

A.P.I. # 15-065-23872-0000

GEOLOGICAL REPORT
DRILLING TIME AND SAMPLE LOG

COMPANY Baird Oil Company, LLC.
 LEASE Quinn # 4-2
 FIELD Last Hope Northeast
 LOCATION 1842' FNL + 607' FWL
 SEC 2 TWSP 7s RGE 22w
 COUNTY Graham STATE Kansas

ELEVATION
 KB 2257
 DF 2255
 GL 2252
 Depths Measured From
 Log KB Drilling KB.

CONTRACTOR WWD Drilling Rig # 8
 SPUD 10-20-12 COMP 10-27-12
 SAMPLES SAVED FROM 3230' TO R.T.D.

CASING
 Surface 8 7/8" @ 217'
 Production 5 1/2" @ 3786'

ELECTRIC LOGS
Nabors

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE	E. LOG	DATUM	A	B	C	D
				0	●		
Anhydrite	1891	1890	+ 367	+ 368	+ 369		
Base Anhydrite	1924	1923	+ 334	+ 335	+ 338		
Topeka	3252	3251	- 994	- 995	- 992		
Heebner	3453	3453	- 1196	- 1197	- 1194		
Toronto	3477	3477	- 1220	- 1221	- 1218		
Lansing	3494	3494	- 1237	- 1238	- 1237		
Base Kansas City	3684	3684	- 1427	- 1431	- 1426		
Marmaton	3727	3727	- 1470	- 1471	- 1470		
Total Depth	3797	3797	- 1540	- 1541	- 1542		

REFERENCE WELLS

- A Baird Oil Co., Quinn # 3-2, 330' FNL + 330' FWL Sec. 2-7s-22w
- B Baird Oil Co., Quinn # 2-2, 330' FNL + 330' FWL Sec. 2-7s-22w
- C
- D Port Callar @ 1910'

REMARKS

This well ran structurally favorable with the reference wells. It was decided production casing should be cemented to further test the well. The following zones should be tested; 3651-3654', 3567-3569', 3558-3560', 3528-3529' and 3494'-3497'.

