Ken LeBlanc
Petroleum Geologist

GEOLOGICAL REPORT

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

API: 15-057-20952

COMPANY VINCENT OIL CORP (5004
LEASE MALONE 4-21
FIELD GREAT MOGUL CANYON
LOCATION 1670 FSL & 1675 FWL
SECTION 21 TOWNSHIP 28S RANGE 23W
COUNTY FORD STATE KANSAS

ELEVATIONS
KB 2443 FEET
DF 2441 FEET
GL 2431 FEET
MEASUREMENTS ARE ALL FROM: KB

CONTRACTOR DUKE DRLG RIG 1 (5929)
COMMENCED DRILLING TUES. OCT. 28, 2014
COMPLETED DRILLING FRI. NOV. 7, 2014
RTD 5260 FEET LTD 5262 FEET
MUD UP AT 3800± FEET MUD TYPE CHEMICAL

CASING
8 5/8" AT 608'
4½" AT 5256'

ELOG SUITES
CNCD/PE
DUAL INDUCTION
MICROLOG
SONIC

SAMPLES SAVED FROM 4160 FEET TO 5260 FEET
DRILLING TIME KEPT FROM 4050 FEET TO 5260 FEET
SAMPLES EXAMINED FROM 4160 FEET TO 5260 FEET
GEOLOGICAL SUPERVISION FROM 4546 FEET TO 5260 FEET

NOTES: MUD SYSTEM – MUD-CO, SURF. CSG. CMT – QUALITY WELL SVC, GAS DETECTOR – MBC LOGGING & LEASING, WATER – WELL, FUEL – BEST-HORN O&G, DSTS - TRILOBITE TSTG, LOGGING – NABORS WLSVC, CORES – NONE

Remarks: THE VOC MALONE 4-21 WAS DRILLED AS AS DEVELOPMENT WELL ON THE MALONE LEASE AS PART OF THE MALONE 3D PROSPECT. AN RTD OF 5260 WAS REACHED SOME 100 FT PLUS WITHIN THE MISS. FORMATION FOUR (4) DSTS WERE TAKEN AND ALL APPEAR TO HAVE COMMERCIAL POSSIBILITIES. 4½" PROD. CSG WAS SET FOR FURTHER EVALUATION

Ken LeBlanc

Daily Penetration

7 Am

Date	Depth
10-28-14	MIRT, RIG UP, SPUD 7:14 PM
10-29-14	608 - RUN 8 5/8" SURF CSG TO 608'
10-30-14	DRLG 1335'
10-31-14	DRLG 2625'
11-1-14	DRLG 3430'
11-2-14	DRLG 4195'
11-3-14	DRLG 4779
11-4-14	5060 - TOOH F/DST 1
11-5-14	5075 - DST 2
11-6-14	5100 - DST 3
11-7-14	5130 - TOOH W/DST 4 RTD 5260 AT 832 pm 11-7-14 CFS 90, DROP SURVEY NABORS WLS ON LOC 1145 pm FINISHED LOGGING AT 7AM SAT 11-8-14
11-8-14	5260 - FINISH LOGGING, RUN 4½" PROD CSG

Bit Record

Number	Size	Make	Type	Depth Out	Feet	Hours
1	12 1/4	VAREL	RR	608	608	5 3/4
2	7 7/8	VAREL	HE21	5060	4452	108
3	7 7/8	VAREL	HE29	5260	200	8¼
	TOTAL BIT HOURS			→	5260	122

AVG. PENETRATION RATE: 0 - RTD 43.11 FPH

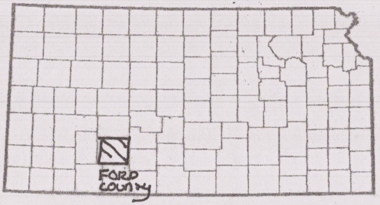
GENERAL INFORMATION

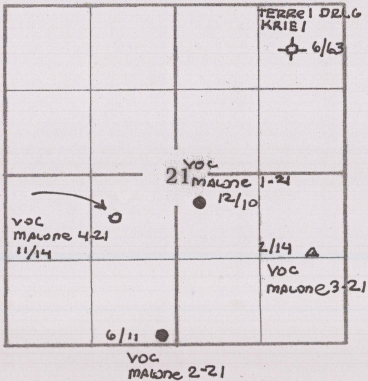
RAN 14 JTS NEW 8 5/8" SURF CSG, SET AT 608', CMTD W/125 SXS MDC (1/4" FLO-SEAL PER SX) + 125 SXS COMMON (2% GEL, 3% CC + 1/4" FLO-SEAL/SX), CMT DID CIRC, PLUG DWN CMT FELL BACK, RAN 1" & CMTD W/15 SXS MDC CMTD COMPLETED AT 3pm 10/29/14
RIG MAKE: IDECO H35, DBL, STEEL PITS
POWER: CAT 3406
DP: 4½" XH, WT 16.6#/FT, OD 6¼", ID: 2¼"
DC: 16 - LENGTH 476.91', 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	608		602	
HEEBNER SHALE	4224		4224	-1781
BRN LS	4353		4356	-1913
LANSING	4363		4368	-1925
STARK SHALE	4691		4696	-2253
HUSH SHALE	4738		4739	-2296
BKC	4813		4818	-2375
PAWNEE	4911		4912	-2469
CHEROKEE SHALE	4962		4962	-2519
B/PENN LS	5055		5055	-2612
MISS. UNCONFORMITY	5065		5064	-2621
RTD, LTD	5260		5262	-2819

