James C. Musgrove
Petroleum Geologist
Office (620) 588-4250
212 Main St. • P.O. Box 215 • Claflin, KS 67525
Home (620) 587-3444

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY ABARTA Oil & Gas Co., Inc

LEASE Hoffman #1

FIELD Kraft-Prusa

LOCATION 1382' FSL & 856' FWL
SW-SE-NW-SW

SEC 18 TWP 16S RGE 11W

COUNTY Barton STATE Kansas

CONTRACTOR Royal Drilling Rig #1

SPUD 7-30-2010 COMP 8-5-2010

RTD 3400 LTD 3400

MUD UP 2609 TYPE MUD Chemical

ELEVATIONS

KB 1904

DF

GL 1899

Measurements Are All From K.B.

CASING

SURFACE 8⅝ @ 865'

PRODUCTION 4½ set @ 3398'

ELECTRICAL SURVEYS
Superior Well Services
CDL/CNL/PE - DIL
MICRO - SONIC

SAMPLES SAVED FROM 2600 TO RTD.

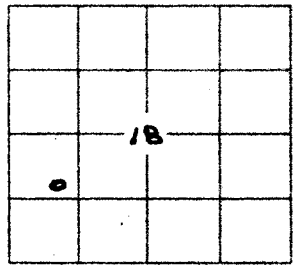
DRILLING TIME KEPT FROM 2500 TO RTD

SAMPLES EXAMINED FROM 2600 TO RTD

GEOLOGICAL SUPERVISION FROM 2750 TO RTD.

GEOLOGIST ON WELL W. Scott Albers

FORMATION TOPS	LOG	SAMPLES
Anhydrite	763 (+1141)	763 (+1141)
Topeka	2668 (-764)	2667 (-763)
Heebner Shale	2954 (-1050)	2953 (-1049)
Toronto	2972 (-1068)	2973 (-1069)
Douglas Shale	2986 (-1082)	2986 (-1082)
Brown Lime	3048 (-1144)	3046 (-1142)
Lansing	3064 (-1160)	3061 (-1157)
B/KC	3314 (-1410)	3315 (-1411)
Arbuckle	3340 (-1436)	3336 (-1432)



REMARKS With the results of log calculations, sample shows & structural position, it was recommended casing be set to further evaluate potential pay zones