Standard 45' Bell
10-28-12

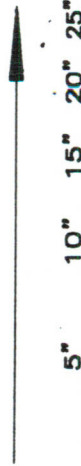
7502

LEGEND

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

DRILLING TIME IN MINUTES
PER FOOT

Rate of Penetration Decreases



DEPTH

1880

1900

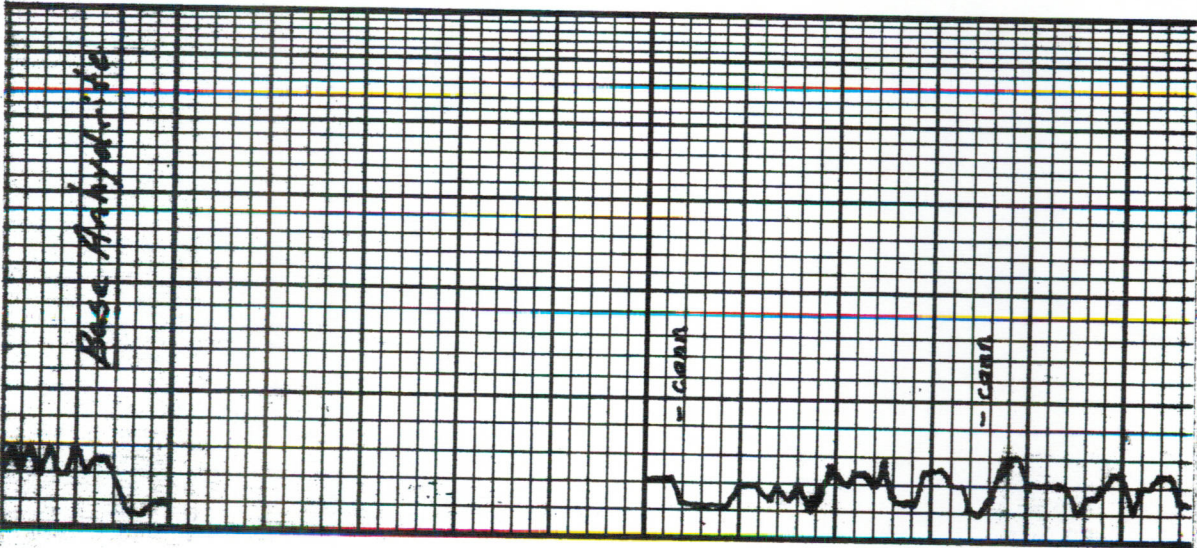
LITHOLOGY

SAMPLE DESCRIPTIONS

OIL SHOWS

REMARKS

LOG 7710



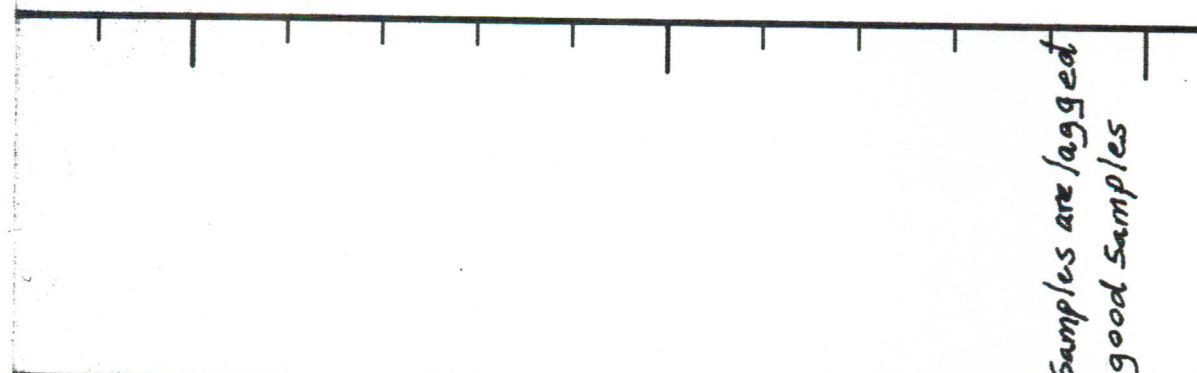
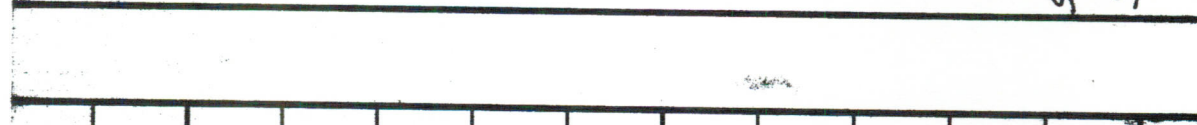
1920

3100

20

40

Samples are lagged
good samples



60

80

3200

20

40

60

80

sh:gyx

LS:tn-gry mtd fsf dns
sh:brn

LS:wh-tn-sli:cky-fxh No
vis^o No 5.0.

