LeBlanc
Petroleum Geologist

GEOLOGICAL REPORT

2349 North Stoneybrook Court
Wichita, Kansas 67226-3604
(316)-630-0195

API: 15-057-21011

COMPANY VINCENT OIL CORP (5004)
LEASE Imel-ROTZ 2-5
FIELD KINGSDOWN NORTHWEST
LOCATION 1650 FSL & 2438 FWL
SECTION 5 TOWNSHIP 29S RANGE 22W
COUNTY FORD STATE KANSAS

ELEVATIONS

KB 2516 FEET
DF 2514 FEET
GL 2504 FEET
MEASUREMENTS ARE ALL FROM: KB

CONTRACTOR DUKE DRLG RIG 1 (5929)
COMMENCED DRILLING SAT. MAY 18, 2019
COMPLETED DRILLING WED. MAY 29, 2019
RTD 5310 FEET LTD 5311 FEET
MUD UP AT 3826 FEET MUD TYPE Chemical

CASING

8⅝" AT 690'
4½" AT 5309'

ELOG SUITES

CDCN/PE
DUAL IND.
MICROLOG
SONIC

SAMPLES SAVED FROM 4260 FEET TO 5310 FEET
DRILLING TIME KEPT FROM 4200 FEET TO 5310 FEET
SAMPLES EXAMINED FROM 4260 FEET TO 5310 FEET
GEOLOGICAL SUPERVISION FROM 4056 FEET TO 5310 FEET

NOTES: MUD-SYSTEM - MUD-CO, SURF. CSG. CMT — BASIC ENG., GAS DETECTOR-MBC LOGGING; LEASING FUEL-BEST HORN O.G, WATER-WELL, DSTS — TRILOBITE TSTG, LOGGING-ELI WL SVC.

CORES-None

Remarks: THE VINCENT OIL CORP Imel-ROTZ 2-5 WAS DRILLED AS A Development WELL ON the MALONE EAST 3D PROSPECT. THIS WELL WAS PROPOSED SEARCHING FOR THE FIELD LIMIT FOR SECONDARY RECOVERY. PROD CSG. WAS RUN FOR FURTHER evaluation.

NOTE: THE main PAY RESERVOIR PRESSURES WERE down to the MID 500# RANGE.

KEN LEBLANC

Daily Penetration
7AM

Date	Depth
5-18-19	MIRT, RIG UP,
	SPUD 5:45PM
5-19-19	690' - SET 8⅝"
	AT 690'
5-20-19	DRLG 1303'
5-21-19	DRLG 2122'
5-22-19	DRLG 3068'
5-23-19	DRLG 3756'
5-24-19	DRLG 4393'
5-25-19	DRLG 4892'
5-26-19	DRLG 5147'
	DST 1
5-27-19	5240-DST 1
	DST 2
5-28-19	5260-DST 3
	RTD 5310 -2794
	AT 1:58AM WED
	5-29-19, CFS 90
	DRP Survey, TOOH
	f/LOGS
5-29-19	5310- ELI WL SVC
	Running open
	Hole Logs,
	Finished AT 1030am
	Run 4½" PROD
	csg for further
	evaluation

Bit Record

Number	Size	Make	Type	Depth Out	Feet	Hours
1	12¼	PDC	5446	690	690	6½
2	7⅞	Linco		5240	4550	129¾
3	7⅞	YAREL	HE28	5310	70	14¾
	TOTAL	BIT	HOURS →		5310	151
AVG	PENETRATION	RATE: 0-RTD (35.16 FPH)				

GENERAL INFORMATION

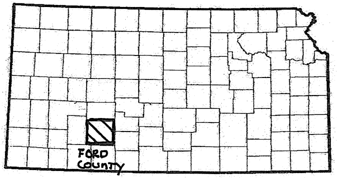
RUN 16 JTS 8⅝"-23# SURF CSG to 690', CMTD W/300 SXS common (2% gel + 3% CC + ¼# SX FloSeal/SX) PLUG DWN AT 10AM 5-19-19, BY BASIC CMTG, CMT DID CIRC.