Respectfully,
W. Scott Albers
#54

LEGEND

Dolomite
Chert
Ool. Lime
Limestone
Carb sh
Shale
Sandstone
Salt
Anhydrite

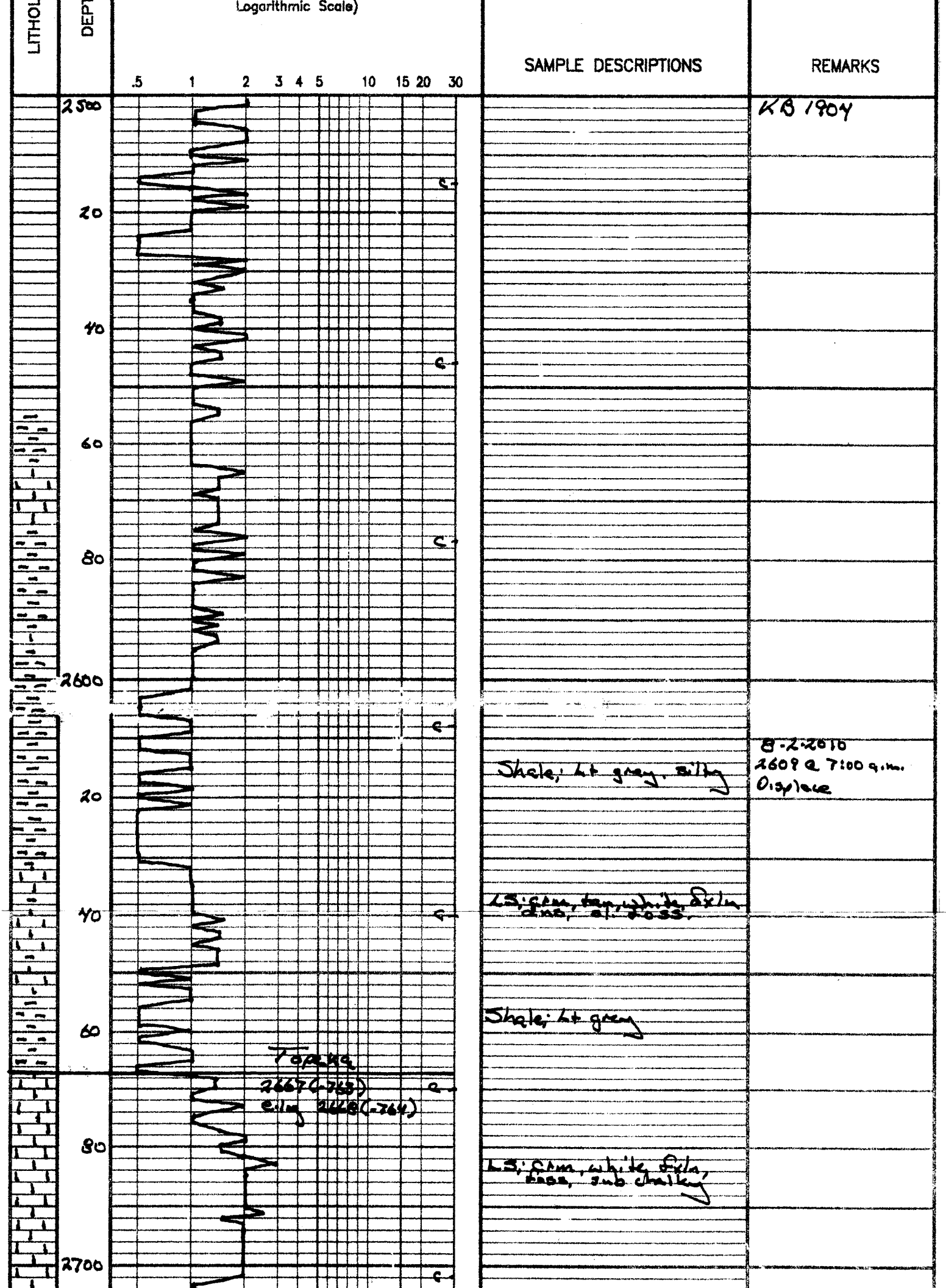
DRILLING TIME

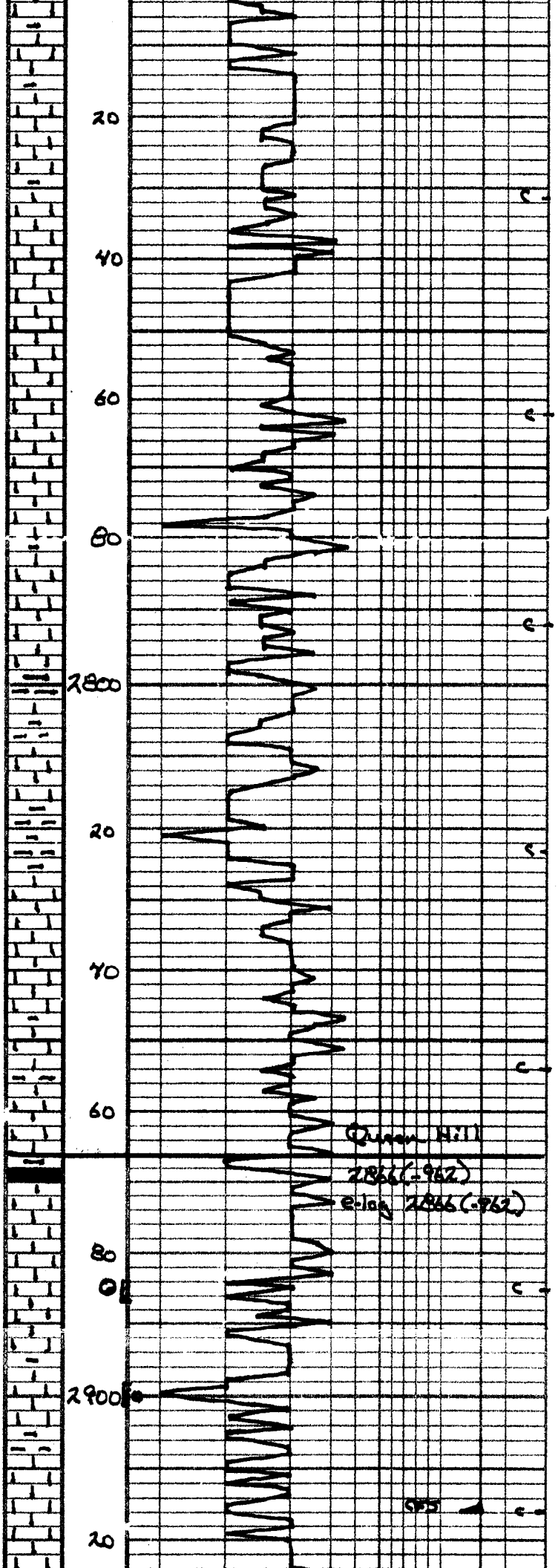
HL

OGY

7505

LOG 7702


LITHOL
DEPT
Logarithmic Scale)
.5 1 2 3 4 5 10 15 20 30
SAMPLE DESCRIPTIONS
REMARKS
2500
20
40
60
80
2600
20
40
60
80
2700
KB 1904
8-2-2010
2609 @ 7:00 p.m.
Displace
Shale; lt grey, silty
LS; crm, tan, white, fxln
dns, sl. foss.
Shale; lt grey
Topeka
2667 (-763)
est. log 2668 (-764)
LS; crm, white, fxln,
foss, sub chalky



