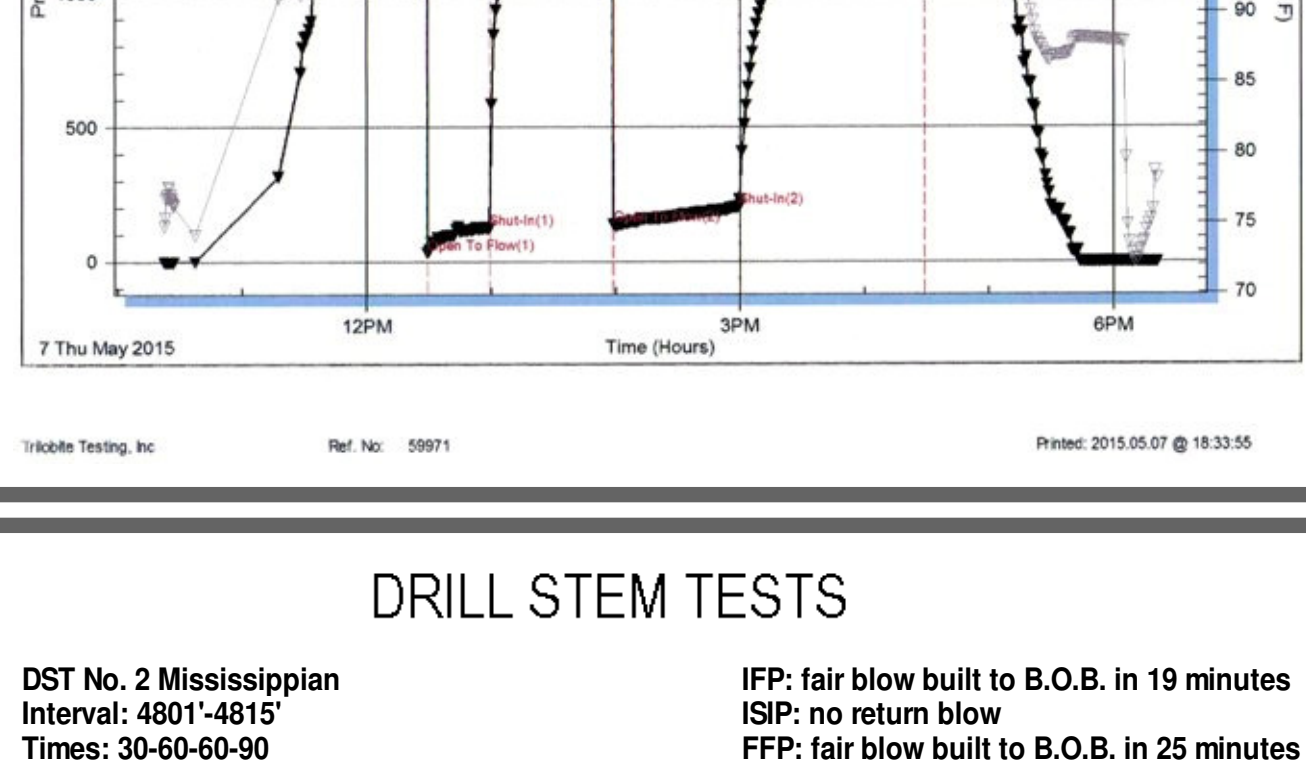
FORMATION TOPS AND STRUCTURAL COMPARISON

FORMATION	SAMPLE TOPS		LOG TOPS		COMPARISON WELLS	
	Depth	Datum	Depth	Datum	1. Zorger Pet. Ackerman C-1 NWSE 9-26S-21W 2302' KB	2. Aikman Oil & Gas Ackerman #1 NWNE 9-26S-21W 2296' KB
		2308' KB		2308' KB		
Anhydrite	1357'	+951	1354'	+954	+3	+1
Heebner Shale	4030'	-1722	4026'	-1718	+17	+18
Brown Lime	4146'	-1838	4138'	-1830	+20	+20
Lansing	4157'	-1849	4148'	-1840	+19	+20
Lansing "B" por.	not developed		not developed		NC	NC
Hushpuckney Shale	4476'	-2168	4470'	-2162	+15	+12
Cherokee	4689'	-2381	4680'	-2372	+23	+16
Mississippian	4778'	-2470	4772'	-2464	+33	+29
Miss. Dolomite por.	4786'	-2478	4780'	-2472	+33	+26
RTD	4900'	-2592				
LTD			4898'	-2590		