Reference Well: VOC MALONE 2-21 115FSL; 2650 FWL 21-28S-23W

Kansas





SEC. 21-T28S-R23W
FORD COUNTY, KANSAS

Legend

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

Drilling Rate Minutes/Foot 5 10	Depth	LITHOLOGY	Sample Descriptions	SAMPLE %	Hot Wire — Chromatograph — 50u 100u 150u 200u 250u

⊙ - CIRCULATE FOR SAMPLES

C - DRILL PIPE CONNECTIONS

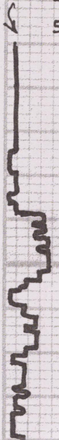
2735 - WT 9.4+, VIS 30
WL NC, CHL 100,000
LCM 2#

SHT AT 614' — 1° DEV
1146' — 1° DEV
1713 - 3/4° DEV
2503 - 3/4° DEV

DISPLACE MUD SYSTEM
+ - 3800 FEET

MBC LOGGING AND
LEASING ON LOCATION
AND OPERATIONAL AT
4150 FT

BEGIN ONE (1)
FOOT DRILL TIME
AT 4050 FT



5" 10"

4050

DRLG W/BIT #2 VAREL
HE 21 in at 608', JETS
3-14's

WOB 33K
RPM 75
PP 900
SPM 58

- C

5" 10"