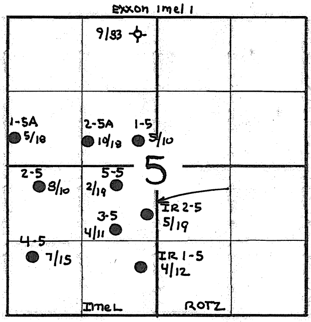
RIG MAKE: IDECO H35, DBL, STEEL PITS
POWER: CAT 3406
DP: 4½" XL, WT 16.6#/FT, OD: 6¼", ID: 2¼",
DC: #16 Length 473.66', OD: 6¼", ID: 2¼"
PUMP: EMSCO D300, Liners 6", Stroke 14"
POWER: CAT 285-9075
RIG POWER: DETROIT DIESEL SERIES 60
TOOL PUSHER: MIKE GODFREY

Formation Tops	Sample Tops	Corrected Sample Tops	Electric Log Tops	Subsea Datums
BASE SURFACE CASING	690		690	
HEEBNER SHALE	4366		4370	-1854
BRN LS	4518		4520	-2004
LANSING	4528		4531	-2015
STARK SHALE	4864		4865	-2349
HUSH SHALE	4900		4903	-2387
BKC	4973		4977	-2461
PAWNEE LS	5068		5071	-2555
CHEROKEE SHALE	5114		5117	-2601
BPENN LS	5207		5210	-2694
MISSISSIPPIAN UNC.	5224		5228	-2712
RTD, LTD	5310		5311	-2795

Reference Well: VOC IR 1-5, 1060 FSL & 2545 FWL Sec 5-29S-22W

Kansas



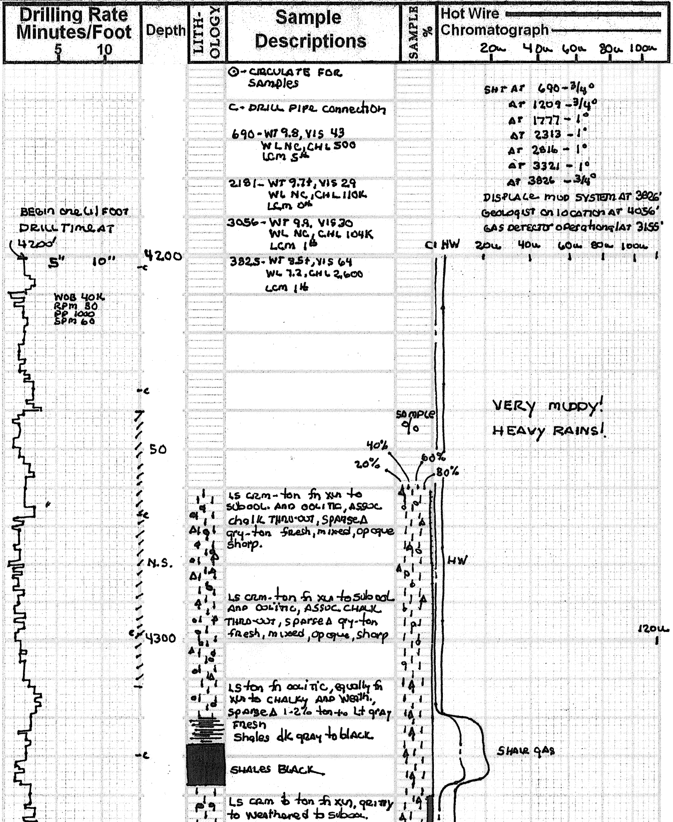


SEC. 5-T29S-R22W

FORD COUNTY, KANSAS

Legend

▨ Sandstone	▨ Limestone	▨ Chert	▨ Coal/ Carb. Shale
▨ Siltstone	▨ Dolomite	▨ Granite Wash	▨ Conglomerate
▨ Shale	▨ Anhydrite/ Gypsum	▨ Granite	▨ oolitic/ oomoldic