DRILL STEM TESTS

DST No. 1 Mississippian  
Interval: 4801'-4800'  
Times: 30-60-60-90  
Recovery: 190' G&OCM (10g, 3o, 87m);  
GO&MCW (30g, 5o, 28m, 37w); 95' GO&MCW  
(20g, 5o, 23m, 52w); total fluid 405'; chl. 56,000  
FP: 33-125/139-204 SIP: 1342-1322  
HP: 2383-2322 BHT: 117 deg. F

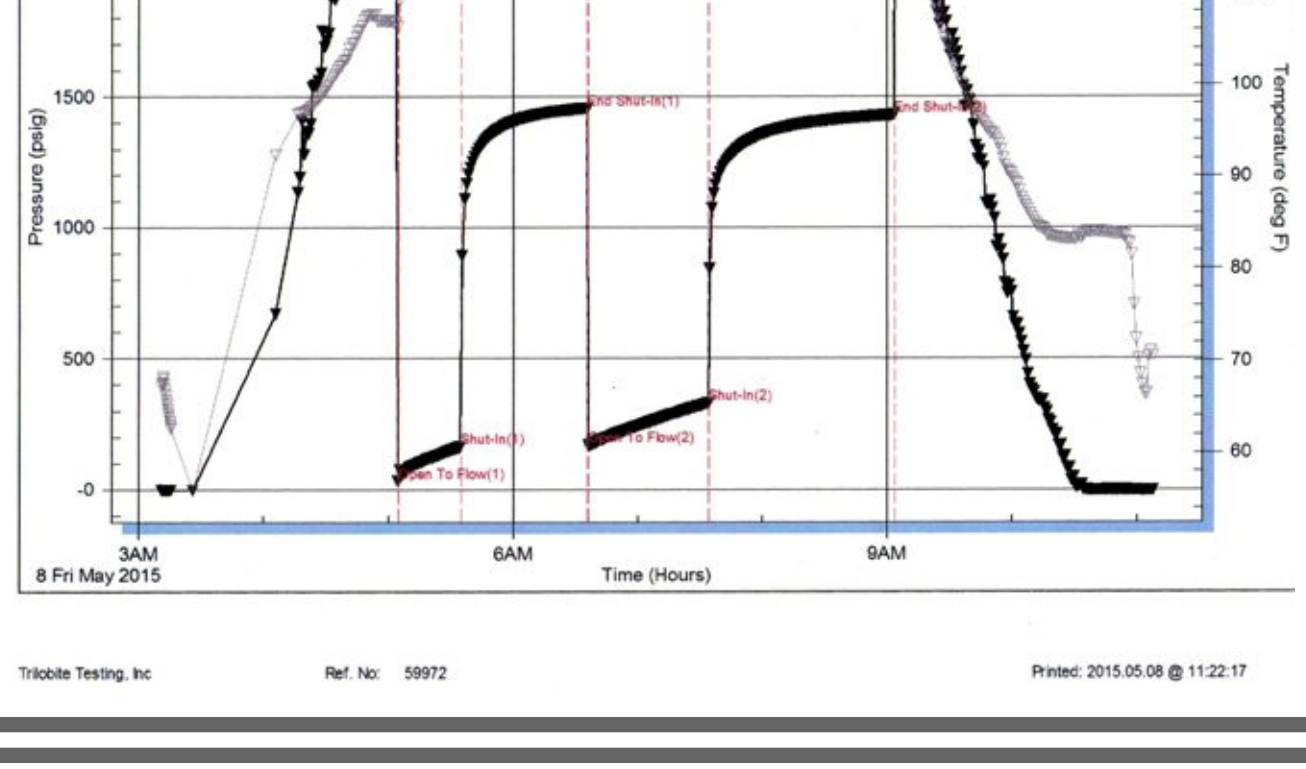
IFP: fair blow built to 11 inches  
ISIP: no return blow  
FFP: fair blow built to B.O.B. in 51 minutes  
FSIP: no return blow