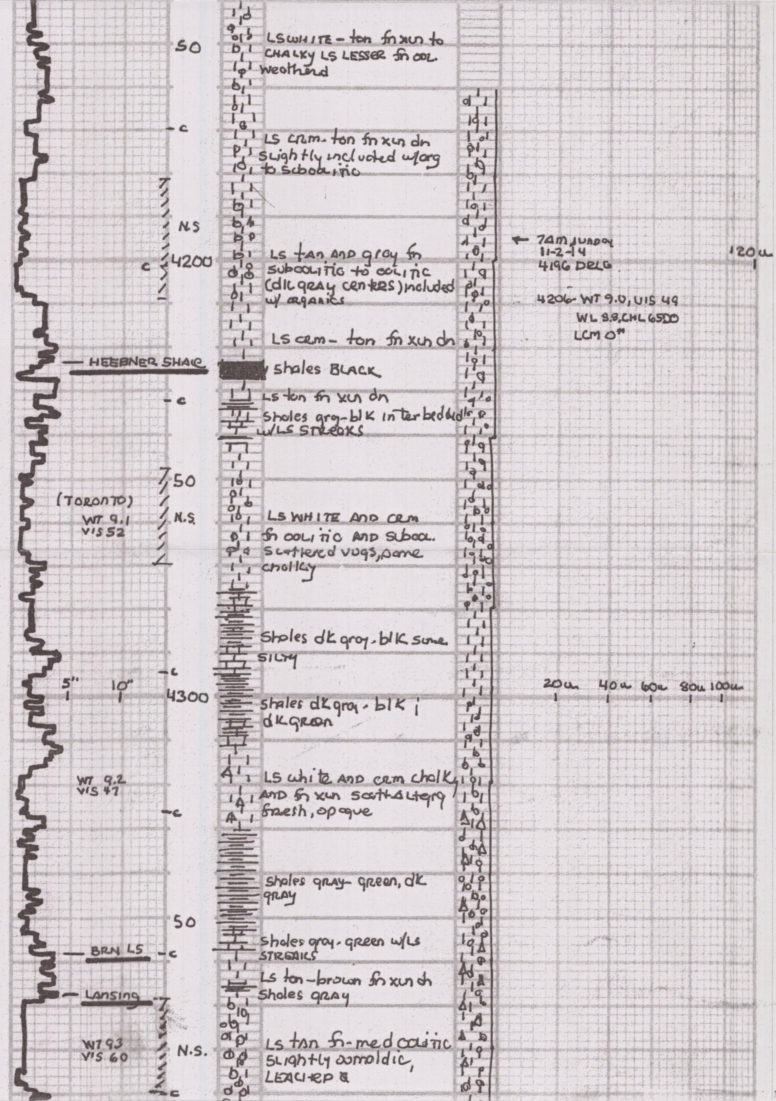
4100

20u 40u 60u 80u 100u

- C

WT 9.0
VIS 46

- C



LS WHITE - tan fn xln to CHALKY LS LESSER fn OOL. weathered

LS crm - tan fn xln dn slightly included w/org to suboolitic

LS tan and gray fn suboolitic to oolitic (dk gray centers) included w/ organics

LS crm - tan fn xln dn

shales BLACK

LS tan fn xln dn

Shales gray - blk interbedded w/LS STREAKS

LS WHITE AND CRM fn OOLITIC AND SUBOOL. Scattered vugs, some chalky

Shales dk gray - blk some silty

shales dk gray - blk ; dk green

LS white and crm chalky and fn xln scatt Δ ltgrg fresh, opaque

Shales gray - green, dk gray

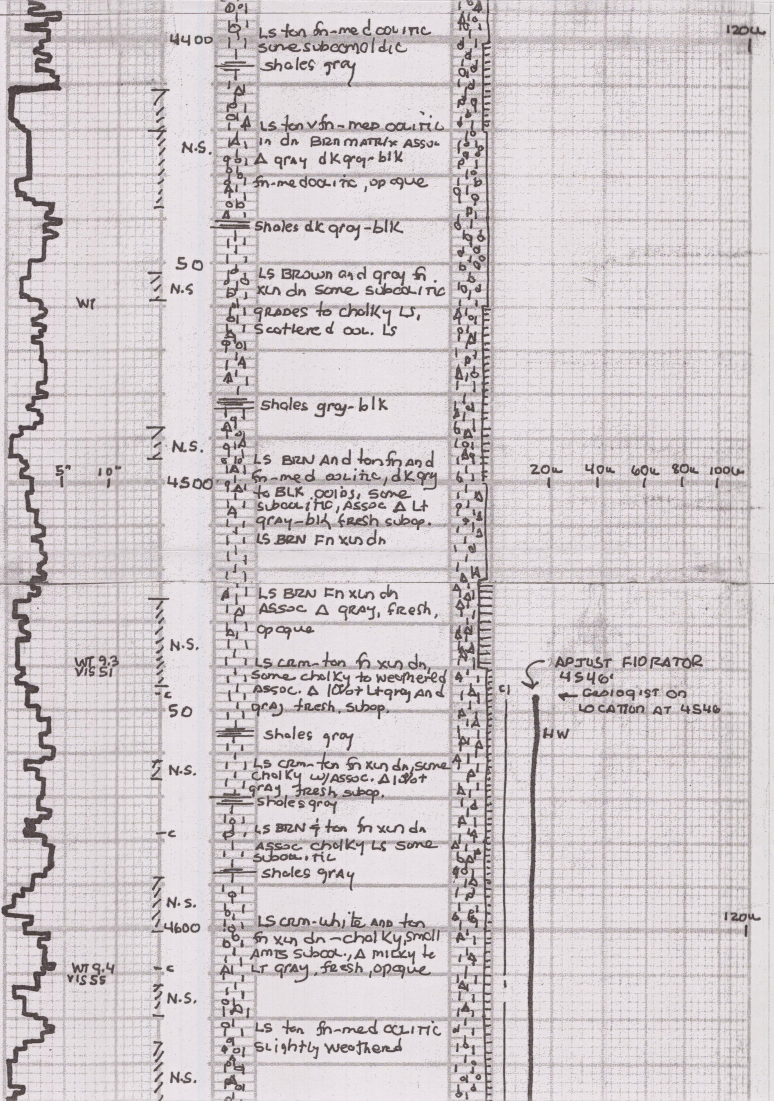
Shales gray - green w/LS STREAKS

LS tan - brown fn xln dn
Shales gray

LS tan fn - med oolitic slightly oomoldic, LEACHED

← 7AM Sunday
11-2-14
4196 DRLG

4206 - WT 9.0, VIS 49
WL 8.8, CHL 6500
LCM 0#



4400 LS tan fn-med oolitic some suboomoldic

shales gray

LS tan vfn-med oolitic in dn BRN MATRIX ASSOC Δ gray dk gray-blk fn-med oolitic, opaque

shales dk gray-blk

50 LS Brown and gray fn. xln dn some suboolitic grades to chalky LS, Scattered ool. LS

shales gray-blk

LS BRN And tan fn and fn-med oolitic, dk gry to BLK oolids, some suboolitic, Assoc Δ Lt gray-blk fresh subop.

4500 LS BRN Fn xln dn

LS BRN Fn xln dn Assoc Δ gray, fresh, opaque

LS crm-tan fn xln dn, some chalky to weathered Assoc. Δ 10% t Lt gray and gray fresh, subop.

ADJUST FIORATOR 4546'

← Geologist on LOCATION AT 4546

50 shales gray

LS crm-tan fn xln dn, some chalky w/Assoc. Δ 10% t gray fresh subop.

