ROGER L. MARTIN
INDEPENDENT PETROLEUM GEOLOGIST 316-250-6970

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY VESS OIL CORPORATION
LEASE WILSON 'A' #448
FIELD EL DORADO
LOCATION 330' FNL 1550' FWL
SECTION 9 TOWNSHIP 25S RANGE 05E
COUNTY BUTLER STATE KANSAS

ELEVATIONS

KB 1371' GL 1365'
Measurements Are All From KB
API 15-015-23969

CONTRACTOR C&G DRILLING, Rig #1
SPUD 04/13/2013 COMP 04/17/2013
RTD 2522' (-1151) LTD 2522' (-1151)

ELECTRICAL SURVEYS

Pioneer Energy Services: DIL, CNL/CDL, CPI

CASING

SURFACE 6 jts 8-5/8" 23#/ft set @ 263' KB w/150 sx Class A
PRODUCTION 60 jts 5-1/2" 15.5#/ft set @ 2521' w/125 sx Thickset

FORMATION TOPS	LOG	SAMPLES
Admire 550'	NP	NP
Admire 650'	694' (+677)	670' (+701)
Burlingame	842' (+529)	840' (+531)
White Cloud Lm	935' (+436)	930' (+441)
White Cloud Sd	949' (+422)	940' (+431)
Topeka	1100' (+271)	1100' (+271)
Oread	1408' (-37)	1410' (-39)
Heebner	1447' (-76)	1444' (-73)
Douglas	1477' (-106)	1475' (-104)
Douglas Sd	1522' (-151)	1520' (-149)
Lansing	1721' (-350)	1722' (-351)
B/Lansing	1862' (-491)	1864' (-493)
Kansas City	2010' (-639)	2009' (-638)
Stark	2112' (-741)	2110' (-739)
B/Kansas City	2170' (-799)	2167' (-796)
Checkerboard	2252' (-881)	2253' (-882)
Hepler Sd	NP	NP
Altamont	2296' (-925)	2300' (-929)
Pawnee	2334' (-963)	2336' (-965)
Cherokee	2373' (-1002)	2373' (-1002)
Ardmore	2432' (-1061)	2433' (-1062)
Viola	2520' (-1149)	2520' (-1149)
RTD/LTD	2522' (-1151)	2522' (-1151)

CHRONOLOGY

04/13/2013- MIRU C&G Drilling, Rig #1. Drill rathole @ 10:15 AM. SPUD 12-1/4" hole @ 12:00 PM. TD 12-1/4" hole @ 264'. Run 6 jts 8-5/8" 23#/ft csg= 255'; Set @ 263' KB; Consolidated Cement w/150 sx Class A, 3% cc, circ. good cement. Plug down @ 9:10 PM 04/13/2013.

04/14/2013- Drlg @ 430'. Drill out @ 5:10 AM. Drilling w/PDC bit.

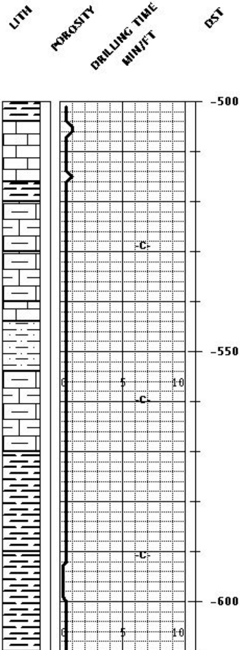
04/15/2013- Bit trip @ 2173'. Change to button bit. Mudded up @ 1700'. WT 9.1, VIS 37, LCM 1.0#,

04/16/2013- Circ @ 2520', TD @ 2522' @ 7:30 AM, Short trip to 1400', MW 9.3, VIS 54, WL 10.2, LCM 1#, CI 900. DST #1: 2437-2522, Viola. Trip in, circ, lay down before logs.