LS; crm, fxln, chalky

LS, crm-white, tan, fxln, marked, chalky, foss

LS, gray-white, fxln, dense, tr gray, chalky foss

Shale; dk gray

LS; tan, white, fxln, dense

Shale; lt gray, gray

LS; gray-white, fxln, foss, tr. foss, vf, sl. chalky no vis shows

LS; tan, gray-white, fxln, foss., sl. chalky

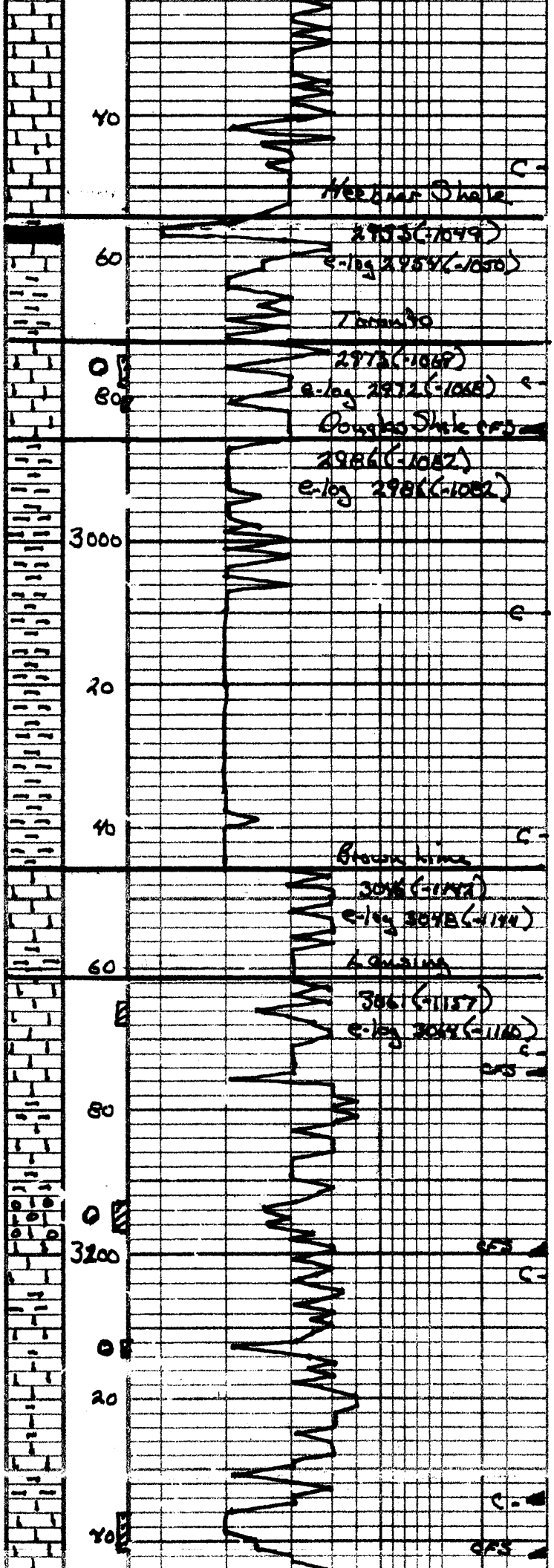
Shale; gray-blk, calc

LS; tan-white, fxln, dk, dense, sl. foss., sl. chalky

LS, tan-white, fxln, sl. foss, tr foss fl, tr pin point por, v. lt shows dk brn oil, no odor

LS; crm, gray-white, fxln, sl. dolitic, mod. por, shows dk oil, v. lt odor when broken

LS; crm, gray-white, fxln, cherty, tr foss



LS; gry, tan, fxln, chalky
loss

55

Heebner Shale

Shale; gray-blk, carb

LS; gray, white, xln, dense

Shale; lt gray, green

Toronto

LS; crm, tan-white, fxln, fr-pp ϕ, chalky, v. blk odor
ϕ shows (tr oil), dull min
fluor.

Douglas Shale

Shale; lt gray, silty to
sli. sandy

Shale; lt gray, silty

Brown lime

LS; tan, fxln, dense, slt loss
sli. chalky

Shale; lt gray

LS; crm, fxln, foss frag, foss
sub chalky, no dis shows

LS; cream-white, fxln, sl foss
chalky

Shale; lt gray, gray

LS; cream-wh, fxln, arg,
sli ϕ, trace shows tr oil,
v. fr odour, fr pp ϕ,
sub chalky

