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COLORADO OIL & GAS CONS. COMM.

BILL T. WOMACK

Petroleum Consultant
42 West Ellsworth Avenue
P.O. Box 9406
Denver, Colorado 80223
(303) 733-1597

COLORADO OIL & GAS CONS. COMM.

GEOLOGICAL WELL REPORT

TEXAS OIL & GAS CORPORATION

BAILEY "D" NO. 1 WELL

se nw nw sec. 34-T25s-R45w

Prowers Co., Colorado

4058' K. B.

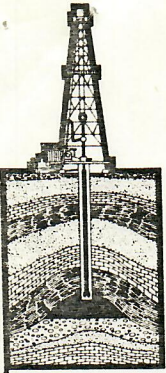
BARREL SPRINGS FIELD

Bill T. Womack
Petroleum Consultant
43 W. Ellsworth Ave.
Mailing Address:
Box 9406
Denver, Colorado 80223
Telephone: 1-303-733-1597

Date: December 22, 1982

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BILL T. WOMACK

Petroleum Consultant
42 West Ellsworth Avenue
P.O. Box 9406
Denver, Colorado 80223
(303) 733-1597

December 22, 1982

Texas Oil & Gas Corporation
1800 Lincoln Center Bldg.
1600 Lincoln St.
Denver, Colorado 80264

Attention: Ms. Emily Hundley-Goff

Re: Texas Oil & Gas Corporation
Bailey "D" No. 1 Well
se nw nw sec. 34
T25s; R45s
Prowers Co., Colorado

Dear Ms. Hundley-Goff,

Attached the Geological Well Report & Sample Log on the aforementioned well.

Samples were examined for oil shows from 3000' to 5240'.

CONCLUSION:

No shows were obtained in the samples from 3000' to 4802'.

Morrow-4802 (-744')- 68' high to the prognosis, and 14' high to the Appling #1 well.

Morrow Pay Sd-4836' (-778') 58' high to the prognosis, and 18' high to the Appling No. 1 well. A good drilling break occurred from 4839' to 4869'. Samples were circulated at 4880'. Sample recovery was a white, colorless to pale blue, fine to coarse grained, subrounded translucent, loose sandstone, with good lite yellow mineral fluorescence, with no cut. Instructions were received to drill to 4930' before testing. A Drill Stem Test across the sand recovered 540' of Gas in the drill pipe, and 23' of gas cut drilling mud.

The Mississippian limestone, at 5176', was penetrated 59', with no shows.

FINAL:

Casing was run in the well.

Sincerely,

Bill T. Womack



TXO PRODUCTION CORP.

DENVER DISTRICT
INTER-OFFICE MEMORANDUM

4.

Date: August 19, 1982

To: Steve Tillman

From: Rich Asher

Bailey D #1

Re: NW Section 34-T25S-R45W

Barrel Springs Field

Prowers County, Colorado

The Las Animas Arch is a major northeast-southwest structure feature in southeast Colorado that separates the D-J Basin and the Hugoton Embayment. The Bailey D #1 is located on the southwestern flank of the Las Animas Arch. The Bailey D #1 will be a 5300' test of the Upper Morrow.

The proposed location is within the spaced area of Barrel Springs Field. The Upper Morrow sand at Barrel Springs is a large point bar deposit that coincides with a Morrow structural high. The Morrow is a transgressive sequence of sands, shales, and scattered limestones that were deposited across a very broad low angle floodplain. The major drainage patterns during this time were oriented in a northwest-southeast direction. The main pay at Barrel Springs Field is the Upper Morrow which has produced 5 billion cubic feet of gas, 26,000 barrels of oil and 36 barrels of water.

The Bailey D #1 will be 50' lower than the Michigan-Wisconsin #1 Jon Appling Etal (NE Section 34-T25S-R45W) which had an initial production rate of 61 MCFD from perforations at 4869-80. The #1 Jon Appling has a cumulative production of 733 million cubic feet of gas. The Bailey D #1 will have 13' of gross Upper Morrow sand as does the #1 Jon Appling.

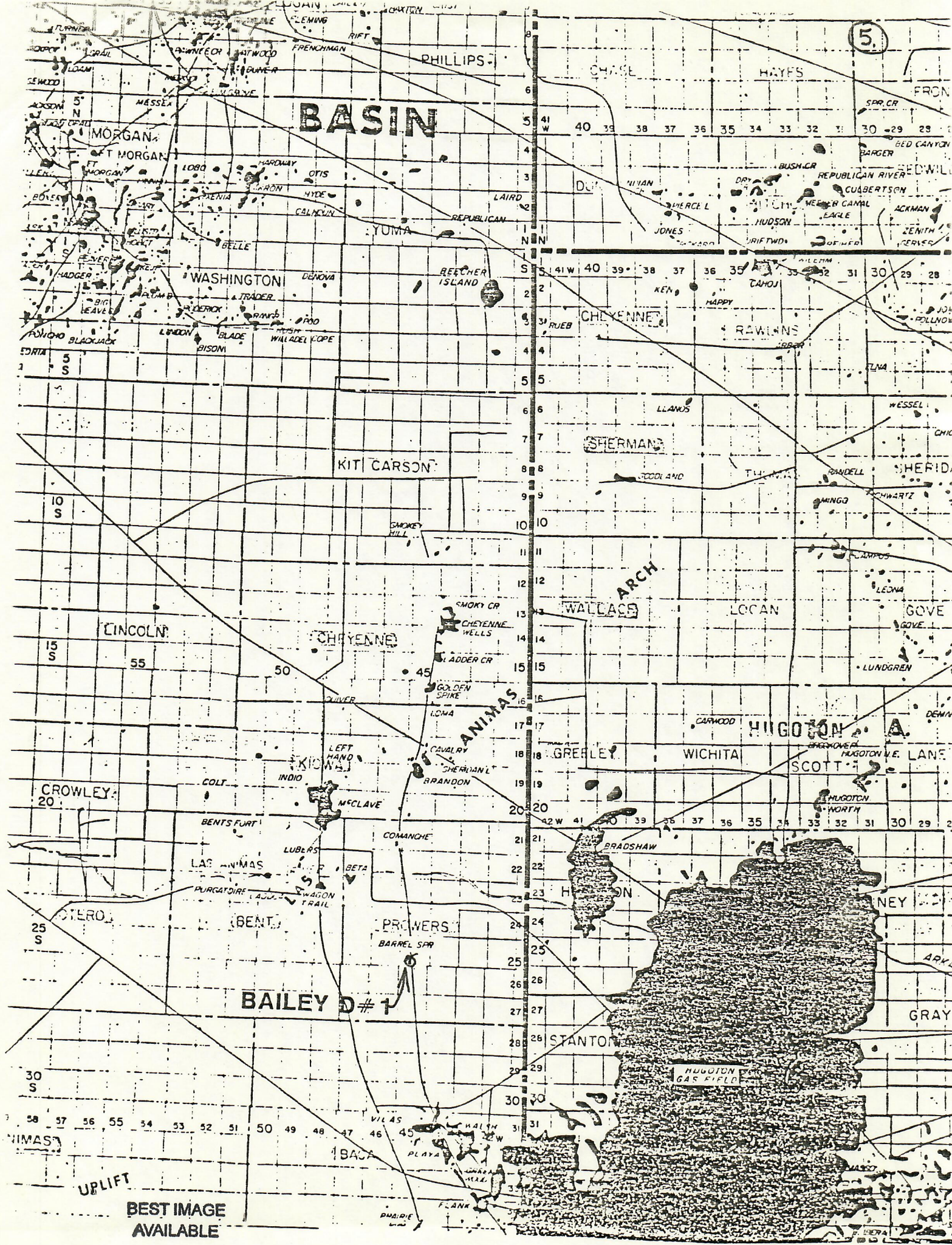
Included are the following:

1. Regional Index Map
2. Morrow Structure Map
3. Upper Morrow Gross Sand Isopach
4. Production Map
5. Type Log
6. Stratigraphic Cross-Section A-B