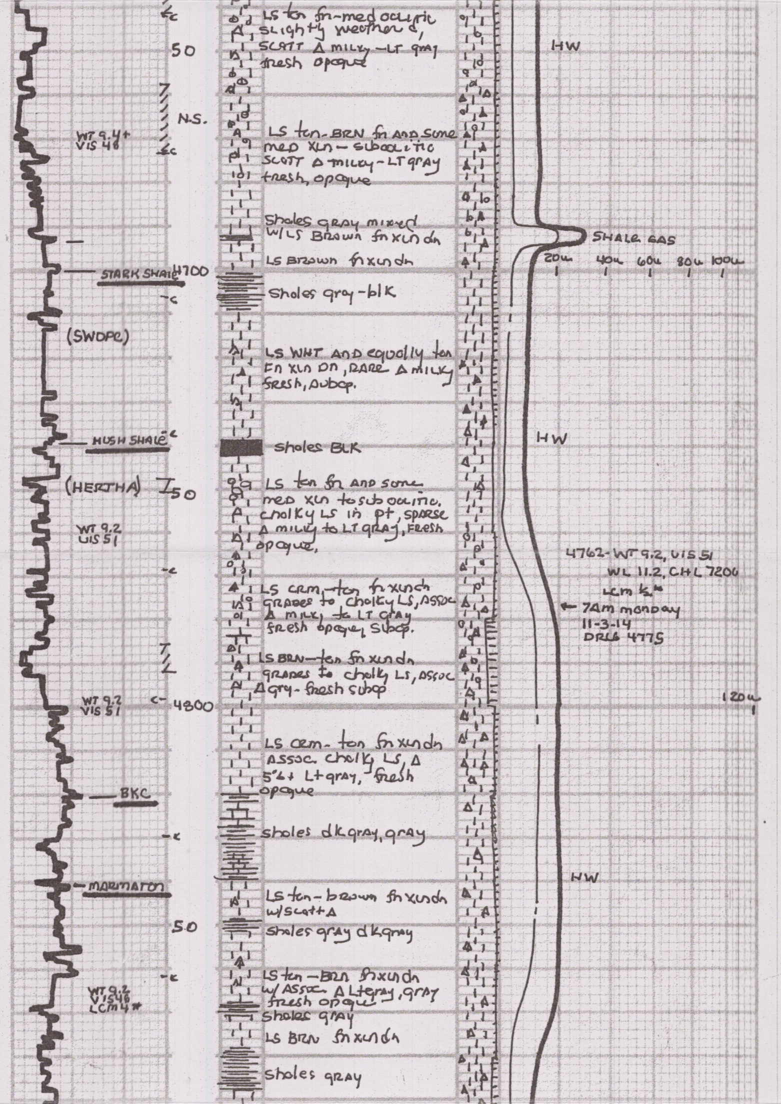
shales gray

LS BRN & tan fn xln dn Assoc chalky LS some suboolitic

shales gray

4600 LS crm-white and tan fn xln dn-chalky, small amts subool., Δ milky to Lt gray, fresh, opaque

LS tan fn-med oolitic slightly weathered



LS tan fn-med oolitic slightly weathered, scatt Δ milky-LT gray fresh opaque

LS tan-BRN fn AND some med XLN - suboolitic scatt Δ milky-LT gray fresh, opaque

Shales gray mixed W/LS Brown fn xln dn

LS Brown fn xln dn

Shales gray-blK

LS WHT AND equally tan fn xln dn, RARE Δ milky fresh, subop.

Shales BLK

LS tan fn AND some med xln to suboolitic. chalky LS in pt, sparse Δ milky to LT gray, fresh opaque,

LS crm-tan fn xln dn grades to chalky LS, ASSOC Δ milky to LT gray fresh opaque, subop.

LS BRN-tan fn xln dn grades to chalky LS, ASSOC Δ gry- fresh subop

LS crm- tan fn xln dn ASSOC. chalky LS, Δ 5'&+ Lt gray, fresh opaque

shales dk gray, gray

LS tan-brown fn xln dn w/scatt Δ

shales gray dk gray

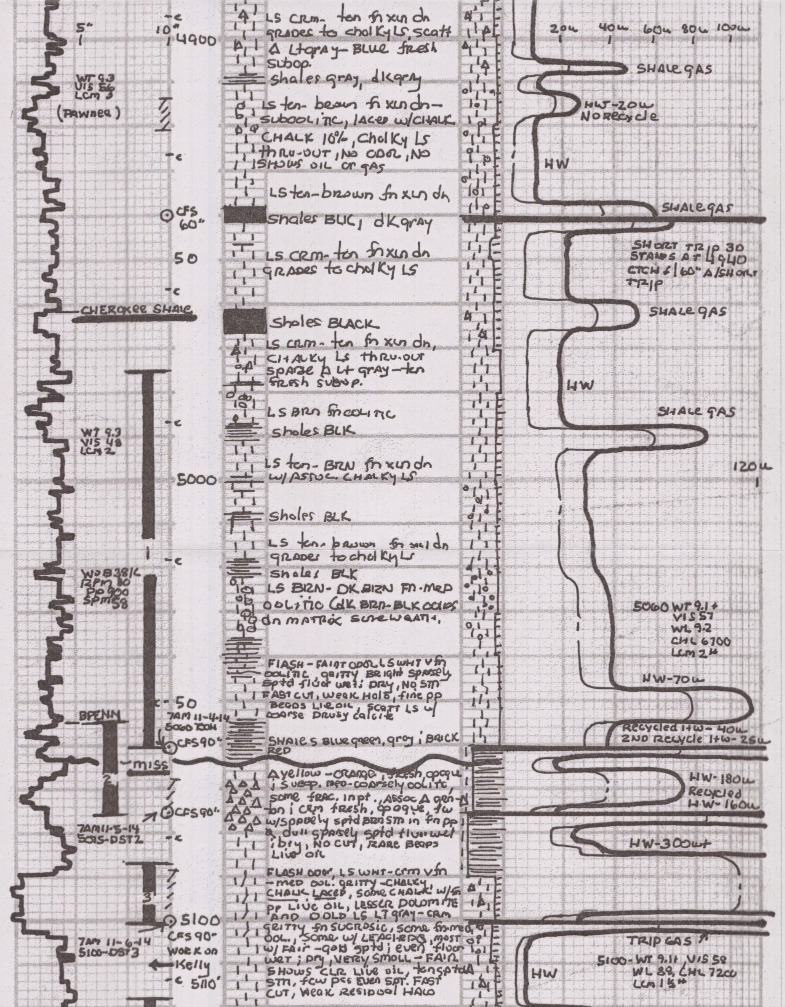
LS tan-BRN fn xln dn w/ ASSOC. Δ Lt gray, gray fresh opaque