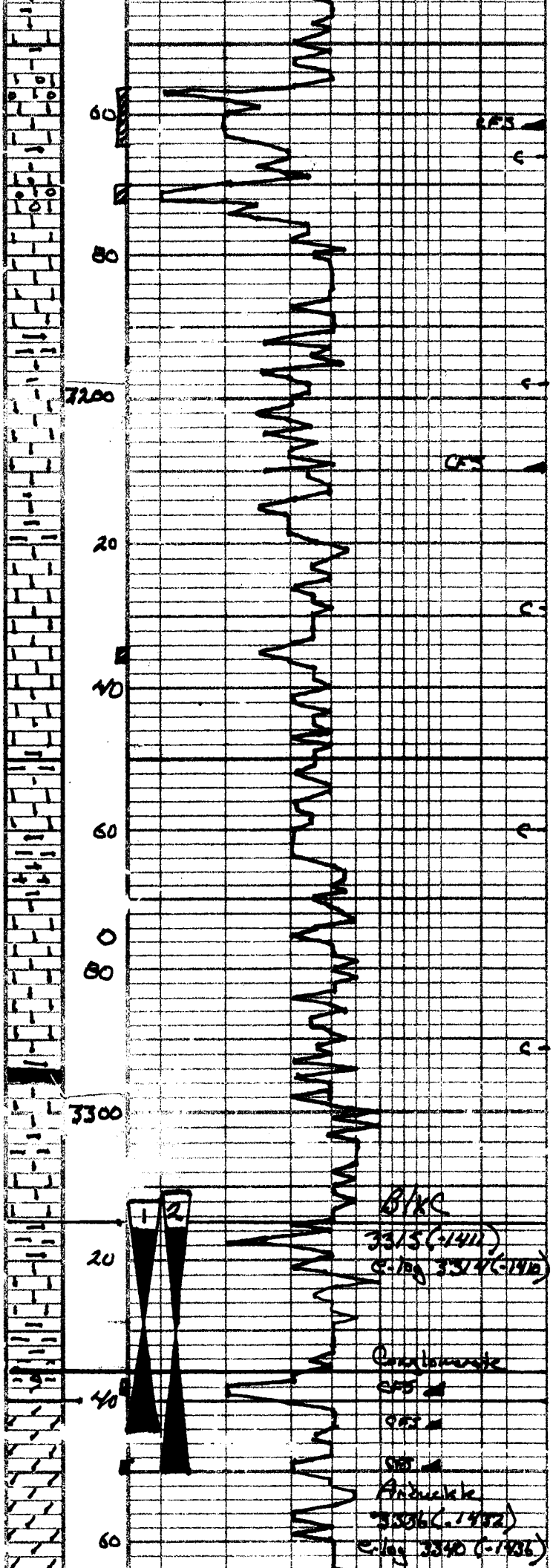
Shale, lt gray

LS; crm, tan-white, fxln, foss
fragments, fr, vag ϕ fr odor
v. sli shows tr oil

LS; gray-white, fxln, dense
foss loss, tr chalky

Shale; gray

LS; gray-white, tan, fxln
v. foss, loss ϕ, chalky,



LS; crm-white, fxln, sl. foss chalky in pt

LS; crm, fxln, calcareous, sl. ∅, bentonite, no odor, no vis shows

LS; crm-white, fxln, sl ∅ vugs, sl. chalky, no vis shows

LS; tan-white, fxln, dly dense, tr tan chert

Shale; gray

LS; crm, gray-white, fxln, sl. foss, tr oolo ∅, no odor, no vis shows, sl. chalky in pt

LS; crm, gray-white, fxln, sl. foss, sl. chalky, no odor, no vis shows

LS; crm tan-white, fxln, tr. ppf, sl. foss., trace ∅, poor ∅, v. fr. odor, no vis shows

LS; tan gray-white, fxln, dark, tr chert, sl. foss

Shale; gray-blk, sl. carb

LS; tan crm-white, fxln, tr ∅, tr foss, in pt, v. fr hyd sl show oil, no odor

LS; tan, xln, dense, tr tan gray chert

Shale; dk gray

LS; gry-wh-white, tan, fxln dense, sl foss

Shale; gray-green

LS; tan-white, fxln, dense

Shale, green, gray

A var-colored, stony to sandy sl. asphaltic staining

Dolomite; crm-white, tan, sucr, impt, fr odor, v. fr show oil under plug.

Dolo-crm-white, tan, v/s, fine xln with scattered vugs ∅

Dolomite, crm, tan-white, fine grained, grainy text, tr vug ∅, sl. fr odor, no vis show oil

B-3-2010
3162 @ 7:00 a.m.

OST #1 3312-3344
Times 30-45-30-45
IHP 1644 FHP 1593
IFP 14-21 FFP 20-52
ISIP 777 FSIP 777
Rec: 45' VSOCM
(5% O, 95% M)
1st Opening 1¼" blow
no blow back
2nd Opening ¼" blow
plugging
no blow back

B-4-2010
3344 @ 7:00 a.m.
PIPE STRAP
STRAP 3355.1L
BOARD 3353.91
1.25 long

NO CORRECTION

Dolomite, tan, slightly chalky, trace scattered anhy., v. slight vuggy

Dolomite, a/a

Dolomite, slightly anhydritic, clear, grainy, granular, fair oil, occ. shows, trace red granular granite

80

3400

K
B SES

Pass. Granite Wash

RTD 3396
LTD 3390

* Drilled 4" extra hole into granite wash!
Set 4½" @ 3392'

20

40

60

80

3500

DST #2 3311-3350
Times 30-45 30-45
IHP 1631 FHP 1585
IHP - 21-64 FHP 68-109
ISIP 783 FSIP 782
Rec. 1' Free Oil
129' WCM (30% W, 70% M)
60' MCW (30% M, 70% W)
Temp 111° Cl 55000
1st Opening 7" blow
no blow back
2nd Opening 5½" blow
no blow back

ALBERG PETROLEUM, LLC
W. Scott Alberg
Petroleum Geologist, KS Lic 54
609 Meadowlark Lane
Pratt, Kansas 67124

Geologist Report

August 12, 2010

ABARTA Oil & Gas Co., Inc
1000 Gamma Dr Ste 400
Pittsburgh, PA 15238-2926

Hoffman #1
SW SE NW SW
1582' FSL & 856' FWL
Section 18-T16S-R11W
Barton County, Kansas