04/17/2013- RTD @ 2522'. Finish running OH logs. Ran 5-1/2" casing to 1' above TD. Casing tally matches RTD. CASING JOB: Ran 60 jts of 5-1/2" 15.5#, J-55 LT&C Csg, Tally= 2526.80, plus float shoe = 1.00'. Total = 2527.80', tagged TD @ 2522', set @ 2521'. Put on 6 centralizers & 1 basket. Consolidated Services pump 500 gal mud flush. Cemented w/100 sx Thickset cement. Caught pressure @ 35.75 bbl. Good circ of mud. Lift pressure to 600#. Rotated casing. Land plug @ 1050# @ 10:55 PM 4/17/2013. Release. It held. Set slips & cut off casing.

REMARKS: ** E-log tops by P. Ramondetta, Geologist, VOC

Respectfully submitted,
Roger L. Martin, Geologist (Wellsite)



SAMPLE DESCRIPTION

SH: gy & blk

LS: (Abndt) cm-gy, pred Mdst & mx- dn, sm bf-tn, mx-Vfnxln, sucro dolomc w/sm Pr- Fr IX Por. NS.

LS: tn-gy, dn- mx, sm argil, Pr- NVP, NS.

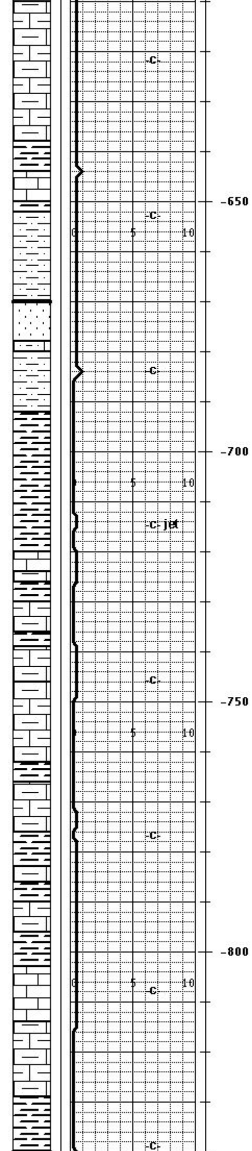
SH- SILTS: gy-blk, sm micac.

LS: cm-gy-tn, dn-mx, sm argil, Pr- NVP, NS.

SH: dk-lt gy & gn-gy.

SH: AA, VC, mrn-rd SH.
LS: AA & gy-bn, dn-mx, VPr- NVP, NS.

REMARKS



SH: Pred gy-blk & gn-gy, sm pyrtc.

LS: tn-gy-bn, sm mot, VC, mx- fnx, Pr- NVP w/Rr trc STN-SFO-FLR.

Rr SD CLUST: gy-tn, cm-gy, Vfn-fn Gr'd, rnd'd- anglr, silty, micac, sm calc & lmy, Sl pyrtc, Pr- Fr Por.

{ADMIRE 650'} SS- SD CLUST: <10% silty Sd Clust w/brt FLR & Sl SFO, VSl Odor (715' spl). <5% w/sat STN, Sl- Fr Cut.

SILTS: lt-dk gy, micac, sm calc & LS: tn-bn, mx & fos Pkst, VPr- NVP.

(<5% Sd Clust w/FLR- SFO 746' spl)

pred SH: gy-blk.
& SILTS: dk-lt gy, micac.
sm LS: tn-gy-cm, mx- fnx & fos Pkst, VPr- NVP.

LS: tn-gy-cm, dn & mx- fnx & Pkst, sm argil- shly (777' spl)

SH: AA, pred gy-blk.