LS:tn-gry fxh dns

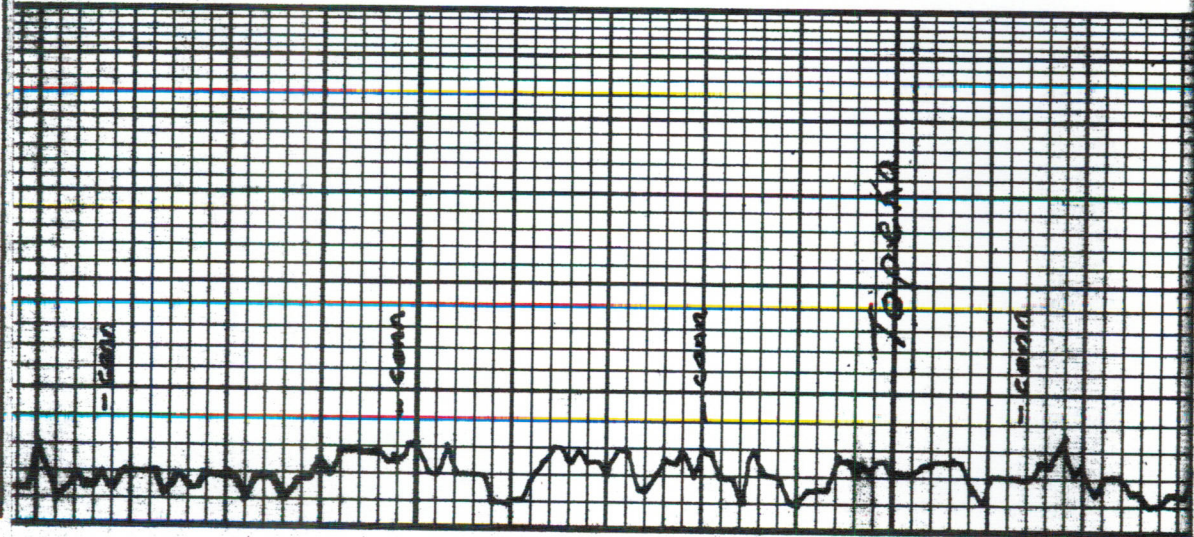
Sh:gry sKx,brn

LS:wh-tn-gry-sli:cky-fsf
dns No 5.0.
sh:gyx,brn

LS:aa sli:incr.cky

LS:wh-txcky-fxh Tr. PP
Tr. Glauc. spks. NSO.

sh:brn



conn

conn

conn

Topo

conn

10-21-91 1214 hrs.

LS: wh to fxlh - Tr. sli ool
Fg. impart of Thick blk
Ostn Tr. Tary O stn
If floating h2o ft. odor

LS: wh to - Lt. gry sli. cky -
fxln Tr. sli: fslf dms N50

Sh: Blk Carb
LS: to - gry fslf dms N50
sh: brn, gry

LS: wh to cky - fxlh Tr.
150l. vugs w/ oil stn N.F.O.
No odor Aty to Tr-5ptd
O Sat.

Sh: brn stty, gry
LS: wh to fxlh ool w/ pass.
incls. pp - Tr. impart of lit.
A. Ostn pp floating F.O.
V. ft. odor

LS: wh to sticky fxlh dms.

LS: as.
Sh: brn, gry

LS: wh to fxlh ool/pp -
part of Tr. sli. D514

20

40

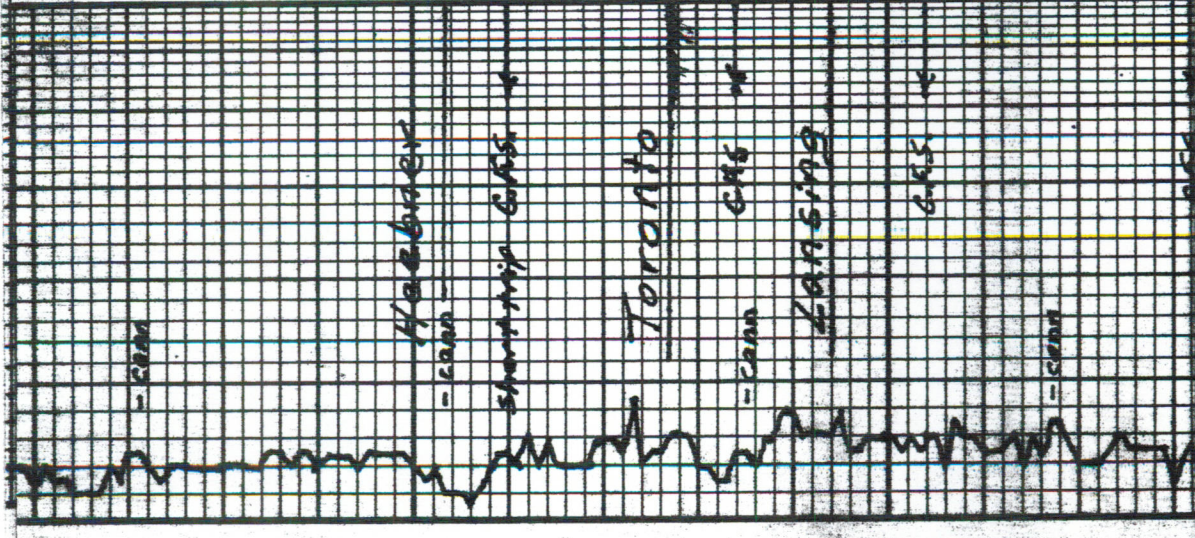
60

80

3500' A

20

'C'