Rich Asher
Rich Asher

RLA/cjd

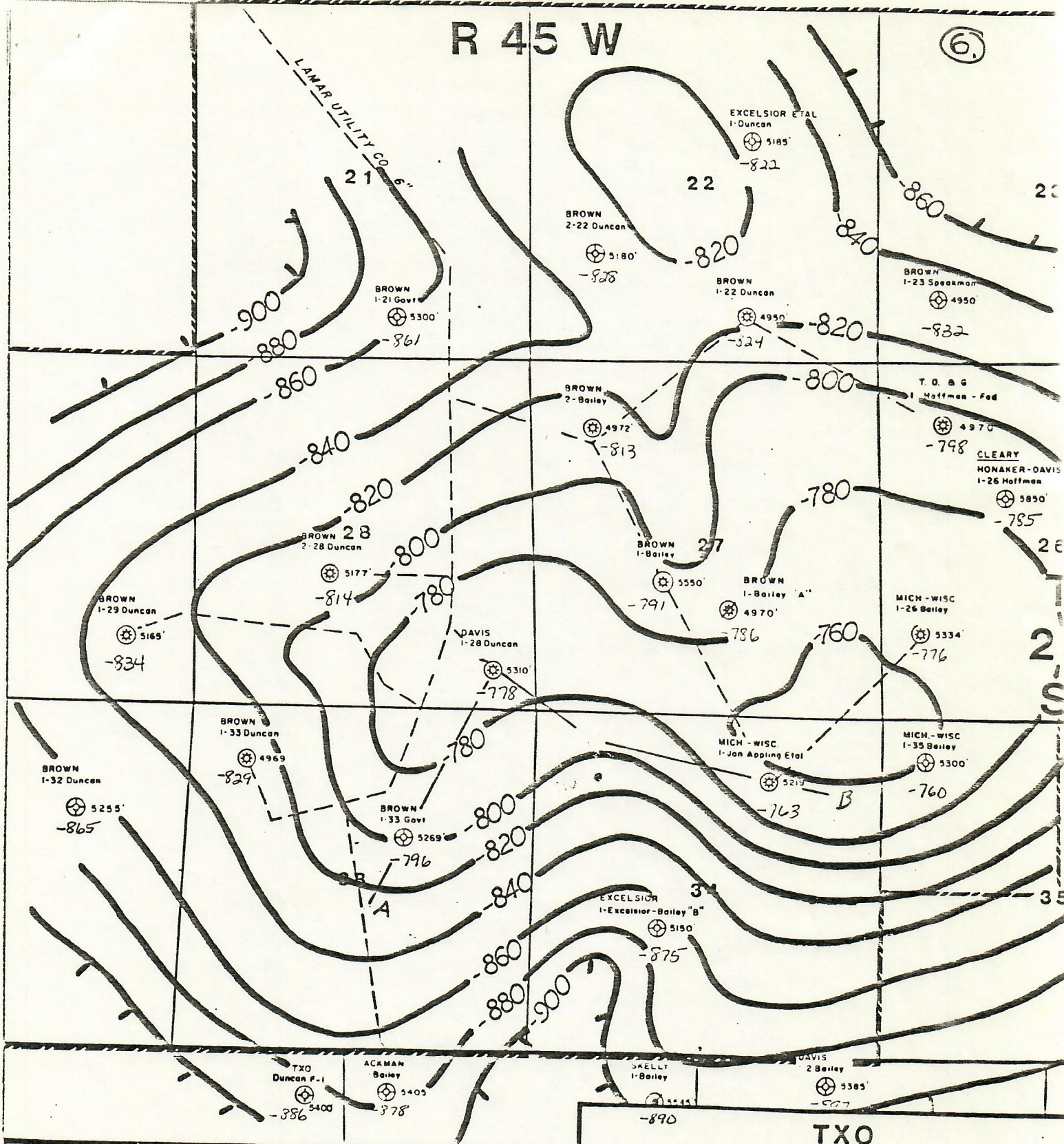
Attachments



BEST IMAGE
AVAILABLE

R 45 W

(6)



LEGEND

COMPANY
Well Name
TD
Morrow Subsea Top

BEST IMAGE
AVAILABLE

TXO
TXO PRODUCTION CORP.
DENVER DISTRICT

BARREL SPRINGS FIELD
PROWERS CO., COLORADO

MORROW STRUCTURE

Scale: 1"=2000'
C.I.: 20'

Geologist: R.L. Asher
Date: January 1982

R 45 W

8.

LAMAR UTILITY CO
21

EXCELSIOR ETAL
1-Duncan
5185

BROWN
2-22 Duncan
5180

22

Cum. 1077 BO 721 MMCF
D.R. 0.0 BOPD 8.4 MCFD
Cum. Date 6-13-11 st Prod. 1-75
I.P. 20 BOPD 172 MCFD
Prod. Fm. MORROW
Perfs. 4955-76

BROWN
1-21 Govt
5300

BROWN
1-23 Spe
4950

Cum. 245 BO 326
D.R. 0.0 BOPD 5
Cum. Date 6-13-11 st Prod. 1-75
I.P. BOPD 162
Prod. Fm. MORROW
Perfs. 4955-76

T.O & G
1 Hoffman - Fed.
4970

CLEARY
HONAKER-DAVIS
1-26 Hoffman
5850

Cum. 654 BO 385 MMCF
D.R. 0.0 BOPD 5.0 MCFD
Cum. Date 6-13-11 st Prod. 1-75
I.P. BOPD 674 MCFD
Prod. Fm. MORROW
Perfs. 4956-62

BROWN 28
2-28 Duncan
5177

BROWN
2-Bailey
4972

Cum. 6178 BO 110 MMCF
D.R. 1.7 BOPD 46.3 MCFD
Cum. Date 6-13-11 st Prod. 1-75
I.P. BOPD 3020 MCFD
Prod. Fm. MORROW
Perfs. 4412-22

BROWN
1-Bailey
5550

BROWN
1-Bailey "A"
4970

Cum. 110 BO 615 MMCF
D.R. 0.0 BOPD 42.9 MCFD
Cum. Date 6-13-11 st Prod. 1-75
I.P. BOPD 3210 MCFD
Prod. Fm. MORROW
Perfs. 4973-84

MICH - WISC
1-26 Bailey
5334

DAVIS
1-28 Duncan
5310

Cum. 2817 BO 1072 MMCF
D.R. 0.5 BOPD 41.5 MCFD
Cum. Date 6-13-11 st Prod. 1-75
I.P. BOPD 4152 MCFD
Prod. Fm. MORROW
Perfs. 4952-48

BROWN
1-33 Duncan
4969

Cum. 385 BO 253 MMCF
D.R. 0.0 BOPD 7.8 MCFD
Cum. Date 6-13-11 st Prod. 1-75
I.P. BOPD 1036 MCFD
Prod. Fm. MORROW
Perfs. 4945-4425

BROWN
1-33 Govt
5269

MICH - WISC
1-Jan Appleing Etal
5219

Cum. 727 BO 856 MMCF
D.R. 0.0 BOPD 2.84 MCFD
Cum. Date 6-13-11 st Prod. 1-75
I.P. BOPD 61 MCFD
Prod. Fm. MORROW
Perfs. 4864-80

MICH - WISC
1-35 Bailey
5300

EXCELSIOR
1-Excelsior-Bailey "B"
5150

34

TXO
Duncan F-1
5400

ACKMAN
Bailey
5405

SKELLT
1-Bailey
5545

DAVIS
2-Bailey
5385

Schlumberger **TYPE LOG**

COUNTY: PROWERS
 FIELD: BARREL SPRINGS
 LOCATION: JON APPLING, ET AL. NO. 1
 WELL: JON APPLING, ET AL. NO. 1
 COMPANY: MICHIGAN WISCONSIN PIPE LINE CO.
 FIELD: BARREL SPRINGS
 COUNTY: PROWERS STATE: COLORADO

Location: C-MW-NE
 Sec. 34 Twp. 25S Rge. 65W
 Other Services: FDC-CML-GR
 Permanent Datum: 5.66 Elev.: 4064
 Log Measured From: 5.66 10 Ft. Above Perm. Datum
 Drilling Measured From: 5.66 Elev.: 4064

Type Log

Schlumberger **COMPENSATED NEUTRON FORMATION DENSITY**

COUNTY: PROWERS
 FIELD: BARREL SPRINGS
 LOCATION: JON APPLING, ET AL. NO. 1
 WELL: JON APPLING, ET AL. NO. 1
 COMPANY: MICHIGAN WISCONSIN PIPE LINE CO.
 FIELD: BARREL SPRINGS
 COUNTY: PROWERS STATE: COLORADO

Location: C-MW-NE
 Sec. 34 Twp. 25S Rge. 65W
 Other Services: DIL
 Permanent Datum: 5.66 Elev.: 4064
 Log Measured From: 5.66 10 Ft. Above Perm. Datum
 Drilling Measured From: 5.66 Elev.: 4064