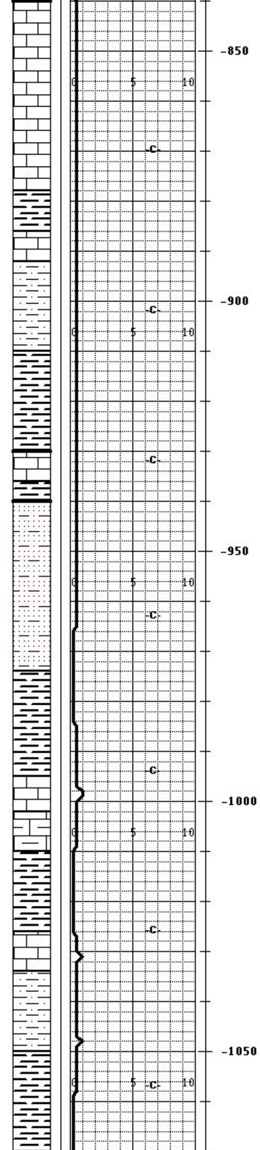
Abndt LS: cm-gy-bn, mot, mx- fnx: grnlr Pkst- fos & argil, sm sndy & silty, Pr- NVP, NS. (808' spl)

SH: gy-blk & sm blk carb.

LS: abndt cm-tn, mx- fnx, trc Mdx- crs X's, sm wh- chky, Pr- NVP, NS. (839' spl)

Abndt LS: tn-gy-wh, Pred dn- mx- fnx & Mdst, VPr- NVP, NS. & SH: gy & gn-gy & blk carb. (870' spl)

**670' (+701)
ADMIRE 650'
{Sl SFO)**



{BURLINGAME} LS: (V.Abndt >90%) tn-gy-wh, pred dn-mx-fnx, Trc md- crsX's- 2ReX, Rr prt chlky, Rr Pkst & Wkst, prt dn Mdst. (902' spl)

SH: lt-dk gy & gn-gy, VRr blk carb.

LS: gy-tn, dn- argil Mdst & Rr Wkst- Pkst, VPr- NVP, NS.

SILTS: gy, calc.

SH: dk-lt gy & SILTS: micac.

930' (+441)
WHITE CLOUD LM

{WHITE CLOUD} LS: tn-gy-bn, dn & mx, sm fos Pkst, VPr- NVP. <5% Sd Clust w/FLR- Sl SFO.

940' (+431)
WHITE CLOUD SD
{Sl SFO)

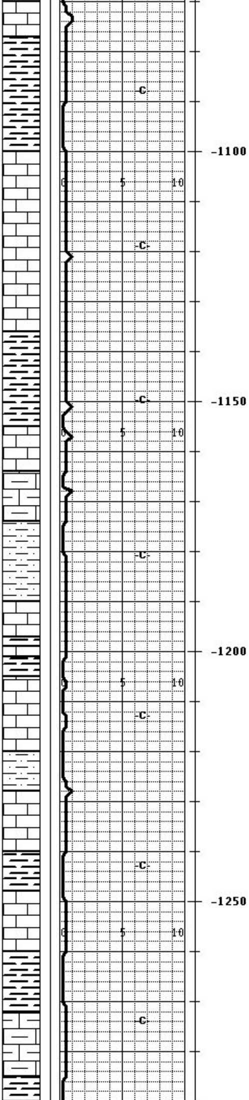
{WHITE CLOUD} SS- SD CLUST: gy-tn-STN, Vfn-fn Gr'd, rnd-d- anglr Gr's, pred well cmt'd, Vsilty, micac, VRr fribl w/Fr- Gd Por: spt'd-sat brt FLR & Tn OSTN & Sl SFO & Vfn Gr'd, Vsilty Sd Clust w/Pr visbl Por w/sat FLR & STN & Sl SFO & Sl-Gd Cut. & SILTS: lt-dk gy, trc Tn-STN-FLR- SFO.