✓

✓

✓

✓

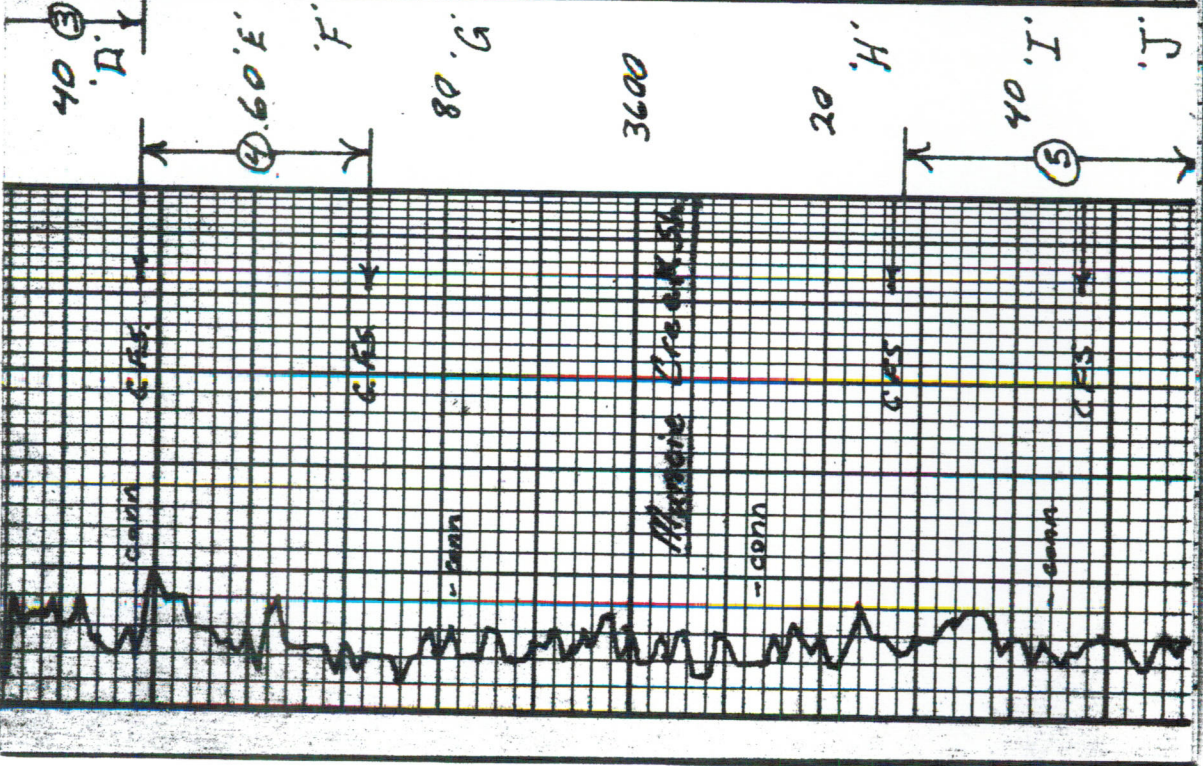
Board 3517.47
Strap 3517.38
Diff. .09
Incline 1° @ 3504'
Trilobite Testing

DST# / 3484 - 3504.
30-30-30-30
IF: wk blow dms in 12 min
FF: No blow
Recovery: 10' OCM
107.0, 90% M
Hyd: 1740-1698#
FP: 10-13/14-14#
BHP: 71-44#
BHTemp: 107°F.