SPONTANEOUS-POTENTIAL
 DEPTHS
 RESISTIVITY OHMS M/M

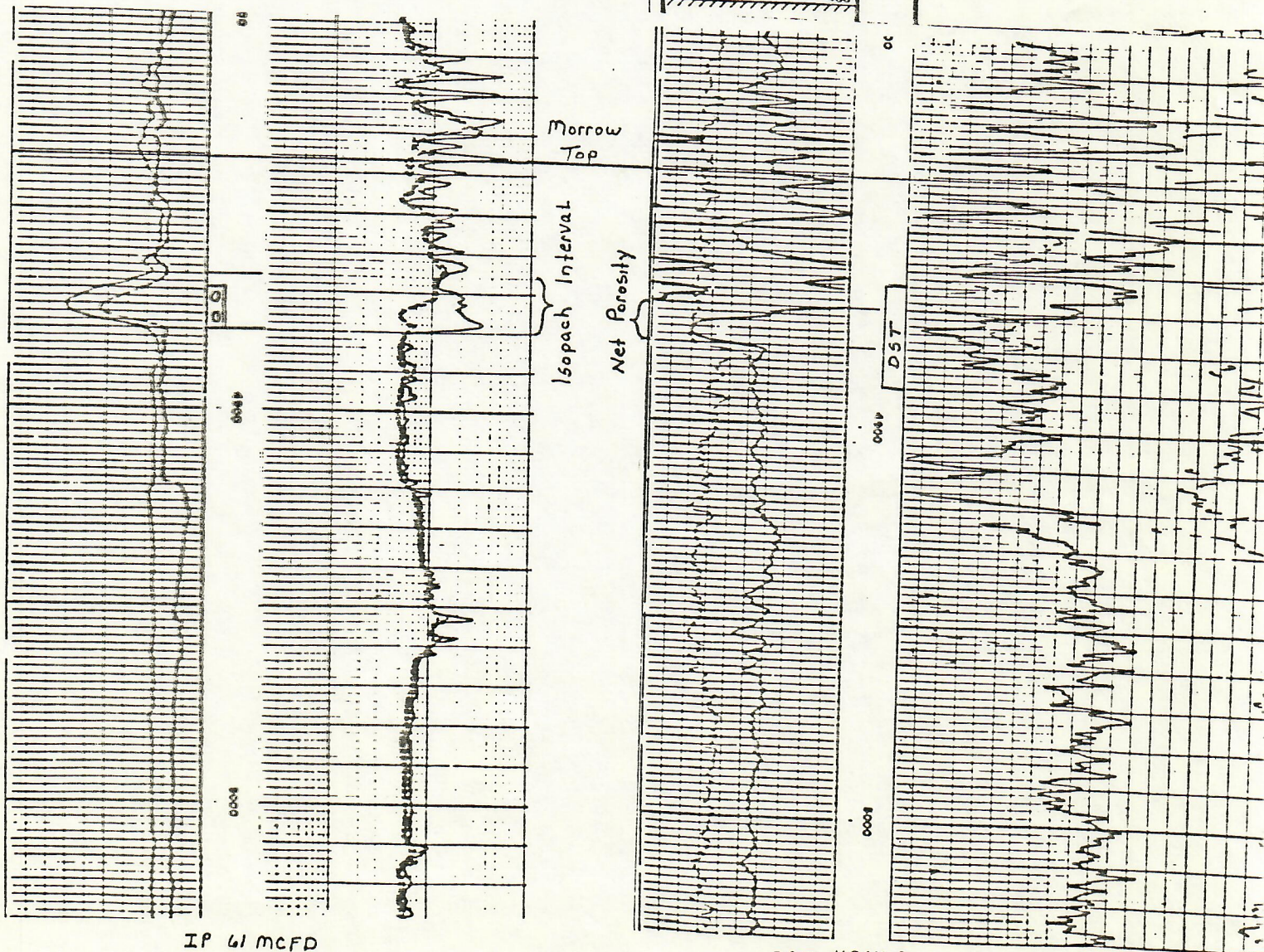
DEEP INDUCTION LOG
 MEDIUM INDUCTION LOG
 LATEROLOG - 3

CALIPER
 HOLE DIA. IN INCHES
 DEPTHS

DENSITY POROSITY INDEX %
 L.S. MATRIX

GAMMA RAY
 API UNITS

NEUTRON POROSITY INDEX %
 L.S. MATRIX



IP 61 MCFD

DST 4864-90
 GTS 375 MCFD
 50' 6cm; 4790' Gas; 50' 06cm
 FP 73-70 95-70 SI 1123-1117 HP 2333-2305

A



(10)

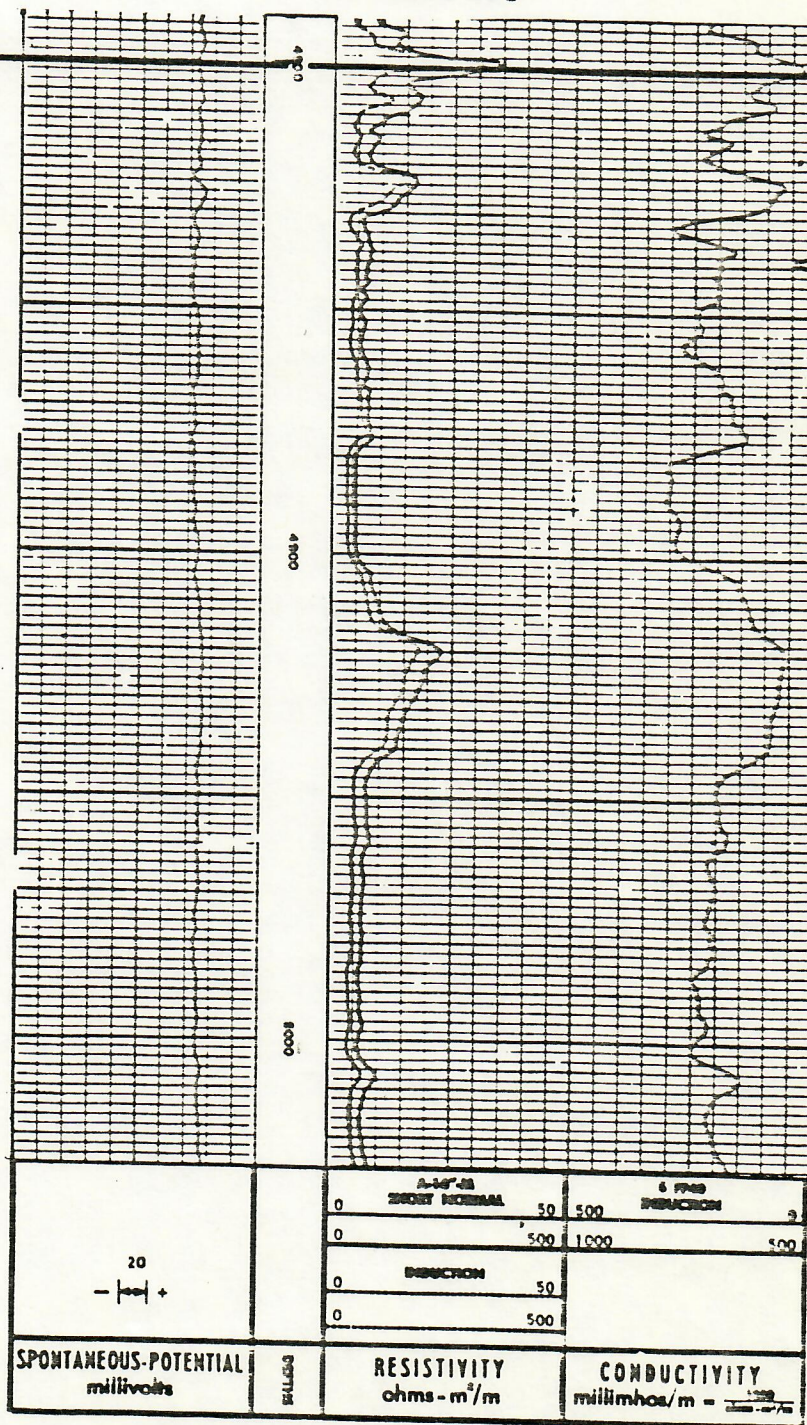
BROWN DR LG ET AL

#1 FEDERAL

KB 4004'

Ind. Elect. Log

Top Morrow



TD 5269'



DAVIS DRLG ET AL

#1 DUNCAN

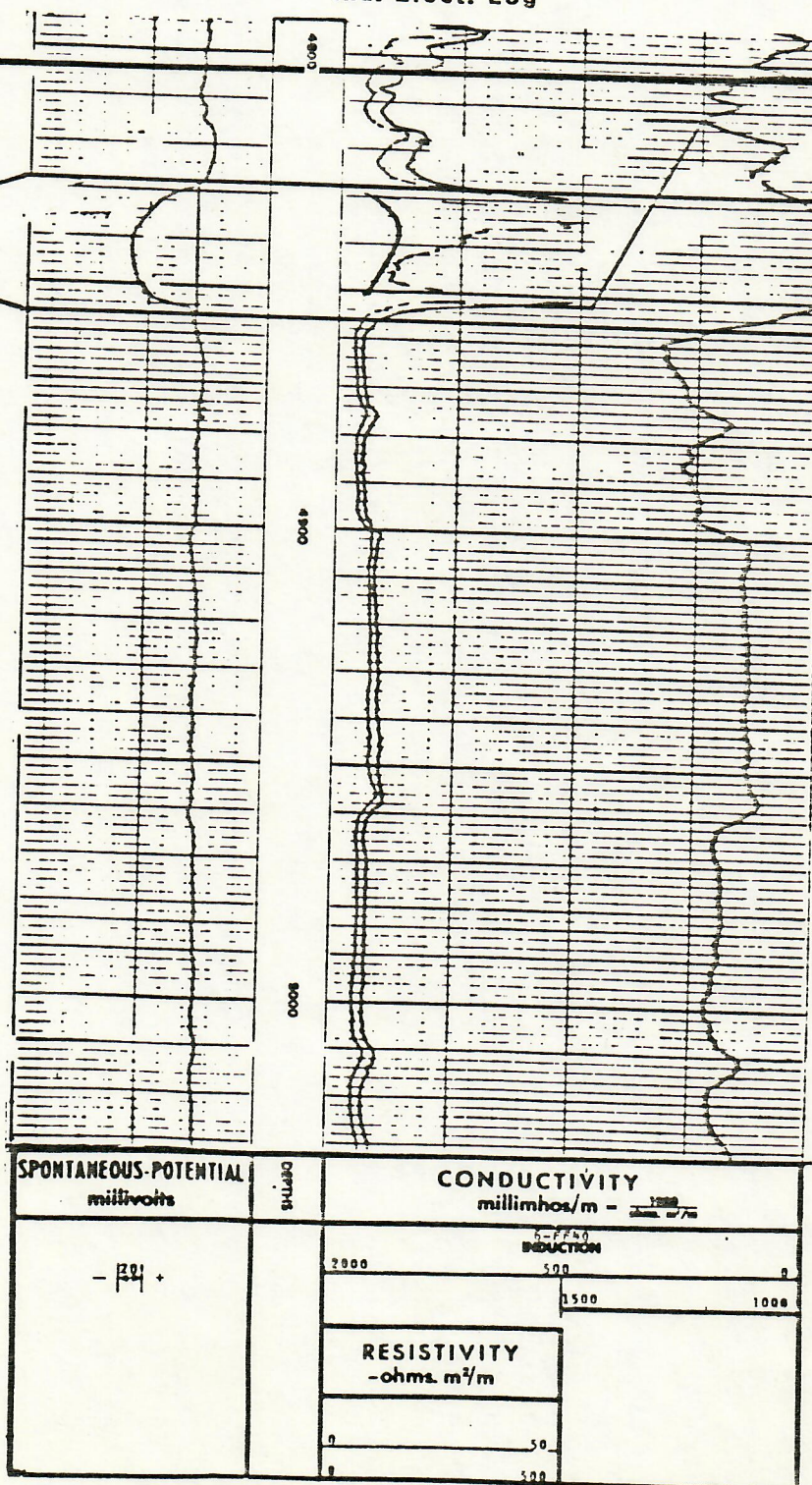
KB 4026'