Pred SH: md-dk gy SH (Trc Sd Clust, AA w/Por- STN-FLR- SFO- Cut). (994' spl)

LS: cm-tn & gy, pred dn Mdst, Rr Wkst & Pkst: VPr- NVP, NS. (1026' spl)

SH: pred gy-blk. & LS: gy-bn-tn-cm, mot Pkst & Wkst, argil- shly, VPr- NVP. (1057' spl)

LS: cm-tn, pred dn Mdst, Rr SS- SD CLUST: gy-wh, gn-gy, Vfn Gr'd, silty, micac, well cmt'd- fribl w/pred Pr visbl Por w/NS. & SILTS: gn-gy, micac, sm sndy, Vfn Gr'd (Trc LS, AA w/Pr vug Por w/FLR & STN, NFO). (1088' spl)



LS: cm-tn & gy-wh, mx- fnx, Pred dn, Rr 2nd ReX, sm chlky, Rr Pkst, VPr- NVP, NS.

SH- SILTS: gy & gn-gy, sm micac. (1119' spl)

{TOPEKA} LS: cm-tn, fos Pkst, mx- fnx, sm wh-chlky, sm grnlr Pkst, Pr-Fr IGr & IX Por, Sl Cherty; trc FLR- SFO-STN

{Trc SFO)

SH: gy-blk & gn-gy, sm micac.

LS: tn-gy-wh, sm mot, prt chlky & prt dn, sm fos Pkst, Pr IGr & IX Por, <5% w/brt FLR & trc SFO & Cut, Trc STN.

{Trc SFO)

SH- SILTS: md-dk gy & gn-gy, sm micac.

LS: tn-gy, dn-mx-fnx, sm fos Pkst- Wkst, sm argil-shly, Rr wh-chlky, Pred Pr- NVP, NS.

LS: tn-gy-wh, sm mot, grnlr & fos Pkst & mx-fnx, Pred Pr-NVP w/NS. (1243' spl)

SH- SILTS: gn-gy & blk.

LS: tn-wh, mx-fnxln, sm dn, sm chky, Pred Pr- NVP, NS.

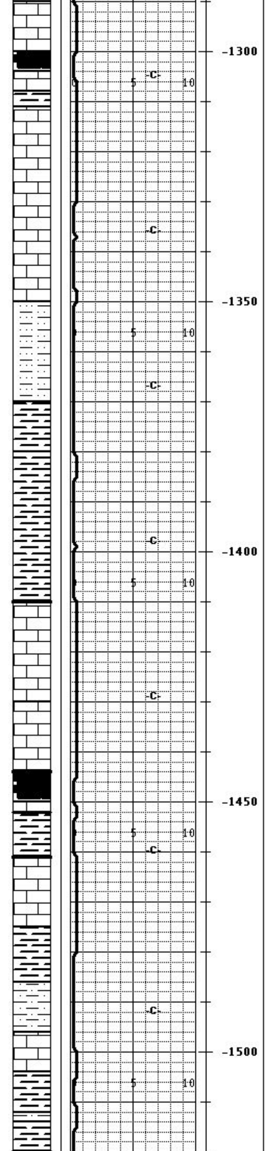
SH: gy-blk & gn-gy. (1274' spl)

LS: wh-tn-gy, prt chlky, sm fos Pkst, sm mx- fnxln, sm dn Mdst- Wkst, VPr- NVP w/NS. (1305' spl)

SH: md-dk gy & gn-gy, Rr blk carb SH.

LS: gy-tn-bn, dn & argil Mdst.

SH: gn-gy & blk carb.



LS: wh-tn-gy, sm mot, pred chlky, sm fos Wkst- Pkst, Pred VPr- NVP w/NS.

Abndt SH: blk carb & VC SH- AA. (1336' spl)

LS: wh-tn-gy, prt chlky & mx- fnx- sm 2nd ReX, sm fos Pkst, Pr- Fr Por w/NS. (1367' spl)

SILTS: lt-dk gy, sm sndy, micac, Rr Sd Clust: lt gy, Vfn Gr'd, silty, well cmt'd- subfribl w/Pr- Fr Por, NS. (1398' spl)

SH: Pred dk gy, sm blk (1429' spl)

1410' (-39)
OREAD

{OREAD} LS: tn-wh, dn-mx & chlky. (1429' spl)