⊙ - CIRCULATE FOR SAMPLES

C - DRILL PIPE connection

690 - WT 9.8, VIS 43
WL NC, CHL 500
LCM 5#

2181 - WT 9.7+, VIS 29
WL NC, CHL 110K
LCM 0#

3056 - WT 9.9, VIS 30
WL NC, CHL 104K
LCM 1#

3825 - WT 8.5+, VIS 64
WL 7.2, CHL 2,600
LCM 1#

SHT AT 690 - 3/4°
AT 1209 - 3/4°
AT 1777 - 1°
AT 2313 - 1°
AT 2816 - 1°
AT 3321 - 1°
AT 3826 - 3/4°

DISPLACE MUD SYSTEM AT 3826'
GEOLOGIST ON LOCATION AT 4056'
GAS DETECTOR OPERATIONAL AT 3156'

BEGIN ONE (1) FOOT DRILL TIME AT 4200'

WOB 40K
RPM 80
PP 1000
SPM 60

VERY MUDDY!
HEAVY RAINS!

LS crm - tan fn xln to subool. AND OOLITIC, ASSOC chalk THRU-OUT, SPARSE Δ gry - tan fresh, mixed, opaque sharp.

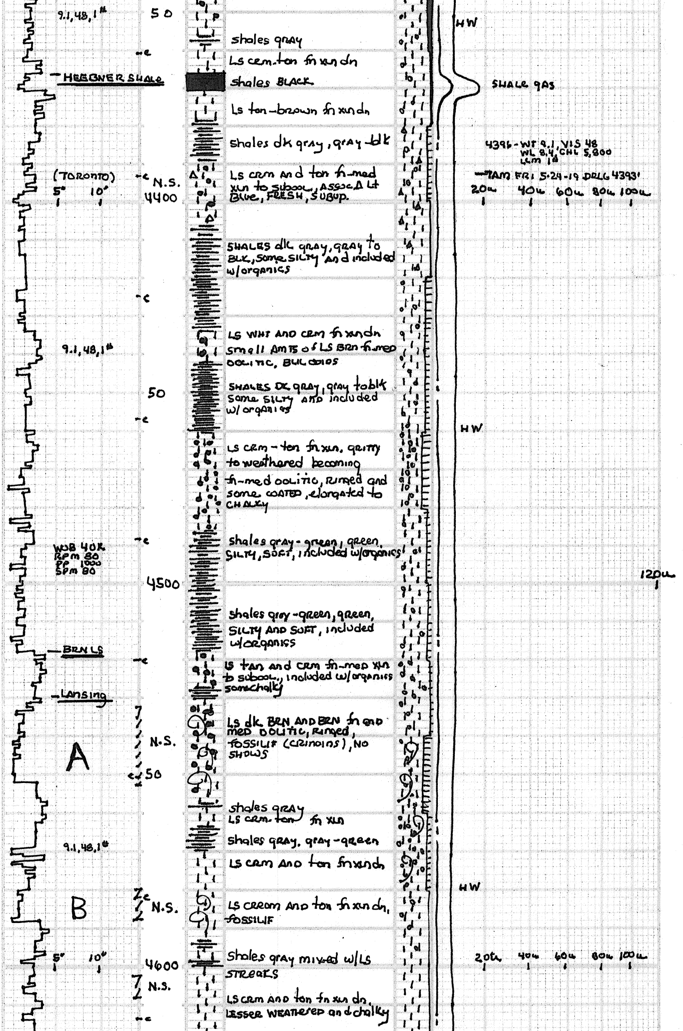
LS crm - tan fn xln to subool AND OOLITIC, ASSOC. CHALK THRU-OUT, SPARSE Δ gry - tan fresh, mixed, opaque, sharp

LS tan fn oolitic, equally fn xln to CHALKY AND WEATH., SPARSE Δ 1-2% tan to Lt gray FRESH

Shales dk gray to black

SHALES BLACK

LS crm to tan fn xln, gritty to weathered to subool.



shales gray

LS crm-tan fn xln dn

shales BLACK

LS tan-brown fn xln dn

shales dk gray, gray-blk

LS crm and tan fn-med xln to subool, ASSOC Δ Lt Blue, FRESH, SUBUP.