Ind. Elect. Log

TXO PROD. CC

#1 BAILEY "I

PROPOSED LOCA



TD 5306'

PTD 5300'

DST 4812-4852

GTS 5684 MCFD

Rec. 75' M

FP 915-977, SL 1135-1124, HP 2370-2307

IP 14750 MCFD, 4832'-4848'

DIRECTIONS TO WELL

TEXAS OIL & GAS CORPORATION
BAILEY "D" NO. 1
se nw nw sec. 34-T25s-T45w
Prowers Co., Colorado
4058' K. B.

At the intersection of highways 285 & 50, in the main business district of Lamar, Colorado, go East on hiway 50 11.4 miles to Carlton, Colorado. Turn South, on main gravel road 19. Go 18 miles. Road dead ends. Turn West on Rd. N. Go 1.1 miles to farm house. Continue West through a wire gate on a dirt two track road, 1.5 miles. Road turns North, go .9 mi., to dead end. Turn left, West, and go .3 mile. Go through a wiregate in a N-S fence, & follow two track road .2 mile to location. Location is in pastureland. Total Distance: 33.4 miles.

TEXAS OIL & GAS CORPORATION
BAILEY "D" NO. 1 WELL

14.

WELL DATA

OPERATOR: Texas Oil & Gas Corporation
WELL NAME: Bailey "D" no. 1
LOCATION: se nw nw sec. 34-T25s-R45w
COUNTY: Prowers
STATE: Colorado
ELEVATION: 4048' B. L.; 4058' K. B.
DRILLERS: -
CONTRACTOR: J. W. Gibson Well Service Co., Inc. No. 93
TOOLPUSHER: Dale Carberry
DRAW WORKS: Franks 500, w/500 hp. v-12
DERRICK: Franks - 107' - Double
MOTORS: Detroit Diesel - 500hp - V-12
PUMPS: 1 - Gardner-Denver-14"X6" - w/Detroit - V -12
1 - National - C-150-14"X6" = 2 - 671 Detroit Diesel
MUD COMPANY: Service Mud Co., Lamar, Colorado
MUD TYPE: Jet - Chemical
MUD LOGGING: -
CASING: 8 5/8" set @ 380' K. B.
CEMENTERS: Halliburton
HOLE SIZE: 12 1/4" - surf. to 386'; 8 5/8" - 386' to 5240'.
SAMPLES: 3000' to 5240'
COMMENCED: 11:15 P.M., 11/30/82
DATE TOTAL DEPTH: 4:00 P.M., 12/11/82
STATUS: Prep. to run production csg.
TOTAL DEPTH: Drlrs - 5240'; Elog - 5235'.

TEXAS OIL & GAS CORPORATION
BAILEY "D" NO. 1

DAILY WELL CHRONOLOGY

<u>DATE</u>	<u>DEPTH</u> 7:00 A.M.	<u>DAILY</u> <u>FOOTAGE</u>	<u>REMARKS</u>
12/ 2/82	1010'	1010'	(Drlg.) SPUD: 12¼" surface hole @ 11:15 P.M., 11/30/82. Drilled to 386' by 9:45 A.M., 12/1/82. Circu. hole 30 minutes. Pull out of hole to run surf. csg. Ran 9 jts. - 8 5/8" csg. to 380'. Cmt. with 300 sks. cmt. Good returns. Plug down: 1:15 P.M., 12/1/82. Wait on cement 11 hrs. Drld. cmt. plug. Drlg. 7 7/8" hole @ 11:45 P.M., 12/2/82. Drlg. @ 1010' @ 7 A.M.
12/ 3/82	2141'	1131'	(Drlg.) R.T. for new bit @ 3:30 P.M., 12/2/82. Back on bottom drlg. at 4:30 P.M.
12/ 4/82	2938'	797'	(Drlg.)
12/ 5/82	3375'	437'	(Work on mud pump) Lost circ. @ 3340' for 6¼ hrs.; Pulled 5 stands.
12/ 6/82	3797'	422'	(Drlg.)
12/ 7/82	4177'	380'	(Drlg.)
12/ 8/82	4497'	320'	(Drlg.)
12/ 9/82	4830'	333'	(Drlg.) R.T. for new bit at 4560' @ 11:30 A.M., 12/8/82. Resume drlg. @ 4:00 P.M., 12/8/82.
12/10/82	4930'	100'	(Circu. bottoms up after DST #1). Circu. spls. @ 8:30 A.M., 12/9/82 @ 4880'. Resumed drlg. 1:15 P.M., drld. to 4930'. Circu. spls. Start out of hole at 3:30 P.M. to pick up tst tool. Pick up tst tool & back on bottom, open tst. tool @ 8:45 P.M., 12/9/82. Pull off bottom @ 1:30 A.M., 12/10/82. Out of hole, lay down tst. tool, & back on bottom at 4:15 A.M., 12/10/82. Circu. 1 hr.
12/11/82	5240'	310'	(Circu. for elogs.) Circu. bottoms up. Resume drlg. @ 7:15 A.M., 12/10/82. T.D. - 5240' @ 4:00 A.M., 12/11/82. Lost circ. Pull 5 stds. Regained circ. Back on bot. circ. at 6:00 A.M., 12/11/82.
12/12/82	5240'	0'	(Prep. to run csg.) Circu. 1½ hrs., made 6 std. short trip. Circu. 2 hr Conditioning hole for elogs. Out of hole to run elogs @ 1:45 P.M., 12/11/82. Finish 6:30 P.M. Finish sending telecopies: 10:30 P.M., 12/11/82.

TEXAS OIL & GAS CORPORATION
BAILEY "D" NO. 1 WELL

BIT RECORD

Well: Texas Oil & Gas Bailey D-1

State: Prowers Co., Colo.

Bit No.	Size	Make	Type	Jets	Depth Cut	Footage	Hours
1	12½	HTC	J-1	14-14-14	380'	380'	10½
2	7 7/8	Reed	Y-11	14-14-15	1403	1023	24
3	"	Smith	F-2	14-14-15	4560	3157	116½
4	"	Smith	F-3	15-15-15	5240	680	36 3/4

DEVIATION SURVEY

<u>DEPTH</u>	<u>DEVIATION</u>	<u>KIND</u>
380'	½°	Eastman
1463'	1°	"
4560'	1½°	"
4930'	1½°	"
5240'	1½°	"

COMPARATIVE FORMATION TOPS

TEXAS OIL & GAS CORPORATION
 BAILEY "D" NO. 1
 se nw nw sec. 34-T25s-R45w
 Prowers Co., Colorado
 4058' K. B.

FORMATION	MICH-WIS APPLING NO. 1 nw ne sec. 34 25s-45w 4074' K. B.		TEXAS OIL & GAS CORPORATION BAILEY "D" NO. 1 WELL se nw nw sec. 34-T25s-R45w Prowers Co., Colorado 4058' K. B.					
	ELOG		PROGNOSIS		SAMPLE		ELOG	
	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM
Stone Corral	1800	+2274	-	-	-	-	1764	+2294
B/Stn. Corral	1822	+2252	1834	+2224	?1832	+2226	1786	+2272
Topeka	3112	+ 962	3216	+ 842	3188	+ 870	3078	+ 980
Topeka "C"	3278	+ 796	-	-	3336	+ 722	3246	+ 812
L-KC	3653	+ 421	3786	+ 272	3710	+ 347	3620	+ 438
Marmaton	4146	- 72	4151	- 93	4205	- 147	4104	- 46
Cherokee	4316	- 242	4300	- 242	4367 ⁺	- 309	4292	- 234
Atoka	4528	- 454	4561	- 503	4579 ⁻	-	4506	- 448
Morrow	4832	- 758	4870	- 812	4839	- 781	4802	- 744
Pay Sd.	4870	- 796	4894	- 836	4839	- 781	4836	- 778
M-2	-	-	-	-	-	-	4884	- 826
L. Morrow	5120	-1046	5146	-1083	5090	-1032	5094	-1036
Miss.	-	-	5220	-1162	5183	-1125	5176	-1118
T.D.	-	-	5270	-1212	5240	-1182	5235	-1177

TXD
Bailey
"D"
Senwnw
34-25-45W
Powers Co
Colo

Morrow P
37
4836
-778

(18.)