1444' (-73)
HEEBNER SH

{HEEBNER} SH: blk carb- Vcarb. (VAbndt in 1492' spl)

LS: tn-gy, dn-mx.
& SH: VAbndt & gy-blk & subcarb. (1492' spl)

{TORONTO} LS: tn-gy-wh, Pred dn- mx- fnx & chlky, VPr- NVP w/NS. (1492' & 1522')

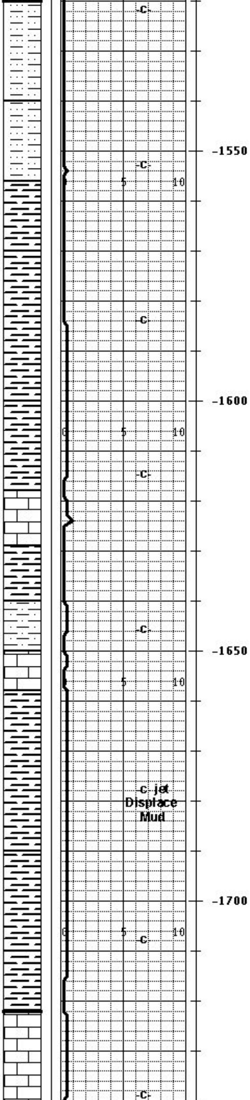
1475' (-104)
DOUGLAS

{DOUGLAS} SH: lt- dk gy & gn- gy.

& SILTS: sm shly & micac, sm SD CLUST: gy, Vfn Gr'd, silty, well cmt'd, Pr Por, NS. (1522' spl)

LS: gy-tn, dn-mx-fnx, sm sl fos Wkst- Pkst, VPr- NVP, NS.

SILTS & SH: gy, sm micac.



{DOUGLAS SD} Rr SD CLUST: gy, VRr wh, Vfn Gr'd, sm Vsilty, sm well cmt'd, Pred Pr visbl Por w/NS. (1552' spl)

SS- VAbndt SD CLUST: gy, bf, gy-wh, Vfn Gr'd, pred Vsilty, well cmt'd- fribl w/anglr- rnd'd Gr's, Pr- Fr IGr Por w/NS. NF. (1584' spl)

SH: md-dk gy, sm Vmicac, (1615' spl)
sm Silts, AA, Trc Sd Clust, AA.

SH: gy-blk, sm micac, & sm Siltst. (1646' spl)

LS: tn-gy-wh, pred dn- mx- fnx, sm sl fos, VPr- NVP, sm argil, NS. (1646' & 1677' spl)

SH: gy-blk & SILTS: gy, micac, sm calc & lmy Sd- Siltst, NS. (1677' spl)

LS: tn-wh, pred dn-mx- fnx & chlky w/Pr- NVP & NS. (1708' spl)

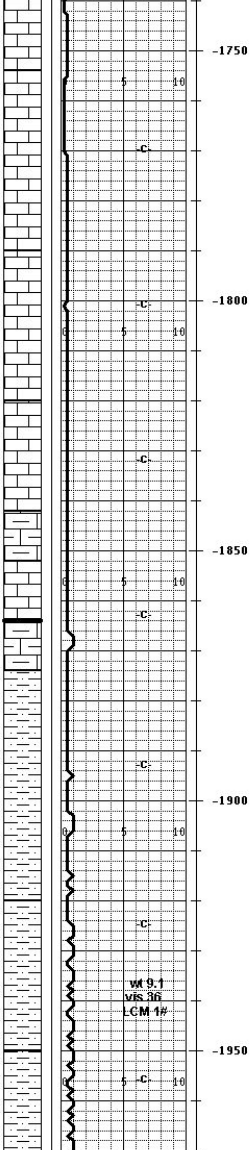
SH: gy-blk & gn- gy. (1708 & 1731' spl)

SH: AA.

SH: md-dk gy & gn-gy, sm pyrtc.