SHALES dk gray, gray to BLK, some SILTY and included w/organics

LS WHT AND CRM fn xln dn
small AMTS of LS BRN fn-med OOLITIC, BUL OOIDS

SHALES DK gray, gray to blk some SILTY AND included w/organics

LS crm-tan fn xln, gritty to weathered becoming fn-med oolitic, ringed and some COATED, elongated to CHALKY

shales gray-green, green, SILTY, SOFT, included w/organics

shales gray-green, green, SILTY AND SOFT, included w/organics

LS tan and crm fn-med xln to subool., included w/organics somechalky

LS dk. BRN AND BRN fn and med OOLITIC, Ringed, FOSSILIF (CRINOIDS), NO SHOWS

shales gray
LS crm-tan fn xln

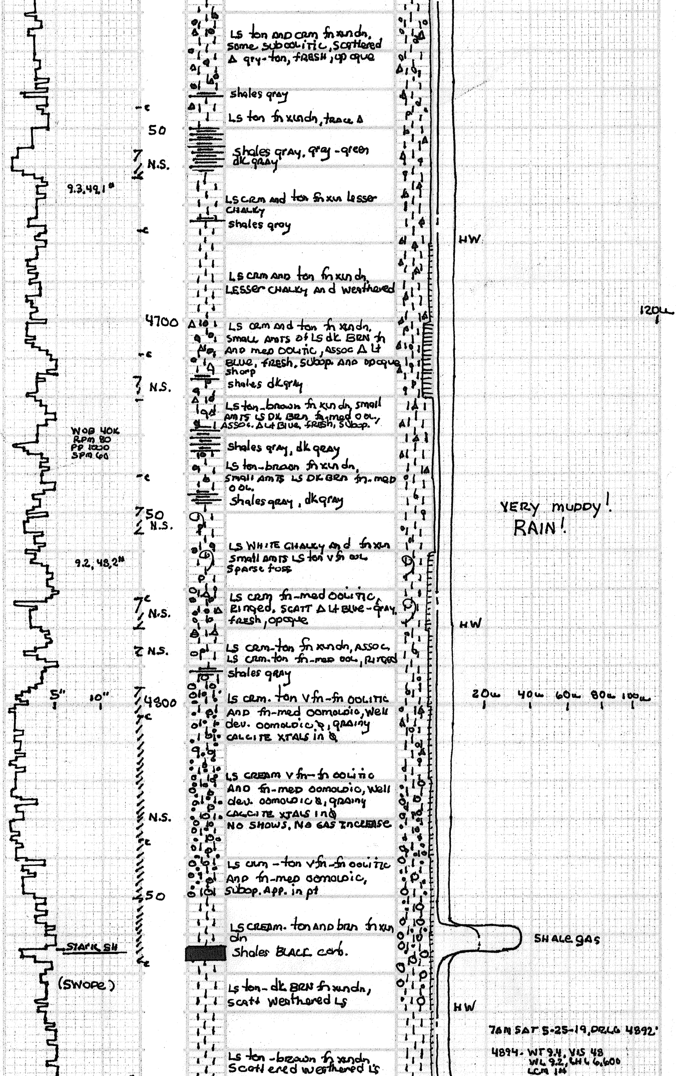
shales gray, gray-green

LS crm and tan fn xln dn

LS cream and tan fn xln dn, FOSSILIF

Shales gray mixed w/LS STREAKS

LS crm and tan fn xln dn, LESSER WEATHERED and chalky



LS tan AND crm fn xln dn, some subOOLITIC, scattered Δ gry-tan, FRESH, opaque

shales gray

LS tan fn xln dn, trace Δ

shales gray, gray-green dk gray

LS crm and tan fn xln lesser CHALKY

shales gray

LS crm AND tan fn xln dn, LESSER CHALKY and weathered

LS crm and tan fn xln dn, small AMTS of LS dk BRN fn AND med OOLITIC, ASSOC Δ Lt BLUE, FRESH, SUBOP. AND opaque sharp

shales dk gray

LS tan-brown fn xln dn, small AMTS LS DK BRN fn-med OOL, ASSOC. Δ Lt Blue, FRESH, SUBOP.