SW = 61% RW = 04%
SW = 46%

(DST depths adj.
to log depths)

04900

05000

GR →
- X cal
- Y cal

Δc

Δφ₂

Δφ₀

Δp →

SS MATRIX
2.68

T X0
Bailey
D-1
se nw nw
34-25-45w
Powers Co
Colo
4058' KB

Morrow Poy 4832

32



26

SP-

- Rv 7/4

05000

ILD

12m

113

Oil

20.

1 x 0
Bailey "D"-1

Morrow

NT-1 4841' 4930'

30-60-30-150

IF: mixed blk. clay &
air, grad. into 3"

in 30 mins. N.G.T.S.

FF: mixed, good clay &
air (2"), 60 mins. to 300 in 60 mins

N.G.T.S.

OS-3:2360, 219/92

REC: 340 G.C.D.F.

23' 6.5 D.M.

SPLK: 0# 2200 cc

mud. N.G.

4900

IF: 100-125 ft Plugging

FF: 100-110

IF: 100-128

FF: 100-128

IF: 100-128

FF: 100-128

IF: 100-128

FF: 100-128

IF: 100-128

Sh. dk. pale blue, reddish
etc. conch. to top.
etc. sub. transp.
transp. Good h. y.
mineral fluor, no air

Sh. dk. qn, blk. Trce
h. qn, bento, blk
to blk, transp.
micro-transp.

Sh. dk. to dk. qn, blk
h. qn, blk & splinter
dull micro-mud.

Sh. dk. qn, blk, blk
splinter, crinkly
etc. etc. micro-
mud, sparsely
pyrit.

Tr. floating etc. amts.
etc. sub. transp.

Sh. dk. to dk. qn, dk.
am. qn. h. am. blk
splinter & crinkly
micro-mud, sparsely
pyrit. etc. etc. pyrit.

5000

TEXAS OIL & GAS CORP.
DST REPORT FORM

BEST IMAGE
AVAILABLE

21.

Lease & Well # Bailey "D" no. 1

Date: 12/9/82

DST # 1, 4841 ' - 4930 ', (Morrow Fm)

3/4 "B & 1/4 " TC. 0 ' WC.
Tool open: 9:00 P.M.

IFP, TO w/ weak blow of air, gradual increase to 3" in 30 mins.

FFP, TO w/ good blow of air (9"), open 2" line, blowed down in 1". Close 2" line. Start
bubbling in 6 mins., inc. to good blow of air. BOB at end of 60 mins.

REC: 540' GIDP; 23' GCDM

Top Rw = _____ @ _____ °F, Cl _____ ppm. Middle Rw = _____ @ _____ °F,
Cl _____ ppm. Btm Rw = _____ @ _____ °F, Cl _____ ppm. Mud Rw = _____
@ _____ °F, Cl _____ ppm.

IHHP 2459 #, 30 "IFP 106 - Perfs. #, 60 "ISIP 528 #,
plugging
60 "FFP 106 - 119 #, 120 "FSIP 632 #, FHHP 2433 #, BHT 123 °F.

BHSC @ 0 #, 2200 cc mud. N.S.

SIP Build-up indicates: (Normal) (Damaged) (Tight) (Depletion) (Other)
Testing Company: Halliburton Tester: Gary Moore
Test was mechanically: (Successful) (Unsuccessful)

T x D
Bailey
D' - 10

(22)

L. Morrow

5094

-1036

05100

$\phi_n -$

$\Delta p \rightarrow$
 ϕ_0

Miss.

5176'

(-1118)

44' hi. to prog.

CR

X cal

4 cal $\Delta t -$

05200

TID

CDE - CNL - CR

SS MATRIX

TXO
Bailey
8-1
8am 1034
253-45w
Powers Co.
Colo.
4058' KB

L. Morrow

05100

SP

Miss.

5176'
(-1118')
(4' hi. to
prod.)

R_{xo}/R_t

R_{no}/R_t

SP

05200

T.D.

FR

DIC

LATEROLOG

DEEP INDUCTION

MEDIUM INDUCTION

120 → ← 143
14m

to
Bailey "D" - 1

BEST IMAGE
AVAILABLE

(24.)

L. Morrow

5100

Lmy. Ss.

N.S.

Miss

5200

BRIEF SAMPLE DESCRIPTION

TEXAS OIL & GAS CORPORATION
 BAILEY "D" NO. 1 WELL
 se nw nw sec. 34-T25s-R45W
 Prowers Co., Colorado
 4058' K. B.

DRILLED TO 3000' by 9:00 A.M., 12/4/82. Samples lagged by wellsite geologist.

- 2980-3120: Sh-100%- brick red, Traces pale grn, med. hd., flky, slty, dull, in pt. sdy, micro-micaceous, Tr-wh, amorphous & spicular gypsum Tr-grn, vfg, shly. ss. Tr-wh, crypto-X-ln, smooth, dnse ls. - w/li. yel. min. fluor.
- 3120-3140: Sh-80%- desc. abv.
Ss-20%- wh. tan, vfg, prly. cmted, suba, transparent, no vis. ϕ ; N.S.
- 3140-3160: Sh-100%- desc. abv.
 Trcs-wh, translucent platy gypsum.
- 3160-3190: Sh-80%- desc. abv.
Ss-20%- wh, li. tan, vf/fg, friable, calc, subangular, transp., no vis. ϕ ; N.S.
- 3190-3240: Sh-80%- desc. abv.
Ls-20%- li. tan, wh, crypto-X-ln, med. hd, flky, tite, no vis. ϕ ; N.S.
- 3240-3280: Sh-70%- desc. abv.
Ls-30%- desc. abv. N.S., dull li. yel. min. fluor.
- 3280-3290: Sh-50%- desc. abv.
Ls-50%- li. tan, crypto-X-ln, flky, med. hd, flky, clean, no vis. ϕ , N.S.
- 3290-3300: Sh-90%- dull rusty red, dk. brn, flky, slty, micro-micaceous, 10% li. to dk. gry, & pale grn.
Ls-10%- desc. abv. N.S.
- 3300-3320: Ls-80%- tan, white, crypto-X-ln, in pt. gry-tan, flky, fossiliferous, Tr-oolicasts, clean, no vis. ϕ , N.S. Pale li. yel. min. fluor.
Sh-20%- desc. abv.

- 3320-3340: Sh-80%- desc. abv.
Ls-20%- desc. abv. N.S.
 Tr-wh, colorless, subr., crse.qtz. grns.
- 3340-3350: Sh-60%- desc. abv.
Ss-40%- wh, colorless, fine to crse. lse. qtz. grns, subr.,
 Trcs orange stnd, transparent, probably good inter-granular
 porosity. N.S.
- NOTE: LOST CIRC. @ 3340'. Regained circu. & resumed drlg.
 in 6 hrs. & 20 mins.
- 3350-3370: Sh-70%- desc. abv.
Ls-30%- desc. abv. N.S.
 Tr-f/crse. sandstone, & lse qtz. grns.
- 3370-3390: Ls-70%- wh, tan, li. gry, crypto-X-ln to chalky, sft to hd.,
 flky, fossiliferous, no vis. ϕ ; N.S.
Sh-30%- desc. abv.
 Tr-wh, colorless lse. qtz. grns.
- 3390-3400: Ls-60%- li. gray, tan, wh, clastic, shly, flky, hd, no vis.
 ϕ ; N.S.
Sh-40%- desc. abv.
- 3400-3460: Ls-90%- li. gry, gry-wh, crypto-X-ln, sucrosic to smooth,
 dull, shly, clastic,
 Trcs w/embdd qtz, quartzic, no vis. ϕ ; N.S.
Sh-10%- desc. abv.
- 3460-3480: Sh-80%- brick red, med. to dk. gry, slty, flky, gypsy,
Ls-20%- desc. abv., N.S.
- 3480-3490: Ls-70%- li. gry, gry-wh, tan, crypto-X-ln, hd, flky & blk,
 clastic, shly, sdy, no vis. ϕ ; N.S.
Sh-30%- desc. abv.
- 3490-3510: Sh-60%- desc. abv.
Ls-40%- desc. abv. N.S.
- 3510-3540: Ls-90%- li. gry to gry-wh, crypto-X-ln, flky, fossiliferous,
 rough, no vis. ϕ ; N.S.
Sh-10%- desc. abv.
- 3540-3560: Ls-60%- desc. abv. N.S.
Sh-40%- desc. abv.
- 3560-3580: Sh-80%- desc. abv.
Ls-20%- desc. abv. N.S.
- 3580-3630: Sh-60%- desc. abv.
Ls-40%- tan, crypto-X-ln, smooth, dull, flky, Trcs. fossiliferous,
 no vis. ϕ ; N.S.