1722' (-351)
LANSING
{Trc SFO)

{LANSING} LS: wh-tn, prt chlky & mx- fnxln, sm fos Pkst & Wkst, VRr md- VcrsX's, sm 2nd ReX, pred VPr- Pr visbl Por- NVP, VRr Fr Por: vug & mldc Por, <5% w/s pt'd-sat FLR, Trc SFO & Cut (1770' spl), Trc Gd Por w/STN- FLR- SFO; sm Pr- Fr barren Por; >95% barren. Abndt dn-chlky.



LS: wh-gy-bf, prt chlky, mx- fnxln, VRr prt mdx-Vcrsx- 2nd ReX, ~10% w/Fr- Gd Por: vug Por, IGr Por, IX Por, Ifos Por, w/subsat- sat lt Tn STN, VAbndt brt FLR wet & dry. Abndt (>25%) w/spt'd-sat brt FLR & Sl- Fr SFO & Frly strng Odor, Sl- Fr Cut, VRr Gd strmg cut. (1801' spl)

{Sl-Fr SFO)

LS: wh-tn-gy, prt chlky, sm dn Mdst- Wkst, sm Pkst & mx-mdx w/Pr- Fr Por, VRr Gd Por: vug Por, IGr Por, Pred barren, Trc FLR- SFO & Cut & STN, VSl Cherty. (1832' spl)

[Trc SFO)

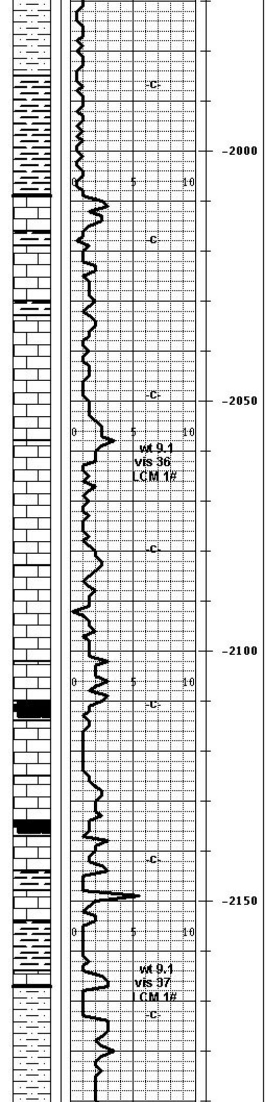
LS: cm-tn-gy, mx- fnxln, VRr prt md- VcrsX's, sm ool & fos mot Pkst, Cherty, sm motl'd-fos opq, sm wh-chlky LS. Cherty: cm-gy & blu gy, bf-tn, opq, shrp, fos, Pred Por-VPr Por w/NS. (1863' spl)

LS: wh-tn-gy, pred motl'd, mx- mdx, sm ool & fos Pkst, prt chlky, sm 2nd ReX, sm FLR- NFO- NC. sm argil LS. (1894' spl)

VAbndt SILTS- SH: gy & gn-gy, calc & lmy, micac. (>95% SH- SILTS AA in 1925' spl)

SH- SILTS: dk- lt gy, calc. (1956' spl)

SH- SILTS: lt- dk gy, calc. (1987' spl)



SH: pred dk gy, sm calc. (2018' spl)

2009' (-638)
KANSAS CITY
{Trc SFO)

{KANSAS CITY} LS: wh-tn & gy, mx- fnx, VRr mdx- VcrsX's, sm motl'd Pkst, sm prt chlky, sm argil- dn, sm fos, VPr- Pr visbl Por: pp Por, IX Por, ~1% w/FLR- Trc SFO & STN & Cut. (2049' spl)

LS: wh-tn-gy, prt chlky, sm fos & ool Pkst w/Pr- Fr pp- vug Por, Trc Gd Por w/NSFO. Sl Cherty: cm-tn, shrp, Trc FLR, NFO, Trc STN, Trc wk Cut. (2180' spl)

LS: wh-tn-gy, prt chlky & prt xln, Pkst- fos & ool, VRr Fr- Gd Por w/NS. sm mdx- VcrsX's, Trc STN & FLR & wk Cut, NFO. Trc oomldc Por w/NS. (2111' spl)

LS: AA, >99% barren.