shales gray

LS BRN fn xln dn

shales gray

4762- WT 9.2, VIS 51
WL 11.2, CHL 7200
LCM ½#
← 7AM monday
11-3-14
DRLG 4775



LS CRM- tan fn xln dn grades to chalky LS, scatt Δ Lt gray- blue fresh subop.

shales gray, dk gray

LS tan- brown fn xln dn- suboolitic, laced w/chalk

CHALK 10%, chalky LS thru-out, NO ODOR, NO SHOWS oil or gas

LS tan-brown fn xln dn

shales BLK, dk gray

LS CRM- tan fn xln dn grades to chalky LS

shales BLACK

LS crm- tan fn xln dn, CHALKY LS thru-out sparse Δ Lt gray- tan fresh subop.

LS BRN fn oolitic

shales BLK

LS tan- BRN fn xln dn w/assoc. chalky LS

shales BLK

LS tan- brown fn xtl dn grades to chalky LS

shales BLK

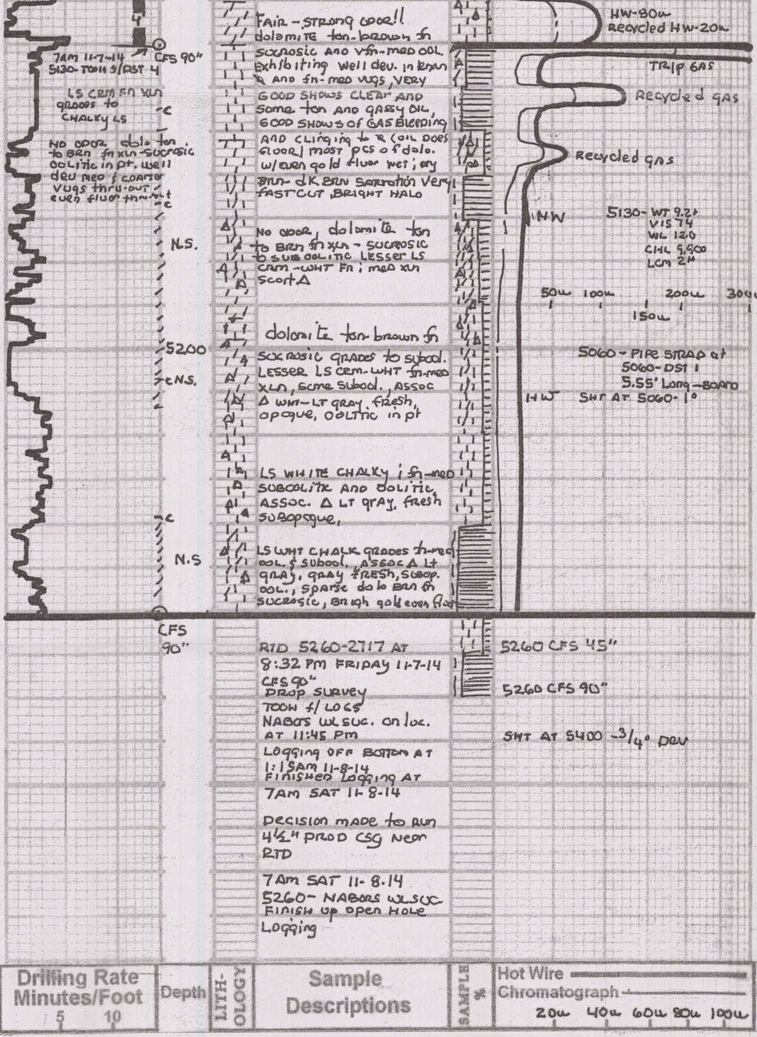
LS BRN- DK BRN FN-MED oolitic (dk BRN-BLK ooids) dn matrix, some weath.