shales gray, dk gray

LS tan-brown fn xln dn, small AMTS LS DK BRN fn-med OOL.

shales gray, dk gray

LS WHITE CHALKY and fn xln small AMTS LS tan v fn OOL. Sparse foss

LS crm fn-med OOLITIC, Ringed, SCATT Δ Lt Blue-gray, fresh, opaque

LS crm-tan fn xln dn, ASSOC. LS crm-tan fn-med OOL, Ringed

shales gray

LS crm-tan v fn-fn OOLITIC AND fn-med OOMOLDIC, Well dev. OOMOLDIC φ, grainy CALCITE XTALS in φ

LS CREAM v fn-fn OOLITIC AND fn-med OOMOLDIC, Well dev. OOMOLDIC φ, grainy CALCITE XTALS in φ
NO SHOWS, NO GAS INCREASE

LS crm-tan v fn-fn OOLITIC AND fn-med OOMOLDIC, subop. App. in pt

LS CREAM-tan AND brn fn xln dn

Shales BLACK carb.

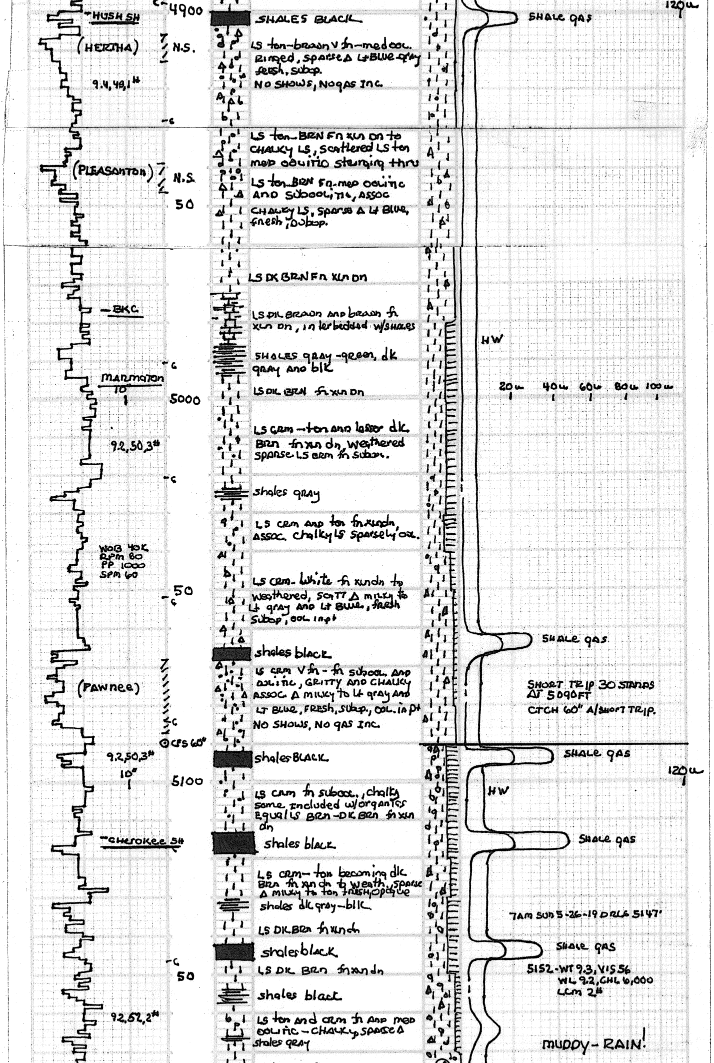
LS tan-dk BRN fn xln dn, scatt weathered LS

LS tan-brown fn xln dn Scattered weathered LS

VERY MUDDY! RAIN!

7AM SAT 5-25-19, DRLG 4892'

4894- WT 9.4, VIS 48
WL 9.2, CHL 6,600
LCM 1#



SHALES BLACK

LS tan-brown v fn-med ool. Ringed, sparse Δ Lt Blue-gray fresh, subop.
NO SHOWS, No gas Inc.

LS tan-BRN Fn xln dn to CHALKY LS, scattered LS tan med oolitic stringing thru

LS tan-BRN fn-med oolitic and suboolitic, ASSOC CHALKY LS, sparse Δ Lt Blue, fresh, subop.