- 3630-3640: Ls-70%- li. tan, wh, tan, crypto-X-ln, flky, smooth to
sucrosic surface texture, med. hd, traces shaly, no vis ϕ , N.S.
Sh-30%- rusty red, brn, minor forest grn & gry, flky, slty,
calc.
- 3640-3660: Sh-70%- desc. abv.
Ls-30%- desc. abv. N.S.
- 3660-3680: Sh-90%- chocolate brn, dull rusty red, flky, blk, slty,
micaceous,
Traces grn & gry sh.
Ls-10%- desc. abv. N.S.
- 3680-3780: Sh-100%- desc. abv.
Tr-tan, wh, dnse ls, N.S., pyritic,
Tr-li. gry, vf/fg, tite, shly. ss. N.S.
- 3780-3840: Sh-70%- dull rusty red, chocolate brn, med. to dk. gry, slty,
flky, micro-micaceous,
Ls-30%- tan, gry-tan, li. gry, crypto-X-ln, flky, hd, shly,
sdy, no vis. ϕ ; N.S.
Trace- wh, fg, suba, friable ss. N.S.
- 3840-3880: Sh-100%- desc. abv.
- 3880-3900: Sh-90%- desc. abv.
Ls-10%- tan, gryish-tan, crypto-X-ln, flky & blk, clean,
Trcs w/spotted gry, no vis. ϕ ; N.S.
- 3900-3920: Sh-60%- desc. abv.
Sltst-40%- med. gry, crse, hd, blk, calc.
Tr.-wh, tan, gry, mottled, dnse ls., N.S.
- 3920-3930: Sh-60%- dull brick red, gry, hrd, flky, slty,
Ls-40%- li. gry, mottled gry & tan, crypto-X-ln, to chky,
shly, no vis. ϕ ; N.S.
- 3930-3980: Ls-60%- desc. abv., N.S. Trcs pseudo-oolitic.
Sh-40%- desc. abv.
- 3980-4000: Ls-70%- cream, mottled with gry sh. spots & stks, crypto-X-ln,
med. sft, flky, dull, shly, no vis. ϕ ; N.S.
Sh-30%- choc. brn, rusty red, gry, flky & blk, slty, micro-
micaceous, anhydritic.
- 4000-4020: Ls-80%- tan, gry-tan, cream, li. gry, crypto-X-ln, flky,
clean, no vis. ϕ ; N.S.
Sh-20%- desc. abv.
- 4020-4060: Sh-80%- desc. abv.
Ls-20%- desc. abv. N.S.

- 4060-4070: Ls-60%- desc. abv. N.S.
Sh-40%- desc. abv.
- 4070-4130: Sh-90%- desc. abv.
Ls-10%- desc. abv. N.S.
- 4130-4140: Ls-80%- tan-gry to li. gry, wh, crypto-X-ln, flky, clean,
no vis. ϕ ; N.S.
Sh-20%- dull rusty red, choc. brown, gry, slty & sdy,
micaceous, blk.
- 4140-4150: Sh-90%- dull rusty red to dk. choc. brn, med. to dk. gry,
slty, micro-micaceous, dull, flky & platy,
Ls-10%- tan, wh, crypto-X-ln, flky, hd, clean, no vis. ϕ ; N.S.
- 4150-4180: Sh-60%- desc. abv.
Ls-40%- desc. abv. N.S.
- 4180-4210: Sh-70%- desc. abv.
Ls-30%- desc. abv. N.S.
- 4210-4240: Sh-90%- desc. abv.
Ls-10%- desc. abv., N.S.
- 4240-4260: Sh-70%- dull, rusty red to dk. choc. brn, dk. gry, slty, dull,
micro-micaceous, calc.
Ls-30%- tan, wh, crypto-X-ln, smooth, trcs w/fractures filled
with red shale, no vis. ϕ ; N.S.
- 4260-4300: Ls-80%- med. gry, brnsh-gry, crypto-X-ln, sucrosic texture,
Trces fossiliferous
Trace w/embedded crinoid stem, no vis ϕ ; N.S.
Sh-20%- dk. choc. brn, li. to dk. gry, blk, slty, micro-
micaceous,
- 4300-4310: Sh-70%- desc. abv.
Ls-30%- desc. abv. N.S.
- 4310-4320: Ls-80%- li. gry, tan, brn, gryish-wh, crypto-X-ln, med. hd.,
flky, shly,
Sh-20%- li. to dk. gry, dull rusty red, slty, micaceous,
carbonaceous,
- 4320-4330: Sh-70%- dk. rusty, red, li. to dk. gry, slty, carbonaceous,
micaceous.
Ls-30%- desc. abv. N.S.
- 4330-4360: Sh-80%- desc. abv.
Ls-20%- desc. abv. N.S.

- 4360-4420: Ls-70%- tan, gry-tan, li. gry, crypto-X-ln, flky & plty,
smooth, clean, no vis. ϕ ; N.S.
Sh-30%- desc. abv.
- 4420-4460: Ls-60%- desc. abv. N.S.
Sh-40%- desc. abv.
- 4460-4470: Ls-60%- tan, gryish-tan, li. gry, crypto-X-ln to chky,
flky & blk, smooth, med. hd, clean, no vis ϕ ; N.S.
Sh-40%- li. to dk. gry, dull rusty red, blk, dk. choc. brn,
slty, blk, micaceous.
- 4470-4490: Sh-70%- desc. abv.
Ls-30%- desc. abv. N.S.
- 4490-4500: Ls-80%- Desc. abv. N.S.
Sh-20%- Desc. abv.
- 4500-4520: Sh-70%- Desc. abv.
Ls-30%- desc. abv. N.S.
- 4520-4540: Sh-70%- dull rusty red, choc. brn, li. to dk. gry, flky,
& blk, slty, micaceous
Ls-30%- tan, gry-tan, li. gry, crypto-X-ln, med. hd, smooth,
no vis. ϕ ; N.S.
- 4540-4560: Sh-80%- desc. abv.
Ls-20%- desc. abv. N.S.
- 4560-4600: Sh-70%- dk. gry, blk, flky & blk, micro-micaceous,
Ls-30%- li. to med. gry, gry-tan, crypto-X-ln, flky, shly,
no vis ϕ ; N.S.
- 4600-4620: Sh-70%- med. to dk. gry, flky, dull, micro-micaceous,
Ls-30%- tan, li. gry, crypto-X-ln, flky, smooth, shly, no
vis. ϕ ; N.S.
- 4620-4640: Sh-60%- desc. abv.
Ls-40%- desc. abv. N.S.
- 4640-4660: Sh-90%- desc. abv.
Ls-10%- desc. abv. N.S.
- 4660-4670: Ls-60%- gryish-tan to li. gry, crypto-X-ln, sucrosic, shly,
med. hd, otherwise nondescript, no vis. ϕ ; N.S.
Sh-40%- med. to dk. gry, blk, minor li. gry, flky, micro-
micaceous, dull, carbonaceous
- 4670-4680: Sh-80%- desc. abv.
Ls-20%- desc. abv. N.S.
- 4680-4700: Sh-60%- desc. abv.
Ls-40%- desc. abv. N.S.

4740-4750: Ls-70%- gry, dk. gry, tan, crypto-X-ln, sucrosic, med. hd, flky, dnse, shly, no vis. ϕ ; N.S.
Sh-30%- dk. gry, blk, carbonaceous, flky, dull, micaceous.

4750-4770: Sh-70%- desc. abv.
Ls-30%- desc. abv. N.S.

4770-4800: Ls-60%- desc. abv. N.S.
Sh-40%- Desc. abv.

4800-4840: Sh-80%- desc. abv.
Ls-20%- desc. abv. N.S.

NOTE: DRILLING BREAKS: 4842-44 - from 2 to 1 minute/ft;
 4850-58' - from 2 to $\frac{1}{2}$ minute per ft; 4867-69', from
 2 to 1 minute per foot. Circ. @ 4880', 8:26 A.M., 12/9/82.

4840-4850: Sandstone-60%- wh, pale blue, colorless, fine to coarse, consolidated to lse. qtz grns., subrounded, translucent to transparent, probable good porosity, consolidated frags, with good li. yel. fluor., no cut.
Sh-40%- desc. abv., w/traces pyrite.

4850-4870: Ss-80%- wh, colorless, fine to crse, friable to lse, qtz. grns, subrounded, translucent, probable good intergranular porosity. Good li. yel. fluor., w/no cut.
Sh-20%- desc. abv.

4870-4880: (60 min. circu. sple.)
Sh-100%- dk. gry, blk, trcs li. gry bentonite, flky to plty, carbonaceous, micro-micaceous.

RESUMED DRILLING.

4880-4890: Sh-80%- med to dk. gry, blk, plty & splintery, micro-micaceous, dull, pyritic.
Ss-20%- wh, f/mg, well cmt'd, translucent to transparent, sub-angular, no vis. ϕ ; N.S.