LS: gy-tn-wh, dn- mx & argil.

{STARK} SH: blk carb- Vcarb. (2142' spl)

{Trc SFO)

LS: gy-tn-wh, mx- fnxln, VRr oomldc w/Gd Por, <5% w/FLR, Trc SFO & STN, VRr Fr- Gd Cut. (2142' spl)

LS: cm-tn-gy, pred dn & wh chlky w/Pr- NVP, >95% barren.

SH: AA, blk subcarb- Vcarb.

{Sl SFO)

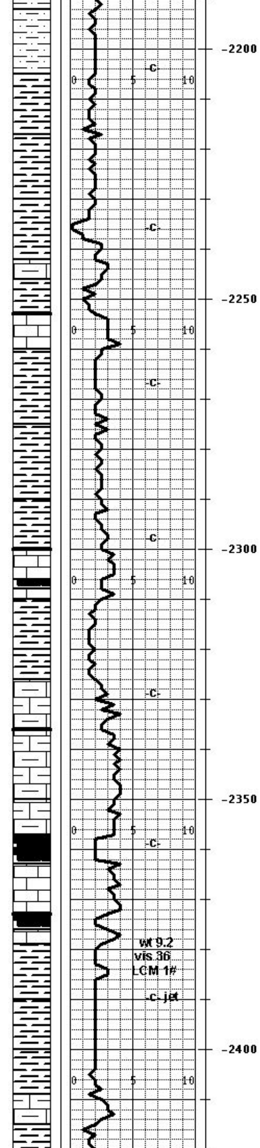
LS: tn-gy-wh, mx- fnxln, VRr sucro, Pr- Fr Por: mIX Por, mIGr Por, sat STN, ~5% w/FLR- Sl SFO, Sl Odor, ~5% w/sat Tn STN, Sl- Fr strmg Cut, VSl Odor, Trc Gd IX Por & 2nd ReX w/FLR-sat STN, Sl SFO & Gd Cut. Trc md- crsX's.

SH: gy & gn.

LS: dk gy & tn-bn, pred dn Mdst (VRr Pr Por, spt'd STN AA), sm 2nd ReX. (2190' spl)

{BASE/KANSAS CITY} SH- SILTS: gy & gn-gy, sm pyrtc.

Bit trip 2173'
10' samples



SILTS: lt-dk gy, sm calc, Rr sndy.

SH: gn-gy & mrn-rd.

SH- SILTS: AA.

Pred SH: lt-dk gy & blk.

LS: md-dk gy, dn Mdst & argil.

SH: AA & blk carb.

2253' (-882)
CHECKERBOARD

{CHECKERBOARD} LS: tn-gy-wh, mx- mdx, sm motl'd Pkst, sm fos, sm prt chlky, sm dn Mdst- Wkst, sm grnlr argil Pkst, Pr- NVP, NS.

SH: gn-gy & mrn-tn, Rr SILTS: lt-md gy. No Sd Clust. NS.

SH: pred gy, sm gn & mrn, VRr SILTS: AA. No Sd Clust w/ Por, NS.

SH: AA, Sl Incrs gn & mrn.

2300' (-929)
ALTAMONT

{ALTAMONT} LS: tn-gy-wh, dn- mx- fnx, sm ool & fos Pkst, sm chlky, VPr- NVP, NS.

SH: sm blk carb- Vcarb, Abndt gn-gy-blk, sm mrn.

SH: AA, pred dk gy, AA, sm calc- lmy.

LS: dk gy, tn, argil- shly.

2336' (-965)
PAWNEE

{PAWNEE} LS: cm-tn, dn Mdst- Wkst, VRr pyrtc; VPr- NVP.