FLASH- FAINT ODOR, LS WHT vfn oolitic, gritty bright sparsely sptd fluor wet; dry, NO STN FAST CUT, weak halo, fine pp beads live oil, scatt LS w/ coarse drusy calcite

SHALES blue green, gray; BRICK RED

Δ yellow- orange, fresh, opaque; subop. med- coarsely oolitic, some frac. inpt., assoc Δ gen- tan; crm fresh, opaque, few w/sparsely sptd BRN STN in fn pp & dull sparsely sptd fluor wet; dry, NO CUT, RARE BEADS Live oil

FLASH odor, LS WHT- crm vfn- med ool. gritty- chalky CHALK LACED, some chalk w/ fn pp live oil, lesser dolomite and oold LS LT gray- crm gritty fn sucrosic, some fn-med ool., some w/ leached, most of w/ fair- good sptd; even fluor wet; dry, very small- fair shows clr live oil, tan sptd STN, few pcs even spt. FAST CUT, weak residual HALO



7AM 11-7-14
5130- TOOH f/DST 4

LS CRM FN XLN
GRADES to
CHALKY LS

NO ODOR dolo tan
to BRN fn xln-sucrosic
oolitic in pt. well
dev med & coarse
vugs thru-out
even fluor thru-out

FAIR - STRONG ODOR!!
dolomite tan-brown fn
sucrosic AND vfn-med OOL.
Exhibiting well dev. intxln
Φ AND fn-med vugs, VERY
GOOD SHOWS CLEAR AND
some tan AND GASSY OIL,
GOOD SHOWS OF GAS BLEEDING
AND CLINGING to Φ (OIL DOES
FLOOR) most pcs of dolo.
w/even gold fluor wet; dry
BRN- dK BRN saturation very
FAST CUT, BRIGHT HALO

No odor, dolomite tan
to BRN fn xln - SUCROSIC
to SUBOOLITIC LESSER LS
CRM -WHT FR ; MED XLN
Scant Δ

dolomite tan-brown fn
sucrosic grades to subool.
LESSER LS CRM-WHT fn-med
xln, some subool., ASSOC
Δ WHT-LT GRAY fresh,
opaque, oolitic in pt

LS WHITE CHALKY ; fn-med
SUBOOLITIC AND OOLITIC,
ASSOC. Δ LT gray, fresh
subopaque,

LS WHT CHALK grades fn-med
ool. & subool. ASSOC Δ Lt
gray, gray fresh, subop.
ool., sparse dolo BRN fn
sucrosic, bright gold even fluor

5130- WT 9.2+
VIS 74
WL 12.0
CHL 9,900
LCM 2#

5060 - PIPE STRAP at
5060- DST 1
5.55' Long - BOARD
SHT AT 5060- 1°

RTD 5260-2717 AT
8:32 PM FRIDAY 11-7-14
CFS 90"
DROP SURVEY
TOOH f/ LOGS
NABORS WLSVC. on loc.
AT 11:45 PM
Logging OFF BOTTOM AT
1:15AM 11-8-14
FINISHED Logging AT
7AM SAT 11-8-14

Decision made to run
4½" PROD CSG Near
RTD

7Am SAT 11-8.14
5260- NABORS WLSVC
FINISH up open HOLE
Logging

5260 CFS 45"

5260 CFS 90"

SHT AT 5400 -3/4° DEV

DST 1) 4975 - 5060

(Basal Penn Ls)

Times: 30-60-60-90

1st open: strong blow OBOB in ONE (1) minute, GTS/8"

time	orfice	PSIG	volume
8"	1/2 inch		Gas to Surface
10"	1/2 inch	50.0	370.00 MCFG
20"	1/2 inch	55.0	397.00 MCFG
30"	1/2 inch	55.0	397.00 MCFG

(bled off for 5 min - blowback from 1/2"-1" in bucket)

2nd open: strong blow OBOB immediately, gauging gas

	time	orfice	PSIG	volume
	10"	1/2 inch	60.0	502.00 MCFG
	20"	1/2 inch	63.0	522.00 MCFG
	30"	1/2 inch	63.0	522.00 MCFG
	40"	1/2 inch	63.0	522.00 MCFG
	50"	1/2 inch	63.0	522.00 MCFG
** ++	60"	1/2 inch	63.0	522.00 MCFG

(bled off for 5 min - blowback 1/2"-3/4" in bucket)