NOTE: Circu. spls. @ 4930', @ 1:14 P.M., 12/9/82.

4890-4900: Sh-100%- med. to dk. gry, blk, li. gry, plty & splintery, dull, micro-micaceous.
 Tr-Ss-wh, f/mg, friable, suba, N.S.

4900-4920: (30 min. circu. sple.)
Sh-100%- desc. abv.
 Tr-wh, ss - N.S.

- 4920-4930: (60 min. circu. sple.)
Sh-100%- dk. gry, blk, plty, splintery & crinkly fragments,
 dull, micro-micaceous, sparsely pyritic,
 Tr-floating qtz. grns, subrounded, crse, transparent.
- NOTE: Ran DST #1 - 4841' - 4930'.
- 4930-5050: Shale-100%- med. to dk. gry, dk. gryish-grn, li. gry, plty,
 splintery & crinkly frags., micro-micaceous, sparsely pyritic,
 traces lse pyrite frags,
 Tr-wh, f/mg, Tr. crse, subr., translucent ss - N.S.
 Tr-li. gry, tan, crypto-X-ln, med. hd. ls.
- 5050-5070: Sh-90%- desc. abv.
LS-10%- gryish-tan to li. brn, crypto-X-ln, mottled tan &
 li. brn, shly, no vis. ϕ ; N.S.
- 5070-5080: Sh-70%- desc. abv.
LS-30%- desc. abv. N.S.
- 5080-5090: Sh-100%- desc. abv.
 Tr-tan, crypto-X-ln, shly ls. - N.S.
 Tr-li. gry, fg, hd, tite ss - N.S.
- 5090-5240: Limy Ss-80%- wh, cream, tan, fine to crse. grnd, friable to
 lse. qtz. grns, translucent, subrounded, Traces pyritic,
 glauconitic, no vis. ϕ ; N.S.
Sh-20%- med. to dk. gry, blk, plty & splintery, micro-
 micaceous, pyritic,
- 5140-5160: Limy Ss-80%-wh, colorless, fine to crse. grnd, predominately
 lse. qtz. grns, subrounded to subangular, glauconitic, limy
 cmtg. material, translucent to transparent, no vis. ϕ ; N.S.
Sh-20%- desc. abv.
- 5160-5180: Sh-80%- desc. abv.
Limy ss-10%- desc. abv. N.S.
LS-10%- tan, crypto-X-ln, flky, med. hd. to chky, clean, no
 vis. ϕ ; N.S.
- 5180-5220: LS-60%- tan, gry-tan to li. gry, sdy, crypto-X-ln, sucrosic,
 in pt. mottled gry & tan, flky & blk, dull, no vis. ϕ ; N.S.
Sh-40%- desc. abv.
- NOTE: T.D. - 5240', 4 A.M., 12/11/82. Lost circulation.
 Pulled 5 stds., regained circulation, & resume circu. in 2½
 hours.
- 5220-5240: No sple. recovery. Lost circulation.

DRILLING TIME

TEXAS OIL & GAS CORPORATION
 BAILEY "D" NO. 1 WELL
 se nw nw sec. 34-T25s-R45w
 Prowers Co., Colorado
 4058' K. B.

DRILLED TO 3000' by 9:00 A.M., 12/4/82.

3000-3010: 3,2,2,2,2,2,2,2,3,2,
 20: 2,2,2,2,2,2,1,2,2,2,
 30: 3,2,2,2,2,1,1,1,1,1,
 40: 1,1,1,1,1,2,1,3,1,2,
 50: 2,2,2,2,2,2,2,2,2,1,
 60: 2,2,2,2,2,2,2,1,2,1,
 70: 2,2,3,2,2,2,2,2,2,2,
 80: 2,2,3,2,2,2,2,2,2,2,
 90: 2,2,2,3,2,2,3,2,2,3,
 3090-3100: 2,2,2,2,2,2,1,2,2,2,
 3100-3110: 1,1,2,2,2,2,2,2,2,2,
 20: 2,2,2,2,1,2,3,2,2,2,
 30: 2,2,1,1,1,1,1,½,½,½,
 40: ½,½,½,2,½,½,2,2,1,1,
 50: 2,2,2,2,2,3,3,2,2,2,
 60: 3,3,2,1,2,1,1,1,1,2,
 70: 2,2,2,2,1,2,1,1,1,2,
 80: 2,2,2,3,2,2,1,2,2,2,
 90: 2,2,2,2,2,3,3,2,1,1,
 3190-3200: 1,1,½,1,1,½,3,3,3,2,2,
 3200-3210: 2,2,3,2,2,3,3,2,2,3,
 20: 3,3,3,3,3,2,2,3,3,3,
 30: 3,4,3,2,2,2,3,2,3,2,
 40: 2,3,2,2,3,2,2,2,2,2,
 50: 3,3,3,2,2,2,1,2,1,2,
 60: 2,2,1,2,1,3,2,2,2,2,
 70: 2,1,2,2,2,2,2,2,2,3,
 80: 2,2,2,3,2,2,2,2,2,2,
 90: 2,2,3,2,2,3,1,2,1,2,
 3290-3300: 1,1½,1½,1½,2,2,2,3,2,2,

3300-3310: 2,2,2,2,2,2,2,2,1,2,
 20: 3,2,3,3,2,2,2,2,3,2,
 30: 2,1,2,1,2,3,2,2,1,2,
 40: 3,2,3,2,2,2,1,1,1,1, - Lost Circu. - 3340', 10:50 P.M., 12/4/82.
 50: 1,1,1,2,3,2,2,2,2,2, - Regain Circu., resume drlg. 5:10 A.M., 12/5/82
 60: 1,2,1 $\frac{1}{2}$,1 $\frac{1}{2}$,2,2,2,3,3,3,
 70: 2,3,3,1,2,3,1,3,2,2,
 80: 3,1,1,1,1,1,1,2,2,1,
 90: 2,1,1,2,2,2,2,3,2,2,
 3390-3400: 3,3,3,3,3,2,3,3,3,2,
 3400-3410: 3,3,3,3,2,2,3,3,3,3,
 20: 2,3,3,2,3,2,3,2,3,2,
 30: 3,2,3,2,2,3,3,2,4,3,
 40: 2,1,2,2,2,2,2,3,3,2,
 50: 4,4,3,2,3,3,3,3,3,2,
 60: 3,3,3,3,3,3,3,4,4,3,
 70: 4,3,2,2,3,3,3,3,4,3,
 80: 3,3,4,3,4,3,3,2,3,3,
 90: 2,2,3,3,2,3,3,3,3,3,
 3490-3500: 3,3,3,3,4,4,4,4,4,4,
 3500-3510: 3,4,3,4,3,3,3,2,3,4,
 20: 3,4,4,3,3,3,4,3,4,3,
 30: 3,2,2,3,4,2,2,3,3,4,
 40: 3,3,3,2,2,2,1,2,2,4,
 50: 3,5,3,2,3,2,2,4,3,3,
 60: 3,3,3,4,2,4,4,4,3,3,
 70: 5,3,4,4,3,3,2,4,5,3,
 80: 4,3,4,3,4,4,3,4,3,3,
 90: 3,3,3,2,3,3,3,3,3,3,
 3590-3600: 2,3,3,2,3,4,3,4,3,3,
 3600-3610: 4,3,4,3,3,3,3,3,3,3,
 20: 2,3,3,4,4,4,4,3,3,3,
 30: 3,3,4,4,4,4,4,3,3,3,
 40: 3,3,3,3,3,4,3,3,3,3,
 50: 3,3,3,3,4,4,3,3,3,3,
 60: 3,3,3,3,3,4,3,3,3,3,
 70: 3,4,3,3,3,3,4,2,3,2,
 80: 3,3,3,3,3,3,4,4,3,3,
 90: 1,1,3,3,4,3,3,4,3,3,
 3690-3700: 3,3,3,2,4,3,4,4,3,3,

3700-3710: 3,4,3,3,3,4,3,4,3,2,
 20: 4,3,3,4,3,3,4,3,3,4,
 30: 3,2,3,4,3,2,3,3,3,3,
 40: 3,3,3,3,3,3,3,3,2,3,
 50: 3,3,4,3,2,4,3,3,4,2,
 60: 2,2,2,3,4,3,3,4,3,3,
 70: 3,3,3,4,3,3,4,3,3,4,
 80: 3,3,3,2,3,4,4,3,3,3,
 90: 3,3,3,3,3,2,3,3,1,2,
 3790-3800: 1,3,3,3,2,4,3,3,3,3,

3800-3810: 3,3,3,3,3,3,3,3,3,4,
 20: 3,3,3,3,4,3,3,3,4,4,
 30: 3,4,4,4,4,4,4,3,3,3,
 40: 4,4,4,3,4,3,4,4,3,4,
 50: 4,4,4,3,4,4,4,4,4,3,
 60: 3,2,3,4,3,3,3,3,2,4,
 70: 3,3,5,3,4,3,4,3,3,4,
 80: 3,3,2,3,4,4,4,4,5,3,
 90: 3,3,4,3,3,4,4,4,4,3,
 3890-3900: 3,4,4,4,4,4,4,4,4,4,