DST# 2 3510-3622
30-45-30-45
IF: B.O.B. in 9 min.
ISI: wk blow dms in 15 min
FF: wk blow in to 7 1/2
FSI: No blow
Recovery: 484' Total
14' C.O.
470' 50cm 170, 892W
107.0
N.M.: 1750-1700

FP: 38-176/180-207
 BNP: 694-623±
 BHTemp: 117°F
 Gravity: 30° A.P.I.
 Chlorides: 44,000ppm
 DST #3 2531-3548'
 15-45-30-45
 IF: B.O.B. in 3 min.
 ISF: No blow
 FF: B.O.B. in 3 min.
 FSI: No blow
 Recovery: 1290' MW
 95% w, 57m
 Hhd: 1762-1676±
 FP: 39-259/267-252±
 BNP: 913-907±
 BHTemp: 118°F
 Chlorides: 41,000ppm
 DST #4 3548-3572'
 15-45-45-45
 IF: B.O.B. in 4 1/2 min.
 ISF: wk blow in. to 2 1/2"
 FF: B.O.B. in 4 min.
 FSI: wk blow in. to 2 3/4"
 Recovery: 280' G.I.P.
 Total fluid 740'
 140' CO.
 180' G+OC/M 1520, 1020
 25% w, 50m
 420' MW 95% w, 52m
 Hhd: 1773-1720±
 FP: 24-147/156-356±
 BNP: 777-749±
 BHTemp: 116°F
 Gravity: 35° A.P.I.
 Chlorides: 41,000ppm
 DST #5 3628-3660'
 45-45-46-45
 IF: wk blow in. to 2"

Fr. Sat. pp. floating fl. a. gry
 Strong odor a. gry
 Sh: brn, gry
 Dol. in str. max. in 2d. Vg. p
 Ark. bleaching fr. tary. osh
 LS: wh. to sl. cky. fish. d. s.
 a. gry. float. ing fl.
 Sh: brn, gry
 LS: wh. to sl. cky. ool. pp. p
 t. spt. osh. fr. fl.
 LS: wh. to sl. cky. ool. pp. p
 part. fr. osh. pp. f. o.
 fr. odor
 Sh: brn, gry
 LS: wh. to cky. fish. d. s.
 N.S.O.
 LS: wh. to ht. gry cky. - fish. d. s.
 Sh: blk. Carb.
 LS: gry. fish. d. s.
 Sh: gry. slty, brn
 LS: wh. to cky. fish. ool. w.
 f. osh. incl. pp. fr. Vg. p
 Lt. osh. fr. tary. osh.
 Fr. floating fl.
 Sh: brn. slty, gry
 LS: wh. to sl. cky. fish. ool.
 Pr. pp. fr. spt. osh. fr. ht.
 O. Sat. fr. pp. f. o.
 LS: wh. to sl. cky. fish. d. s.
 ool. pp. fr. a. osh. pp. f. o.



Recovery: 70' 0c.m
 NME: 1820-1780W
 FP: 14-42/47-64W
 BHP: 72.7-66/48
 BNTemp: 109°F

sh:brn, gry	LS: wh-to, sli-cky-fsch ool foss. incl. Tr. P.P. Ool O. Stn N.P. O. Tr. Tary, Sh
sh:brn, mar. gry Tr. S.S. V. fr. gn. Consol. ingran. N.S.O.	LS: wh-to sli-cky-fsch ool foss. incl. pr. P.P. Tr. H-300 O. Stn Tr. Tary O. Stn P.P. Ool Tr. A Li. gry
LS: wh-to cky-fsch dms	
sh: gry, brn	LS: wh-to fxlrdms N.S.O.
sh:brn, gry	
LS + Sdy, LS: wh-to fxlrdms Tr. S.S. Hugs Tary Ool A + wea. D. Tr. O. Stn P.P. Ool Tr. S.S. cl. fr. gn. Consol. ingran. Tary O. Stn sh: brn, gry	
LS: wh-to cky-fsch-sli-fsch dms N.S.O.	
sh: brn, gry	
a.g.	
sh: brn sly, gry	

'X'
 80 L
 3700
 20
 40
 60
 80
 3800