++ - took gas sample - sent to Caraway Labs in Liberal, Kansas for analysis

** - DID Flare gas - gas burned bright thru-out

Rec: 82' Drilling Mud (100% mud)
82' Total Fluid - ALL IN DRILL PIPE

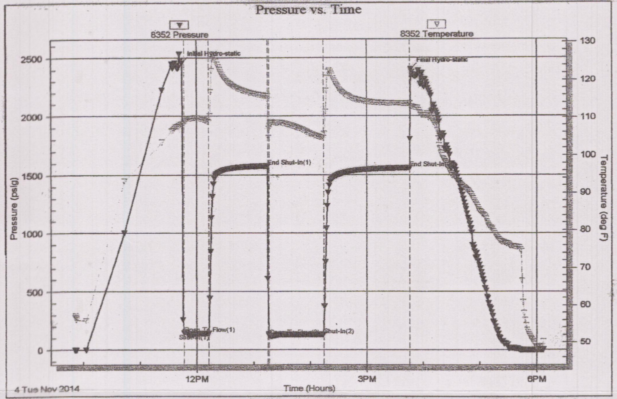
(Alpine Recorders)

IHYD:	2457	psig
IFP:	144-139	psig
IBHP:	1578	psig
FFP:	120-130	psig
FBHP:	1560	psig
FHYD:	2402	psig

TEMP: 114 degrees

Tester: Gary Pevoteaux: Trilobite Testing, Inc. Pratt Kansas District
NOTE: Conventional DST (dual packers, safety joint, electronic recorders, jars)
NO bottom sampler

Serial #: 8352 Vincent Oil Corp. Malone #4-21 DST Test Number: 1



Trilobite Testing, Inc Ref. No: 57871 **DST 1 - Chart** Printed: 2014.11.04 @ 18:17:13

DST 2) 5054 - 5075

(Mississippian Chert)

Times: 30-90-90-120

1st open: strong blow OBOB immediately, GTS/6.5"

	time	orfice	PSIG	volume
*	6.5"	1/2 inch		Gas to Surface
	10"	1/2 inch	22.0	249.60 MCFG
	20"	1/2 inch	19.0	229.40 MCFG
	30"	1/2 inch	18.0	222.60 MCFG

(bled off for 5 min - NO Blowback)

2nd open: strong blow OBOB immediately, gauging gas

	time	orfice	PSIG	volume
	10"	1/2 inch	23.0	256.30 MCFG
	20"	1/2 inch	21.0	242.80 MCFG
	30"	1/2 inch	20.0	236.10 MCFG
++	40"	1/2 inch	19.0	229.40 MCFG
	50"	1/2 inch	17.0	215.90 MCFG
	60"	1/2 inch	17.0	215.90 MCFG
	70"	1/2 inch	16.0	209.10 MCFG
	80"	1/2 inch	16.0	209.10 MCFG
	90"	1/2 inch	16.0	209.10 MCFG

(bled off for 5 min - weak surface blowback)

++ - took gas sample - sent to Caraway Labs in Liberal, Kansas for analysis

** - DID Flare gas at flowline - gas burned bright thru-out

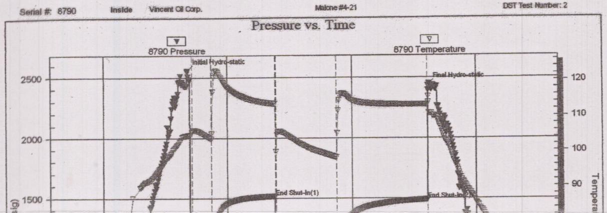
Rec: 50' Very Slight Oil Spoted Mud
(trace oil, 99%+ mud)
50' Total Fluid - ALL IN DRILL PIPE

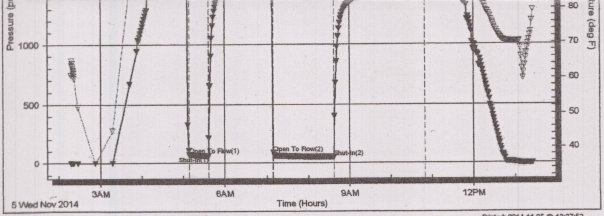
(Alpine Recorders)

IHYD: 2556 psig
IFP: 72-59 psig
IBHP: 1516 psig
FFP: 87-53 psig
FBHP: 1487 psig
FHYD: 2428 psig

TEMP: 113 degrees

Tester: Ryan Reynolds: Trilobite Testing, Inc. Pratt Kansas District
NOTE: Conventional DST (dual packers, safety joint, electronic recorders, jars)
NO bottom sampler





Trilobite Testing, Inc Ref. No: 59921 **DST 2 - Chart** Printed: 2014.11.05 @ 13:37:52

DST 3) 5086 - 5100

(Mississippian)

Times: 30-90-45-120

1st open: strong blow OBOB immediately, GTS/2.5"

time	orfice	PSIG	volume
2.5	3/4 inch		Gas to Surface
10"	3/4 inch	70.0	1.327.70 MMCFG
20"	3/4 inch	85.0	1.562.00 MMCFG
30"	3/4 inch	85.0	1.562.00 MMCFG

(bled off for 5 min - NO Blowback)

2nd open: strong blow OBOB immediately, gauging gas

time	orfice	PSIG	volume
** 10"	3/4 inch	85.0	1.562.20 MMCFG
20"	3/4 inch	90.0	1.640.10 MMCFG
30"	3/4 inch	90.0	1.640.10 MMCFG
++ 40"	3/4 inch	90.0	1.640.10 MMCFG
45"	3/4 inch	90.0	1.640.10 MMCFG

