

Max R. Lovely

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Trans Pacific Oil
 LEASE Michaels #2
 FIELD Keilman Southeast
 LOCATION SESENE
 SEC 32 TWP 17 RGE 24W
 COUNTY Ness STATE KS
 CONTRACTOR Duke Rig 4
 SPUD 12-13-2011 COMP 12-29-2011
 RTD 4455 LTD 4455
 MUD UP 3450 TYPE MUD Chem

ELEVATIONS
 KB 2337
 DF _____
 GL 2328
 Measurements Are All From KB

CASING
 SURFACE 8 5/8 @ 214'
 PRODUCTION 4 1/2

ELECTRICAL SURVEYS
 DUAL INDUCTION
 COMP. N/D

FORMATION TOPS AND STRUCTURAL POSITION

FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION		
				A	B	C
Anhydrite	1623	1621	716	709		
Base Anhydrite	1657	1654	683	673		
Heebner	3690	3688	-1351	-1359		
Lansing	3733	3731	-1394	-1402		
BKC	4026	4026	-1689	-1689		
Pawnee	4148	4149	-1812	-1822		
FT. Scott	4233	4232	-1895	-1908		
Cherokee SH	4260	4258	-1921	-1934		
Cherokee SD	4312	4311	-1974	-1991		
Chert	4360	4365	-2028	-2037		
Mississippi Dolo	4402	4401	-2064	-2081		

REFERENCE WELLS FOR STRUCTURE

- A Palamino #1 Minnie Rutner 1940 FNL, 430 FWL 33-17-24W
- B _____
- C _____

REMARKS

LEGEND

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

DRILLING TIME IN MINUTES PER FOOT Rate of Penetration Decreases 	DEPTH	LITHOLOGY	SAMPLE DESCRIPTIONS	OIL SHOWS	REMARKS

ANHYDRITE
1623 +716

1650

BASE ANHY.
1657 +682

3400

c

c

c

3500

c

3600

LS, WHT, VF XTLN, HRD, FOSS,
No APP. NS

HEEBNER
3690 - 1353

SH, BLK

3700

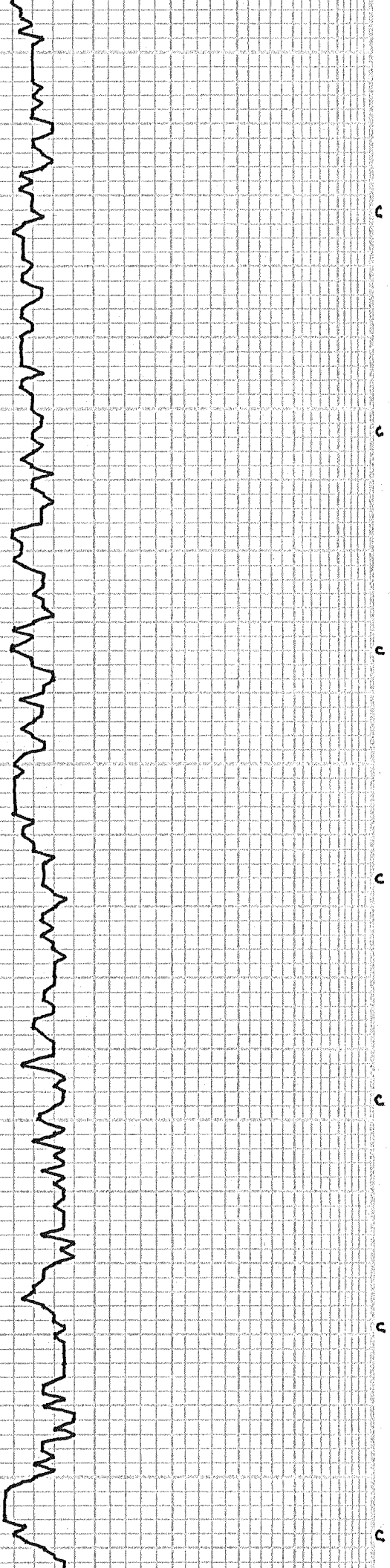
LS, WHT, F → M XTLN, HRD, DNS.
SL FOSS, TITE, NS

CHT, CHINA WHT, FRESH, SL
FOSS, NS

LANSING
3733 - 1394

LS, CRM, VSHLY (GRY), SOFT,
SL ROTTEN, F → G. NS

LS, CRM, BUFF, F XTLN, HRD,
FOSS, TITE, Pcs CHLKY



3800

A A CHT, WHY, FRESH, MILKY

A A

LS, CRM, FXTLN, HRD, V FOSS,
TITE, NS

LS, A.A.