LS DK BRN Fn xln dn

LS dk brown and brown fn xln dn, interbedded w/shales

SHALES gray-green, dk gray and blk

LS dk BRN fn xln dn

LS crm-tan and lesser dk. Brn fn xln dn, weathered sparse LS crm fn subool.

shales gray

LS crm and tan fn xln dn, assoc. chalky LS sparsely ool.

LS crm-White fn xln dn to weathered, scatt Δ milky to Lt gray and Lt Blue, fresh subop, ool inpt

shales black

SHALE GAS

LS crm v fn-fn subool. and oolitic, GRITTY and CHALKY ASSOC. Δ milky to Lt gray and LT BLUE, FRESH, subop., ool. in pt
NO SHOWS, NO gas Inc.

SHORT TRIP 30 STANDS AT 5090 FT
CTCH 60" A/SHORT TRIP.

shales BLACK

SHALE GAS

LS crm fn subool., chalky some included w/organics Equal LS Brn-DK Brn fn xln dn

shales black

SHALE GAS

LS crm-tan becoming dk Brn fn xln dn to weath. sparse Δ milky to tan fresh, opaque

shales dk gray-blk

LS DK Brn fn xln dn

7AM SUN 5-26-19 DRLG 5147'

shales black

SHALE GAS

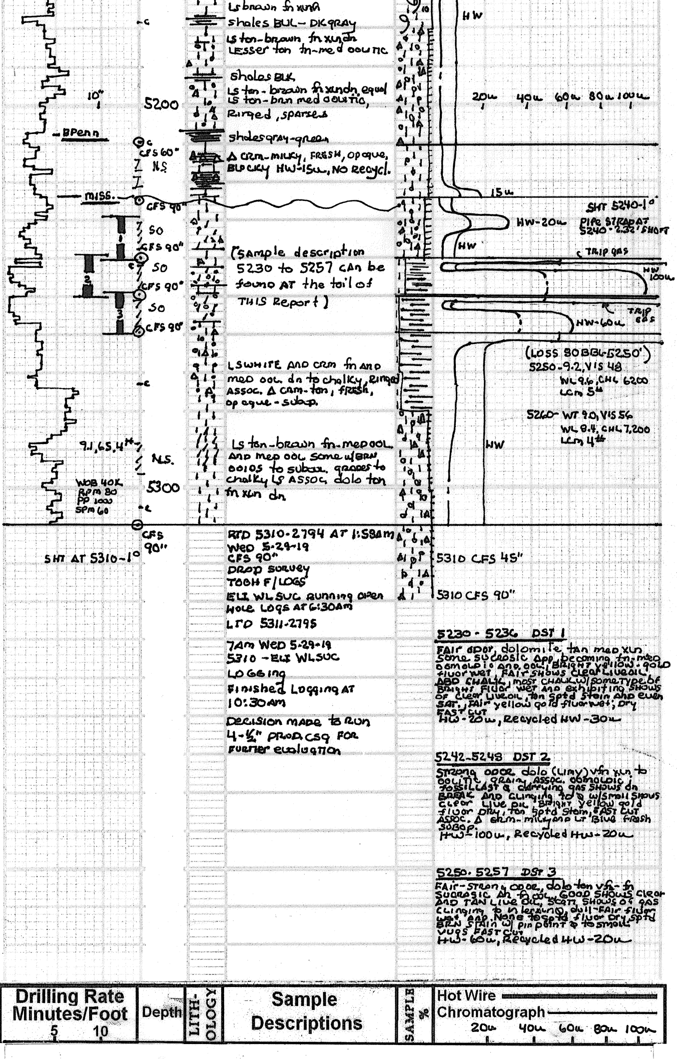
LS DK Brn fn xln dn

5152-WT 9.3, VIS 56
WL 9.2, CHL 6,000
LCM 2#

shales black

LS tan and crm fn and med oolitic-CHALKY, sparse Δ
shales gray

MUDDY-RAIN!