DRILL STEM TESTS

DST No. 2 Mississippian  
Interval: 4801'-4815'  
Times: 30-60-60-90  
Recovery: 130' G&OCMW (5g, 3o, 30m, 62w);  
510' VSL OCMW (trc oil, 5m, 95w); total fluid  
640'; chl. 55,000  
FP: 32-164/168-331 SIP: 1455-1431  
HP: 2448-2291 BHT: 126 deg. F

IFP: fair blow built to B.O.B. in 19 minutes  
ISIP: no return blow  
FFP: fair blow built to B.O.B. in 25 minutes  
FSIP: no return blow



ROCK TYPES

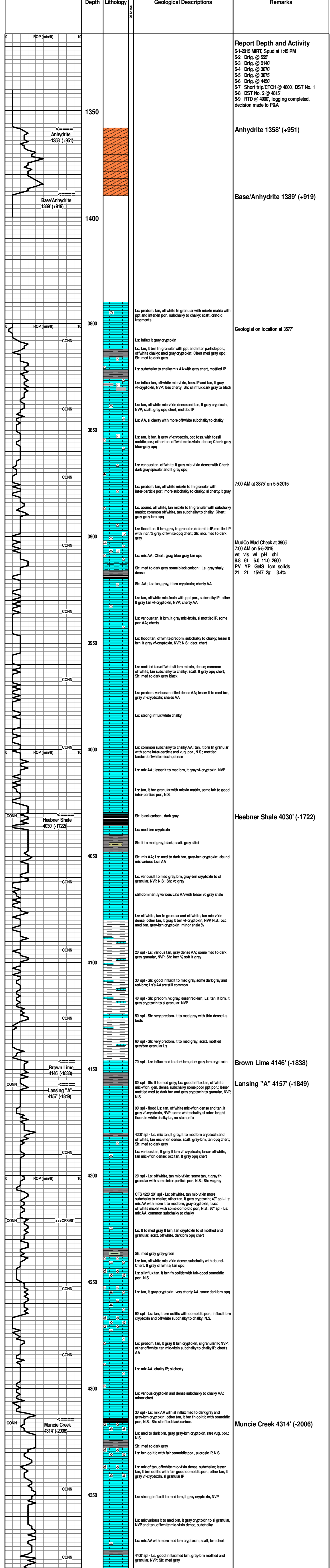
Anhy	Salt	Dol	Shlysts
Cht	Shcol	Dtd	Slysh
Coal	Shgy	Gry sh	Sly dolo
Congl	Siltst	Sandylms	Silty dolo
Dol	Ss	redshale	Shy dolo
Gyp	Carb sh	Shale	Shaly ls
Lmst		Siltstn	Light dolomite