SH, GRY, BLK

LS, CRM, BUFF, FXTLN, HRD,
FOSS, No APP, NS

LS, TAN, FXTLN, SOFT, CHLKY,
NS

CHLK

0 0
0 0
0 0
0 0

LS, CRM, WHY, FXTLN, SOFT,
F FOSS, PXTLN, NS

LS, WHY, V FXTLN, DNS, HRD,
MICROFOSS, NO APP, NS

3900

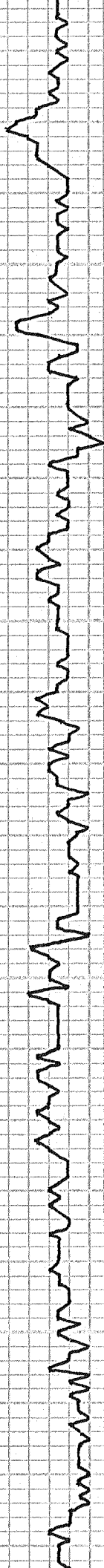
A.A.

A A CHT, WHY, LT GRY, FRESH

A A

LS, WHY, V FXTLN, V DNS, BRTL
NO APP, NS

LS, TAN, FXTLN, V OOL, OOL,
W CMT'D OOLS, HRD, NO APP
, NS



c

4000

SH, DK GRY

SH, GRN

LS, BUFF, F XTLN, V FOSS, HRD
TITE, NS

c

BKC

4026 -1689

SH, BLK, GRY

c

LS, TAN, LT TAN, V HRD, Pcs
BRTL + FOSS, MOSTLY TITE
NS

SH, GRY, GRN

MARMATON

4078 -1741

LS, GRY, V F XTLN, V DNS, V HRD,
TITE, NS

SH, GRY

c

4100

LS, WHT, CRM, V F XTLN, DNS
TITE, NS

A.A.

c

PAWNEE

4155 -1818

SH, RED

LS, GRY, DNS, V F XTLN, NS

c

LS, GRY, V F XTLN, DNS, V HRD,
BARREN FOSS, TITE, NS

4200

LS, TAN, CRM, VFXTLN, DNS, HRD, Pcs STY, NS

7:AM 12:27:11
RE-RIG TO DRILL
GEO ON LOC @ 4200'
~ 1:30 PM

LS, LT GRY, DK GRY, VFXTLN, DNS, V HRD, NO FOSS, TITE NS

MUD CHECK
VIS 95 WT 9.1
CHLOR 6,000 LCM 1
FILT 9.2

SH, GRY

DST #1 4219-4268
30.60.60.60
IF: 1 3/4" ISI: F. SURF BLO
DIED 9"

FT SCOTT
4233 -1896

LS, CRM/WHT, VFXTLN, DNS, SA CHLKY, HVY FLUOR STNG, G FLUOR + LT BRN FO, TR GAS BBL, G SCT VUG, + INT XTLN, HVY SHO IN CUP, TRAY DIRTY W/FO, V LT OIL, F-G BLEED OF VARI SIZE GSSY FO DROPS, HVY ODOR

LT BRN FO
HVY ODOR

FF: 1 1/2" FSI: No BLO
REC: 15'm, SHO 0 IN TOOL
FP: 58-60, 64-66
SIP: 945-171
HP: 2101-2088 113°

LS, TAN, VFXTLN, V DNS, V HRD, SCT FOSS, TITE, NS

STRAP 4266.49
BOARD 4268.87
SHORT 2.38

CHEROKEE SH
4260 -1923

SH, GRY, DK GRY, BLK

CFS 45'