Ls brown fn xuna

shales BLK - DK gray

Ls tan-brown fn xuln dn
LESSER tan fn-med oolitic

shales BLK
Ls tan-brown fn xuln dn, equal
Ls tan-brn med oolitic,
Ringed, sparse

shales gray-green

Δ crm-milky, FRESH, opaque,
BLOCKY HW-15u, NO Recycl.

(Sample description
5230 to 5257 can be
found at the tail of
THIS Report)

LS WHITE AND crm fn AND
med ool. dn to chalky, Ringed
Assoc. Δ crm-tan, fresh,
opaque - subop.

Ls tan-brown fn-med ool.
And med ool some w/BRN
oolds to subox. grades to
chalky LS Assoc. dolo tan
fn xln dn.

RTD 5310-2794 AT 1:58AM
WED 5-29-19
CFS 90"
DROP SURVEY
TOOH F/LOGS
ELI WL SVC Running open
Hole Logs AT 6:30AM

LTD 5311-2795

7AM WED 5-29-19
5310 - ELI WL SVC
LOGGING
Finished Logging AT
10:30AM

Decision made to Run
4-½" PROD CSG FOR
Further evaluation

5230 - 5236 DST 1

FAIR odor, dolomite tan med xln
some sucrosic App, becoming fn-med
oomoldic AND ool, BRIGHT yellow-gold
fluor wet, FAIR SHOWS clear live oil
ABD CHALK, most CHALK w/ some type of
BRIGHT FLUOR wet AND exhibiting SHOWS
OF clear live oil, tan sptd stain AND even
SAT., FAIR yellow gold fluor wet; Dry
FAST CUT
HW-20u, Recycled HW-30u

5242-5248 DST 2

Strong odor dolo (Limy) vfn xln to
oolitic grain Assoc. oomoldic,
fossilcast & carrying gas shows on
BREAK AND clinging to ∅ w/small shows
clear live oil, BRIGHT yellow gold
fluor Dry, tan sptd stain, FAST CUT
Assoc. Δ crm-milky AND LT Blue fresh
subop.
HW-100u, Recycled HW-20u

5250-5257 DST 3

FAIR-STRONG ODOR, dolo tan vfn-fn
sucrosic AND fn ool, GOOD SHOWS clear
AND TAN live oil, SCATT SHOWS OF GAS
clinging to interxln ∅, dull-FAIR fluor
wet AND None to sptd fluor Dry, sptd
BRN STAIN w/ pin point ∅ to small
vugs FAST CUT
HW-60u, Recycled HW-20u

DST 1) 5229 - 5240

(Mississippian)

Times: 30-60-30-60

1st open: weak blow built to 4 inches in bucket, NO GAS TO SURFACE
(NO blowback)

2nd open: weak blow built to 3-1/4" in bucket, NO GAS TO SURFACE
(NO blowback)

Rec: 60' Gas in Pipe

8' Oil Specked Mud
(2% oil, 98% mud)

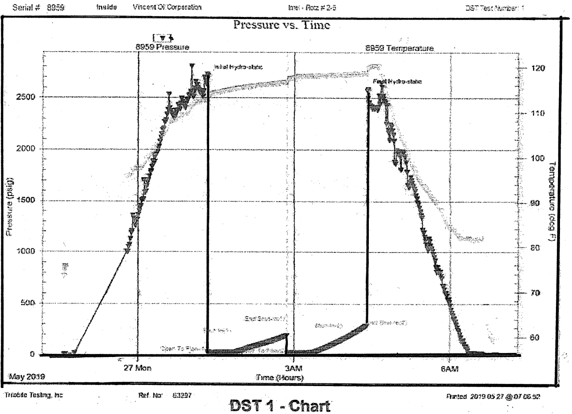
8' Total Fluid - ALL IN DRILL PIPE

(Alpine Recorders)

IHYD: 2714 psig
IFP: 21-24 psig
IBHP: 188 psig
FFP: 22-23 psig
FBHP: 289 psig
FHYD: 2581 psig
TEMP: 120 degrees

Tester: Martine Salinas: Trilobite Testing, Inc., Scott City KS District
NOTE: Conventional DST (dual packers, safety joint, electronic recorders, jars)