(bled off for 5 min - weak surface Blowback)

++ - took gas sample - sent to Caraway Labs in Liberal, Kansas for analysis

** - DID Flare gas at flowline - gas burned bright thru-out

Rec: 10' Very Slight Oil Cut Mud
(trace oil, 99%+ mud)
10' Total Fluid - ALL IN DRILL PIPE

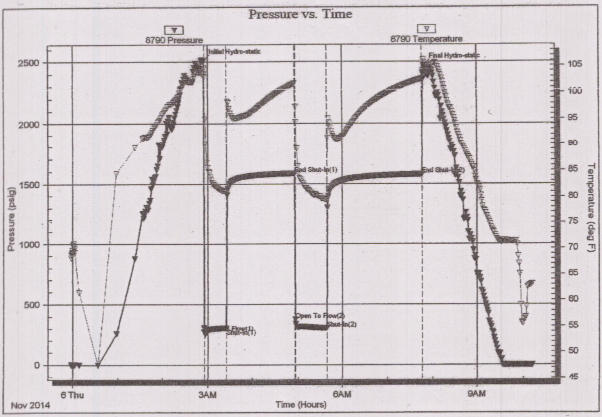
(Alpine Recorders)

IHYD: 2507 psig
IFP: 271-302 psig
IBHP: 1584 psig
FFP: 377-305 psig
FBHP: 1577 psig
FHYD: 2467 psig

TEMP: 106 degrees

Tester: Ryan Reynolds: Trilobite Testing, Inc. Pratt Kansas District
NOTE: Conventional DST (dual packers, safety joint, electronic recorders, jars)
NO bottom sampler

Serial #: 8790 Inside Vincent Oil Corp. Malone #4-21 DST Test Number: 3



Trilobite Testing, Inc Ref. No: 59922 **DST 3 - Chart** Printed: 2014.11.06 @ 10:23:58

DST 4) 5118 - 5130

(Mississippian)

Times: 30-60-60-120

1st open: strong blow OBOB in ONE (1) minute, NO GAS TO SURFACE
GTS 2 minutes into initial SHUT-IN PERIOD
(bled off for 5 min - weak surface blowback)

2nd open: strong blow OBOB immediately, gauging gas

time	orfice	PSIG	volume
** 10"	1/8 inch	5.0	7.50 MCFG
20"	1/8 inch	11.0	9.70 MCFG
30"	1/8 inch	15.0	11.20 MCFG
++ 40"	1/8 inch	19.0	12.70 MCFG
50"	1/8 inch	22.0	13.80 MCFG
++ 60"	1/8 inch	24.0	14.60 MCFG

(bled off for 5 min - STRONG BLOW OBOB in 10 minutes)

++ - took gas sample - sent to Caraway Labs in Liberal, Kansas for analysis
DID NOT FLARE GAS AT FLOWLINE

Rec: 170' Clean Gassy Oil
(15% gas, 85% oil)
63' Muddy Gassy Water Cut Oil
(11% gas, 64%, 17% water, 8% mud)
65' Gassy Muddy WAter Cut Mud
(62% gas, 24% oil, 8% water, 6% mud
2' Clean Water
(100% water)

300' Total Fluid - ALL IN DRILL PIPE

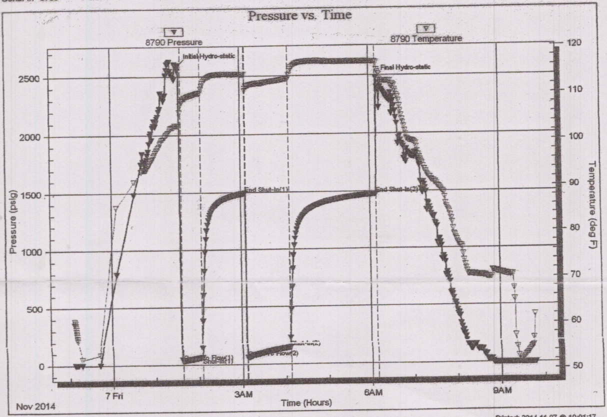
chlorides of mud system: 7,200 ppm
chlorides of formation water: 57,000 ppm
resistivity of formation water: 0.17 at 55 deg F

(Alpine Recorders)

IHYD: 2507 psig
IFP: 271-302 psig
IBHP: 1584 psig
FFP: 377-305 psig
FBHP: 1577 psig
FHYD: 2467 psig
TEMP: 106 degrees

Tester: Ryan Reynolds: Trilobite Testing, Inc. Pratt Kansas District
NOTE: Conventional DST (dual packers, safety joint, electronic recorders, jars)
NO bottom sampler

Serial #: 8790 Inside Vincent Oil Corp. Malone #4-21 DST Test Number: 4



Trilobite Testing, Inc Ref. No: 59923 **DST 4 - Chart** Printed: 2014.11.07 @ 10:01:17