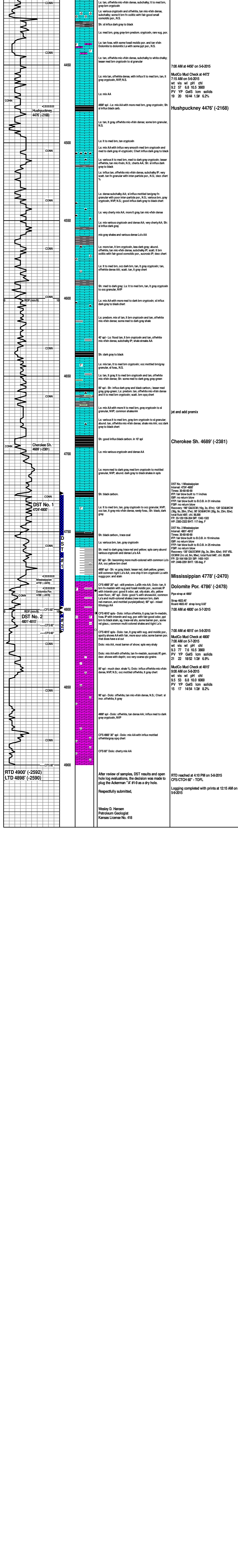
FOSSIL

Algae	Plant	Glaug	STRINGER
Amph	Strom	Gyp	Anhy
Belm	Fuss	Hvymrn	Arg
Briocist	Oomold	Kaol	Bent
Brach		Marl	Coal
Cephalo		Minxl	Dol
Bryozoa	MINERAL	Nodule	Gyp
Coral	Anhy	Phos	Ls
Crin	Arg	Pyr	Mlstrg
Echin	Bent	Salt	Ssstrg
Fish	Bit	Sandy	Carbsh
Foram	Brefracg	Silt	Clystn
Gastro	Calc	Sil	Dol
Oolite	Carb	Sulphur	Gryslt
Ostra	Chtdk	Tuff	Lms
Pelec	Chtlt	Chlorite	Sandylms
Pellet	Dol	Dol	Sh
Pisolite	Feldspar	Sand	Siltstn
	Ferrpel	Silty	
	Ferr		

OTHER SYMBOLS

INTERVALS	EVENTS	OTHER SYMBOLS	
Core	Rft	OIL SHOWS	Trace
Dst	Dst top/base	Even	Dead
		Spotted	Gas show
		Quest.	