NO bottom sampler



DST 1 - Chart

DST 2) 5239 - 5250

(Mississippian)

Times: 30-60-60-120

1st open: weak blow OBOB in 4-1/2 minutes, NO GAS TO SURFACE
(NO blowback)

2nd open: weak blow OBOB in 15 minutes, NO GAS TO SURFACE
(NO blowback)

Rec: NO Gas in Pipe
635' Gassy Oil Cut Muddy Water
(23% gas, 4% oil, 37% water, 36% mud)

80' Gas and Oil Specked Mud
(4% gas, 2% oil, 94% mud)
715' Total Fluid - ALL IN DRILL PIPE

chlorides of mud system: 6,500 ppm
chlorides of formation waters: 35,000 ppm
resistivity of formation waters: 0.210 @ 70.5 deg F

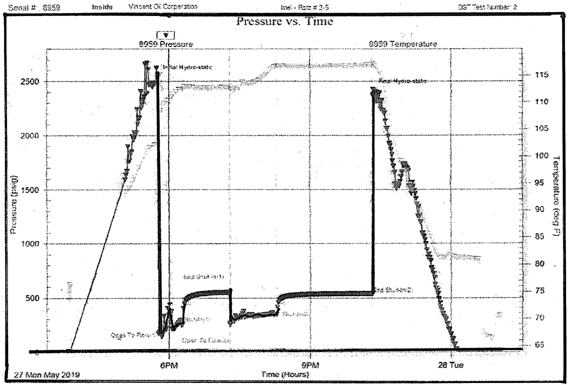
[NOTE: Lost 80 BBLS of mud while CFS at 5250' prior to TOOH for DST 2]

(Alpine Recorders)

IHYD: 2550 psig
IFP: 141-258 psig
IBHP: 550 psig
FFP: 253-349 psig
FBHP: 539 psig
FHYD: 2425 psig
TEMP: 117 degrees

Tester: Martine Salinas: Trilobite Testing, Inc., Scott City KS District
NOTE: Conventional DST (dual packers, safety joint, electronic recorders, jars)

NO bottom sampler



DST 2 - Chart

DST 3) 5249 - 5260

(Mississippian)

Times: 30-60-60-120

1st open: weak blow built to 9 inches in bucket, NO GAS TO SURFACE
(NO blowback)

2nd open: weak blow built to 11 inches in 47 minutes, NO GAS TO SURFACE
(NO blowback)

Rec: 250' Gas in Pipe

5' Clean Gassy Oil
(100% oil-36 deg API)

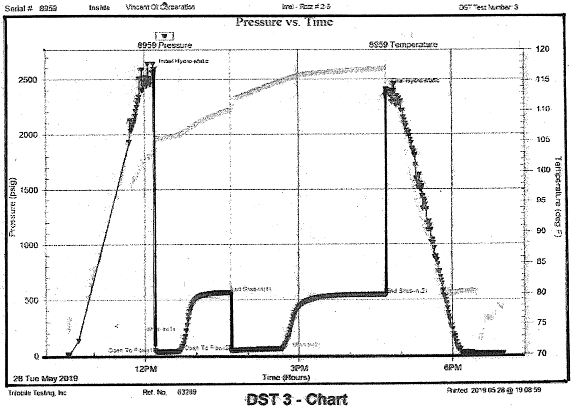
65' Slightly Gas and Oily Mud Cut Water
(3% gas, 2% oil, 75% water, 20% mud)
70' Total Fluid - ALL IN DRILL PIPE

chlorides of mud system: 7,200 ppm
chlorides of formation waters: 67,000 ppm
resistivity of formation waters: 0.120 @ 78.5 deg F

(Alpine Recorders)

IHYD: 2587 psig
IFP: 30-37 psig
IBHP: 564 psig
FFP: 41-56 psig
FBHP: 545 psig
FHYD: 2407 psig
TEMP: 116 degrees

Tester: Martine Salinas: Trilobite Testing, Inc., Scott City KS District
NOTE: Conventional DST (dual packers, safety joint, electronic recorders, jars)



DST 3 - Chart