LS: tn-wh, pred dn, mx- Rr fnxln, Pr- NVP, NS.

SH: blk carb- Vcarb & gn-gy.

LS: tn-gy-wh, pred dn Mdst & Wkst, Rr chlky.

2373' (-1002)
CHEROKEE

{CHEROKEE} SH: blk Vcarb.
LS: tn-gy, dn Mdst.

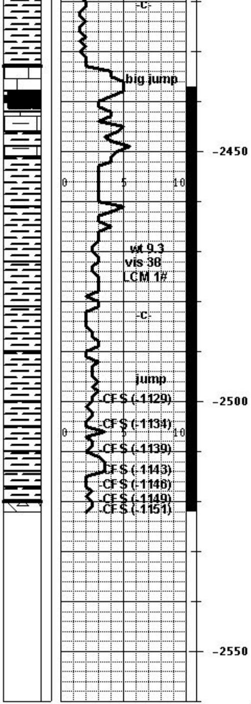
SH: sm blk carb & Vcarb & SH: gn-gy, sm mrn-rd SH.

SH: pred lt-dk gn-gy, sm mrn-rd.

SH: AA.

sm LS: tn-gy-wh, dn Mdst, sm chlky.

SH: gy-blk subcarb & gn-gy, sm pyrtc.



{ARDMORE} LS: tn-gy, pred dn Mdst, Rr Wkst & Pkst, VPr- NVP.

SH: sm blk carb.

LS: tn-gy, dn & argil Mdst.

Abndt gy & gn SH. Rr grnlr Pkst.

SH: dk gy- blk & gn.

SH: VC, gn-gy & olv gn, violt-mrn. Trc Chert.

SH: VC, AA.

SH: gn-gy, mrn-rd.

SH: pred dk gy, sm blk carb, sm pyrtc.

SH: gn-gy, mrn-bn & blk, VRr pyrtc.

SH: dk-lt gy & gn-gy, Abndt pyrtc.

SILTS: lt-dk gy, Vcalc & lmy & pyrtc.

SH: gy-bn, pyrtc, phos, micac, sm blk carb.
{VIOLA} DOLO: (2522' 20 min spl} ~60% DOLO: cm-Tn-O.STN, mx-VfnXln, VRr prt fnXln, Fr Por: m-IX Por & visbl IX Por, Pred sat brt FLR & Tn-O.STN, Fr SFO. sm silic DOLO: V.Cherty (~50% Chert) CHERT: wh-cm-bf-gy, sm Wthr'd, sm semiTripolc, sm pp & IGr Por, sm wthr'd- Frc Edg's w/FLR & SFO, sm dolomc w/FLR-STN-SFO & Cut, strng Odor, VRr qtzc & 2nd qtzc ReX. (40 min spl} ~50% DOLO: pred Rich Tn-O.STN, mx- VfnXln, Rr prt fnXln, sucro, Fr-Gd IX Por & mIX Por w/sat FLR & STN, Fr SFO, VRr Qtzc Chert & 2nd Qtz ReX w/FLR-STN- SFO. (60 min spl} ~30% VIOLA DOLO & CHERT: AA.

2433' (-1062)
ARDMORE

2520' (-1149)
VIOLA (Fr SFO)
RTD/LTD:2522'(-1151)

DST #1 VIOLA
2437'-2522'
30-45-45-60
1st Op: BOB in 28 min, No BB
2nd Op: BOB in 37 min, No BB
Rec: 15'OsptM (1%O,99% M)
210'SOsptWCM (<1%O,22% W, 77% M)
TF: 225'
Tool Spl: 2%O,20% W, 78% M
Cl: 7500 ppm
IHP: 1182
IFP: 11-76
ISIP: 594
FFP: 76-119
FSIP: 596
FHP: 1181
BHT: 99.6 F

VESS OIL CORP
WILSON 'A' #448
330'FNL&1550'FWL
Sec 9-25S-05E
BUTLER CO., KS
API#15-015-23969