3900-3910: 5,5,5,4,4,4,4,4,5,5,
 20: 6,5,5,4,4,4,4,3,3,4,
 30: 4,4,4,2,3,4,3,3,3,4,
 40: 3,3,3,4,3,3,3,3,2,2,
 50: 2,3,4,3,4,4,4,3,4,4,
 60: 3,3,3,3,4,3,3,3,2,3,
 70: 3,4,4,4,3,3,3,3,2,2,
 80: 3,3,2,3,3,4,3,3,3,3,
 90: 3,2,4,3,4,3,3,3,3,3,
 3990-4000: 3,3,4,4,3,3,3,3,4,3,

4000-4010: 4,4,3,3,2,3,3,4,4,3,
 20: 3,4,3,3,4,3,4,3,3,4,
 30: 3,3,3,3,4,3,3,4,3,3,
 40: 3,3,4,3,3,4,3,4,3,3,
 50: 3,3,2,3,3,3,3,4,3,3,
 60: 3,2,4,3,3,3,3,3,3,2,
 70: 3,3,3,3,3,3,2,2,3,2,
 80: 2,3,4,3,3,3,2,4,3,2,
 90: 2,1,1 $\frac{1}{2}$,1 $\frac{1}{2}$,3,3,3,4,5,4,
 4090-4100: 5,4,4,4,3,4,4,4,4,4,

4100-4110: 3,2,3,3,4,4,3,4,5,4,
 20: 4,4,3,4,4,3,4,4,3,5,
 30: 3,4,5,4,3,4,3,4,4,4,
 40: 4,4,4,4,4,4,3,3,3,4,
 50: 4,4,2,2,3,3,4,4,4,4,
 60: 3,3,3,4,4,4,4,4,4,4,
 70: 3,2,1,3,4,5,4,3,4,4,
 80: 3,3,4,3,4,4,4,3,4,4,
 90: 4,4,4,4,4,4,4,4,4,4,
 4190-4200: 4,4,4,3,3,3,3,4,4,4,

 4200-4210: 4,5,5,5,4,3,3,3,3,3,
 20: 3,3,3,4,4,4,4,3,4,4,
 30: 4,3,4,4,2,2,2,2,3,3,
 40: 5,4,5,4,4,5,4,4,3,3,
 50: 3,3,3,3,3,3,4,4,4,4,
 60: 4,3,4,3,4,4,4,4,5,4,
 70: 4,4,4,4,6,6,5,4,3,2,
 80: 3,3,2,2,3,3,4,5,5,5,
 90: 5,5,5,6,5,4,4,4,5,4,
 4290-4300: 4,3,3,1,1,2,2,4,3,4,

 4300-4310: 4,4,4,5,4,4,5,4,5,4,
 20: 4,4,4,5,5,3,5,5,4,4,
 30: 4,5,4,4,4,3,4,4,4,4,
 40: 4,3,3,4,4,5,4,4,4,4,
 50: 4,4,4,4,4,4,4,4,4,4,
 60: 4,4,5,6,5,4,4,4,4,3,
 70: 5,4,4,5,5,5,5,4,4,3,
 80: 4,4,4,4,4,5,5,5,4,4,
 90: 4,5,4,4,4,5,4,4,4,4,
 4390-4400: 4,5,4,4,4,4,3,3,3,1,

 4400-4410: 2,4,4,4,5,4,4,5,5,4,
 20: 4,4,4,5,3,3,5,5,6,4,
 30: 4,5,4,4,5,3,5,4,4,5,
 40: 4,4,3,3,2,4,4,4,4,5,
 50: 5,4,4,2,4,3,6,6,4,4,
 60: 3,3,2,2,1,2,2,6,3,5,
 70: 5,5,6,6,6,5,6,4,5,5,
 80: 6,5,5,3,4,5,4,5,4,5,
 90: 5,4,6,5,5,6,5,6,3,5,
 4490-4500: 4,4,3,3,3,3,3,2,2,3,

4500-4510: 3,4,4,4,4,5,4,4,5,4,
 20: 3,4,4,5,4,4,3,3,3,5,
 30: 5,4,4,4,5,5,5,3,3,2,
 40: 3,3,4,5,2,2,2,5,4,3,
 50: 4,4,5,3,3,5,4,4,4,4,
 60: 3,3,4,4,4,3,3,3,4,5, - R.T.-4560' @ 11:35 A.M., 12/8/82.
 70: 2,3,4,5,5,3,4,4,4,5, - Resume drlg. 3:55 P.M. Strap out of hole:
 4565.45'=4566.98'.
 80: 4,4,4,4,4,4,5,3,3,4,
 90: 3,3,3,3,4,4,5,3,4,3,
 4590-4600: 3,2,2,2,2,2,2,2,2,3,
 4600-4610: 4,3,3,3,4,3,3,3,3,3,
 20: 3,4,3,5,4,4,4,3,2,2,
 30: 2,2,3,3,3,2,2,3,2,2,
 40: 3,3,3,4,4,4,3,4,4,4,
 50: 4,4,3,4,4,5,4,4,4,4,
 60: 5,3,4,4,4,3,3,3,3,3,
 70: 2,2,3,2,3,3,3,3,3,4,
 80: 4,4,3,4,4,4,4,3,3,3,
 90: 3,3,4,4,3,3,3,2,2,2,
 4690-4700: 2,2,2,3,3,3,2,2,3,3,
 4700-4710: 4,3,3,4,3,3,3,3,3,3,
 20: 3,4,3,4,3,3,3,3,3,3,
 30: 3,3,3,3,3,3,3,3,4,2,
 40: 3,3,3,4,2,3,2,2,2,2,
 50: 1,2,1,1,2,3,4,3,4,4,
 60: 3,3,3,3,2,3,2,3,3,2,
 70: 2,1,2,2,3,3,2,2,2,3,
 80: 2,3,4,3,2,3,2,2,2,2,
 90: 3,2,2,2,2,3,2,3,4,4,
 4790-4800: 4,1,1,1,2,2,5,3,2,2,
 4800-4810: 3,3,4,3,2,2,1,2,3,3,
 20: 2,1,2,1,1,1,2,3,3,2,
 30: 2,3,5,5,5,5,5,4,5,4,
 40: 4,3,2,3,3,5,4,5,4,2,
 50: 2,2,1,1,2,2,3,2,2,2,
 60: $\frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, \frac{1}{2}, 1, 1, 1, 2, 2,$
 70: 2,2,2,2,2,2,2,1,1,3,
 80: 3,3,2,2,3,2,2,2,2,2, - circu. spls. 8:26 A.M., 12/9/82
 90: 2,3,3,3,3,2,3,3,2,1,
 4890-4900: 1,2,2,3,3,3,2,2,2,2,

4900-4910: 2,2,2,2,3,2,2,2,2,2,
 20: 2,2,2,2,2,2,2,2,3,2,
 30: 2,2,2,2,2,3,2,3,3,3, - Circu. spls. 1:14 P.M., 12/9/82
 DST #1. Res. drlg. 7:15 A.M., 12/10/82
 40: 3,3,3,3,3,3,2,2,2,2,
 50: 3,3,3,3,3,3,3,3,4,3,
 60: 3,3,3,2,5,2,3,2,2,4,
 70: 2,3,2,3,3,3,2,2,2,2,
 80: 2,2,2,3,2,3,2,3,2,2,
 90: 3,3,4,4,3,2,3,3,3,3,
 4990-5000: 2,2,3,3,3,3,2,2,2,1,
 5000-5010: 2,2,3,2,3,2,2,3,3,2,
 20: 3,3,3,3,3,4,2,3,4,3,
 30: 2,2,3,3,3,3,3,3,3,3,
 40: 2,4,3,3,3,3,3,3,3,4,
 50: 3,3,3,3,3,3,3,4,3,3,
 60: 3,3,3,3,3,3,3,3,4,4,
 70: 4,4,3,3,2,3,3,3,3,3,
 80: 3,2,3,2,2,3,3,3,3,3,
 90: 2,2,2,3,2,2,2,3,3,3,
 5090-5100: 2,3,2,2,2,2,2,2,2,3,
 5100-5110: 3,3,3,4,3,3,3,4,4,4,
 20: 4,4,4,4,4,4,4,5,3,4,
 30: 4,4,3,4,5,4,4,5,4,3,
 40: 3,3,3,3,4,3,3,4,3,3,
 50: 4,3,3,5,4,4,3,2,3,2,
 60: 2,4,4,3,3,2,1,2,1,2,
 70: 2,4,2,1,2,2,3,4,3,2,
 80: 2,3,2,3,3,2,2,2,3,2,
 90: 3,2,3,6,4,4,3,5,6,5,
 5190-5200: 8,6,7,6,7,6,7,6,8,6,
 5200-5210: 7,6,7,6,6,5,6,6,6,7,
 20: 5,6,7,6,6,5,6,7,6,7,
 30: 6,5,5,7,5,7,7,7,8,9,
 40: 9,7,10,9,9,8,8,10,8,10 - T.D. - 5240' - 4:00 A.M. Lost Circu.