Contractor	Royal Drilling, Rig #1
Commenced	July 30, 2010
Completed	August 5, 2010
Elevations	GL 1899; KB 1904
Measurements	All depths measured from Kelly Bushing.
Casing Program	Surface: 8 5/8" set at 869'. Production: 4 ½" set at 3392'
Samples	Samples saved from 2600' to Total Depth.
Drilling Time	One(1) foot drilling time recorded by geolograph from surface to T.D.
Gas Detector	None
Electric Log	Superior Well Services: DIL, CNL/CDL/PE, MICRO, SONIC.
Formation Testing	TrilobiteTesting, Two Tests Ran

FORMATION	ELECTRIC LOG DEPTH	SUBSEA DATUM
Anhydrite	763	+1141
Topeka	2668	-764
Heebner Shale	2954	-1050
Toronto	2972	-1068
Douglas Shale	2986	-1082
Brown Lime	3048	-1144
Lansing	3064	-1160
Base Kansas City	3314	-1410
Arbuckle	3340	-1436
LTD	3400	-1496

All samples corrected to Electric Log Depths.

SAMPLE ANALYSIS, SHOWS OF OIL, ECT.

Topeka
(Oread)
2899 to 2902

Limestone, cream, grey-white, finely crystalline, slightly oolitic, oolimoldic

	porosity, show of dark oil, faint odor when broken. Should be evaluated prior to abandonment.
Toronto 2973 to 2978	Limestone, cream, tan-white, finely crystalline, trace of pin point porosity, chalky in part, very faint odor, slight show of light oil, dull mineral fluorescence. Of Possible value. Should be evaluated prior to abandonment.
Lansing 'B Zone' 3094 to 3098'	Limestone, cream-white, finely crystalline, oolimoldic porosity, very faint odor, trace show of light oil, trace of pin point porosity, sub chalky. Probable non-commercial.
'D Zone' 3116 to 3119	Limestone, cream, tan-white, fine to medium crystalline, fossil fragments, trace of vugular porosity, faint odor, very slight show of oil. Probably tite or wet.
'F Zone' 3137 to 3141	Limestone, grey-white, tan, finely crystalline, very fossiliferrous, fossiliferrous porosity, friable, questionable odor, no visible shows. Of no value.
'J Zone' 3233 to 3237	Limestone,cream, tan-white, finely crystalline, trace of pin point porosity, slightly fossiliferrous, fossiliferrous porosity, poor overall porosity, very faint odor, no visible shows.
Arbuckle 3339 to 3342	Dolomite, cream-white, tan, succorsic in part, faint odor, very faint show oil under ultra violet light, Covered by DST #1 and DST # 2. OF POSSIBLE COMMERCIAL VALUE.
Log Total Depth	3400(-1496)

Drill Stem Tests

DST #1 3312 to 3344
Arbuckle – Times 30-45-30-45
Initial flow period, weak 1 ½" blow, no blow back; Second flow period, very weak blow, ¼" blow, no blow back.

IHP	1644#	FHP	1593#
IFP	14-21#	FFP	20-52#
ISIP	777#	FSIP	777#

Recovery: 45 feet VSOCM (5% oil, 95% mud)

DST #2 3311 to 3350'
Arbuckle - Times 30-45-30-45
Initial flow period, strong blow built to 7" in 30 minutes, no blow back; Second flow period, strong blow, built to 5 ½", no blow back.

IHP	1631#	FHP	1595#
IFP	21-64#	FFP	68-109#
ISIP	783#	FSIP	782#

Recovery; 1' Free Oil
129' WCM, 30% water, 70% Mud
60' MCW 70% water, 30% mud, (Chlorides 55,000 ppm)

RECOMMENDATIONS:

With the results of sample shows, structural position, and log calculations it was recommended 4 ½" production casing be set to further evaluate the potential pay zones in this well. The following zones should be perforated and tested;

1.	Arbuckle	3339 to 3340

Prior to abandonment

1.	'J Zone'	3233 to 3237
2.	Toronto	2924 to 2928
3.	Oread	2898 to 2902

Respectfully,

W. Scott Alberg, P.G. #54