DEV 3/4°

SH, GRN

LS, WHT, F-M XTLN, M HRD, V FOSS, VARI SIZE FOSS, SL BRTL, P XTLN Ø, NS

7:AM 12:28:11
GO IN HOLE FROM
DST #1

LS, CRM, BUFF, FXTLN, Pcs V DNS + V HRD, FEW FOSS, NO APP Ø, NS

MUD CHECK
VIS 70 WT 9.2
CHLOR 7,000 LCM 2
FILT 9.2

4300

SH, GRY/GRN, CONGL GRNS W/IN

VIS 58
WT 9.0

SS, WHT, GRY, V HRD, W CMT'D TITE SH, A.A

DST #2 4281-4319
30.60.60.90
IF: 808 6" ISI: 3 1/2"
FF: 808 7" FSI: below SURF
REC: 180' GIP

CHEROKEE SD
4312 -1975

SS, FINE CLR SUB RND GRNS, WHT CMT, P CMT'D, W SORT, G-HVY FO ON BRK, Pcs LT GRN + NO CMT, TR GAS ON BRK, LT BRN → BRN FO, FEW DROPLETS IRREG SHAPE, VG FLUOR, SLO BLEED

LT ODOR
IN CUP
HVY ODOR
IN TRAY

732' C60 20% G, 80% O
180' C6M 25% G, 10% O
FP: 83-188, 201-388
SIP: 1244-1222
HP: 2163-2130 124°
OIL 38° API

CFS 60'

SS, LG GRNS, F SORT, SUB ANG, SHO GAS IN VG INT GRN LR Ø, LT BRN CMT, CLR GRNS, HVY SHO FO

HVY FLUOR STNG

CFS 60'

SS, LT BRN CMT, CR GRNS, G → W SORT VG ODOR, G INT XTLN Ø, Ø SAT ROCK, G FO

Ø SAT G FO

CFS 60'

SS, WHT, V FG GRNS, W SORT, SL FRIABLE, GRN STN'D CMT, SCT GRN GRNS, PYRITIC, SMELLS WET NS

SS FLOOD

7:AM 12:29:11
CFS @ 4350'

CHERT
4360 -2023

SH, LT GRN, SANDY

MUD CHECK
VIS 51 WT 9.3
CHLOR 7,200 LCM 1
FILT 8.0

CHT, WHT, GRY, TAN, CHINA WHT, V FRESH, Pcs DOLS W/IN SS GRNS CMT'D ON TOP SURFACE

CFS 60'

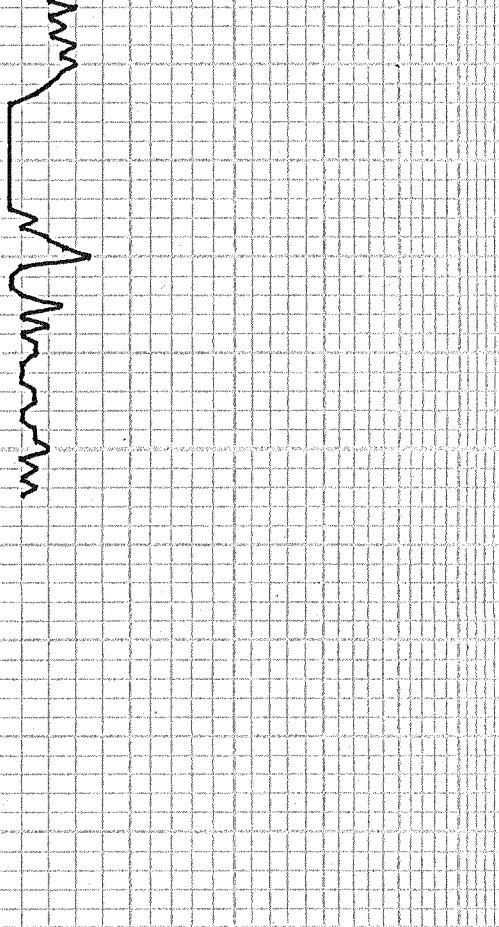
CHT, WHT, SL TRIP, DNS, HRD, Pcs V FOSS, NS

MISS DOLO
4400

CHT, WHT, GRY, OPAQ, NO FOSS, NS

4402 -2065

DOLO, BRN F XTLN, HRD



c



DOLO, TAN, VFXTLN, SCT VUG, NO PERM, SOFT, SL GRAY, PGS SUCR, NS

DOLO, LT CRM, VFXTLN, DMS, TITE, NS

DOLO, WHT, V GRNLR, G XTLN, SL, GRN STNG, NS

c DEV 3/4

CHT FLOOD

5" 10" 15" 20" 25"

DRILLING TIME Minutes/Foot

Rate of Penetration Decreases

DEPTH

LITHOLOGY

SAMPLE DESCRIPTIONS

OIL SHOWS

REMARKS