Ls: tan, offwhite mic-vfn dense, subchally; lt to med bm, gray-brn cryptoxin  
 Ls: various cryptoxin and offwhite, tan mic-vfn dense, subchally; some lt bm fr oolitic with fair-good small oomolitic por., N.S.  
 Sh: sl influx dark gray to black  
 Ls: med bm, gray, gray-brn predom. cryptoxin, rare vug, por.  
 Ls: tan fossil, with some fossil moldic por. and tan vfn Dolomite to dolomitic Ls with some ppt por., N.S.  
 Ls: tan, offwhite mic-vfn dense, subchally to white chalky; lesser med bm cryptoxin to sl granular  
**7:00 AM at 4450' on 5-6-2015**  
**MudCo Mud Check at 4473'**  
**7:15 AM on 5-6-2015**  
 wt vis pH chl  
 9.2 57 6.8 10.5 3000  
 PV YP GelS lcm solids  
 19 20 16/44 1.5# 6.2%  
**Hushpuckney 4476' (-2168)**  
 4607 spl - Ls: mix AA with more med bm, gray cryptoxin; Sh: sl influx black carb.  
 Ls: tan, lt gray, offwhite mic-vfn dense, some bm granular, N.S.  
 Ls: lt to med bm, tan cryptoxin  
 Ls: mix AA with influx very smooth med bm cryptoxin and med to dark gray v-f-cryptoxin; chert influx dark gray to black  
 Ls: various lt to med bm, med to dark gray cryptoxin; lesser offwhite, tan mic-vfn, N.S.; cherts AA; Sh: sl influx dark gray to black  
 Ls: influx tan, offwhite mic-vfn dense, subchally IP; very scatt. tan fr granular with inter-particulate por., N.S.; decr. chert %  
 Ls: dense subchally AA; sl influx mottled tan/gray fr granular with poor inter-particulate por., N.S.; various bm, gray cryptoxin, NVP, N.S.; good influx dark gray to black chert  
 Ls: very cherty mix AA; more lt gray tan mic-vfn dense  
 Ls: mix various cryptoxin and dense AA; very cherty AA; Sh: sl influx dark gray  
 mix gray shales and various dense Ls AA  
 Ls: more tan, lt brn cryptoxin, less dark gray; abund. offwhite, tan mic-vfn dense, subchally IP; scatt. lt brn oolitic with fair-good oomolitic por., sacrosic IP; decr. chert %  
 Ls: lt to med bm, occ dark bm, tan, lt gray cryptoxin; tan, offwhite dense AA; scatt. tan, lt gray chert  
 Sh: med to dark gray; Ls: lt to med bm, tan, lt gray cryptoxin to occ granular, NVP  
 Ls: mix AA with more med to dark bm cryptoxin; sl influx dark gray to black chert  
 Ls: predom. mix of tan, lt brn cryptoxin and tan, offwhite mic-vfn dense; some med to dark gray shale  
 467 spl - Ls: flood tan, lt brn cryptoxin and tan, offwhite mic-vfn dense, subchally IP; shale streaks AA  
 Sh: dark gray to black  
 Ls: mix tan, lt to med bm cryptoxin; occ mottled bm/gray granular, sl foss., N.S.  
 Ls: tan, lt gray, lt to med bm cryptoxin and tan, offwhite mic-vfn dense; Sh: some med to dark gray gray-green  
 867 spl - Sh: influx dark gray and black carbon.; lesser med gray-green; Ls: predom. tan, offwhite mic-vfn dense and lt to med bm cryptoxin; scatt. brn opq chert  
 Ls: mix AA with more lt to med bm, gray cryptoxin to sl granular, NVP; common shales AA  
 Ls: various lt to med bm, gray-brn cryptoxin to sl granular; abund. tan, offwhite mic-vfn dense; shale mix AA; occ dark gray to black chert  
 Sh: good influx black carbon. in 10' spl  
 Ls: mix various cryptoxin and dense AA  
 Ls: more med to dark gray, med bm cryptoxin to mottled granular, NVP; abund. dark gray to black shales in spls  
 Sh: black carbon.  
 Ls: lt to med bm, tan, gray cryptoxin to occ granular, NVP; occ tan, lt gray mic-vfn dense, rarely foss.; Sh: black, dark gray  
 Sh: black carbon., trace coal  
 Ls: various bm, tan, gray cryptoxin  
 Sh: med to dark gray trace red and yellow; spls carry abund various cryptoxin and dense Ls AA  
 90' spl - Sh: becoming more multi-colored with common Ls AA; occ yellow-brn chert  
 4607 spl - Sh: v. gray black; lesser red, dark yellow, green; still common light Ls AA; one chip lt brn cryptoxin Ls with vuggy por. and stain  
 CFS 4607 20' spl - still predom. Ls/Sh mix AA; Dolo: tan, lt brn fr med-in with vug and fossil moldic por., sacrosic IP with intertn por; good lt odor, sat., oily stain, sfo, yellow even floor. 40' spl - Dolo: good % with shows AA; common Ls and multi-colored shales (new moon brn, dark red-maroon, and mottled purple/yellow); 60' spl - mixed lithology AA  
 CFS 4810' spl - Dolo: influx offwhite, lt gray, tan fr med-in, foss. IP with intertn and vug, por. with fair-good odor, ppt bm to black stain, sg, trace-vf sfo, some barren por., some vt glauc.; common multi-colored shales and light Ls  
 CFS 4815' spl - Dolo: tan, lt gray with vug, and moldic por., spotty shows AA with fair, more sour odor, some barren por. That does have a sl out  
 Dolo: mix AA, most barren of show, spls very shaly  
 Dolo: mix AA with offwhite, tan fr med-in, sacrosic IP, gen. decr. shows with depth; occ very coarse qtz grains  
 80' spl - much decr. shale %; Dolo: influx offwhite mic-vfn dense, NVP, N.S.; occ mottled offwhite, lt gray chert  
 90' spl - Dolo: offwhite, tan mic-vfn dense, N.S.; Chert: sl incr. offwhite, lt gray  
 4907 spl - Dolo: offwhite, tan dense AA; influx med to dark gray cryptoxin, NVP  
 CFS 4907 30' spl - Dolo: mix AA with influx mottled offwhite/gray opq chert  
 CFS 60' Dolo: cherty mix AA  
 After review of samples, DST results and open hole log evaluations, the decision was made to plug the Ackerman 'A' #1-9 as a dry hole.  
 Respectfully submitted,  
 Wesley D. Hansen  
 Petroleum Geologist  
 Kansas License No. 418  
**RTD reached at 4:10 PM on 5-9-2015**  
**CFS/CTCH 60' - TOFL**  
**Logging completed with prints at 12:15 AM on 5-9-2015**