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DRILLING TIME AND SAMPLE LOG

OPERATOR: Prolific Resources LLC
LEASE: Roesler WELL NO.: 3
FIELD:
LOCATION: 836' FSL, 1833' FWL
SEC.: 2 TWP: 22S RANGE: 18W
COUNTY: Pawnee STATE: Ks
API NO.: 15-145-21802

CONTRACTOR: Royal Drilling Inc., Rig #1
COMMENCED: March 13, 2015 COMPLETED: 3/21/15
ROTARY TOTAL DEPTH: 4285' LOG TOTAL DEPTH: 4284'
GEOLOGICAL SUPERVISION FROM: 3500' TO: T.D.
MUD-UP DEPTH: 3200' MUD TYPE: Chemical Polymer

ELEVATIONS
KB 2047'
GL 2042'
Measurements are all from KB

CASING RECORD
SURFACE: 8 5/8" @ 1108' w/400 sx. circ
PRODUCTION: 109 jts New 5 1/2", 15.50# @ 4280' w/210 sx.

WIRELINE SURVEYS
Tucker Energy Services
Comp. Neutron PEL
Density Micro Log,
Phased Induction
SP Log, Composite
Log w/Micro log

FORMATION	SAMPLE TOP	SAMPLE SUBSEA	LOG TOP	LOG SUBSEA	STRUCTURAL COMPARISON
Stone Corral Anhydrite	1102	(+945)	1106	(+941)	-3'
Heebner Shale	3529	(-1482)	3525	(-1478)	-2'
Lansing Group	3622	(-1575)	3619	(-1572)	-2'
LKC "J" Porosity	3816	(-1769)	3814	(-1767)	+3'
Stark Shale	3836	(-1789)	3834	(-1787)	-2'
Base KS City Group	3907	(-1860)	3902	(-1855)	+2'
Pawnee Ls.	3999	(-1952)	4001	(-1954)	-5'
Cherokee Shale	4034	(-1987)	4039	(-1992)	-4'
Cherokee Sandstone	4056	(-2009)	4052	(-2005)	-3'
Miss. Osage Chert	4111	(-2064)	4107	(-2060)	-8'
Viola Formation	4133	(-2086)	4130	(-2083)	+12'
Simpson Shale	4205	(-2158)	4203	(-2156)	-5'
Arbuckle Fm.	4252	(-2205)	4250	(-2203)	-17'
Total Depth	4285		4284		

LOCATION MAP: 2 — #1 Roesler, #3 Roesler

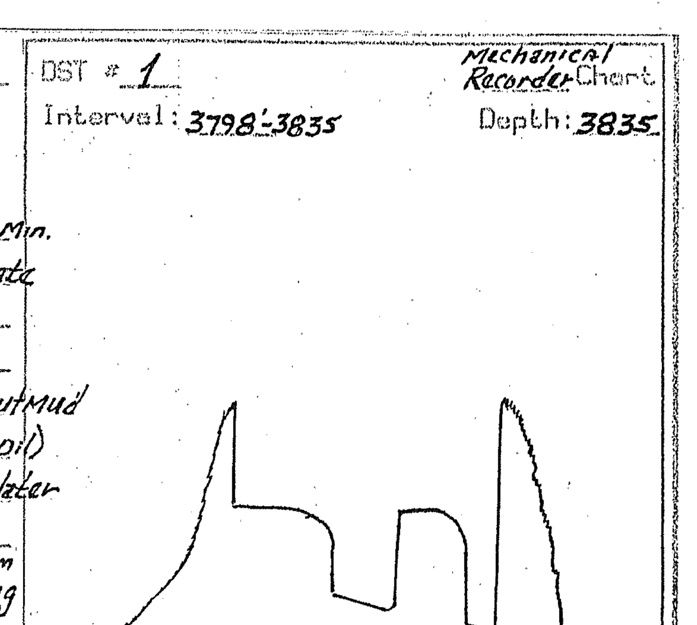
Reference Well for Structural Comparison: Prolific Resources #1 Roesler
Comments and Recommendations: Recommended Completion for oil/gas.

DST # 1 ZONE: L-KC 'J' Zone
INTERVAL: 3798'-3835'

Pressures:	Time	Press.	RECOVERY
1. Initial Hydrostatic		1993 psi	Gas to Surf. 22 Min.
2. Initial Flow: Start	0	76 psi	8 MCF/D Max. rate
3. Initial Flow: End	30	127 psi	850' Gassy Oil
4. Initial Shut-in: End	60	1170 psi	(50% oil)
5. Final Flow: Start	0	250 psi	250' Gas+oil cut Mud
6. Final Flow: End	60	419 psi	(40% gas, 40% oil)
7. Final Shut-in: End	90	1174 psi	100' Gascut Water
8. Final Hydrostatic		1985 psi	(20% gas)

BHT: 112°F
Rw:
Chl. 40,000 ppm
Strap 1.19' long
Deviation 3/4°
Note: Electronic recorder failed

DST # 1 Mechanical Recorder Chart
Interval: 3798'-3835 Depth: 3835

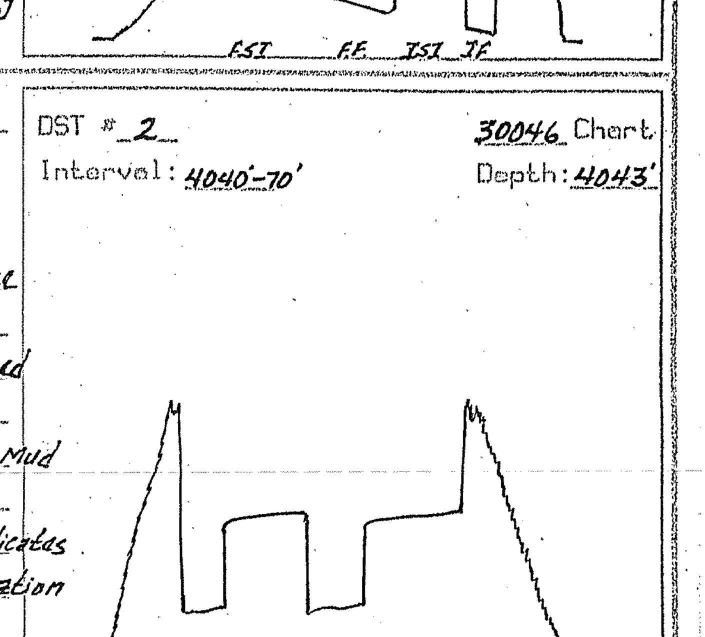


DST # 2 ZONE: Cherokee Sandstone
INTERVAL: 4040'-4070'

Pressures:	Time	Press.	RECOVERY
1. Initial Hydrostatic		2043 psi	Gas to surface
2. Initial Flow: Start	0	551 psi	in 1 minute
3. Initial Flow: End	30	522 psi	Rate stabilized
4. Initial Shut-in: End	60	1260 psi	at 3.2 MMCF/D
5. Final Flow: Start	0	554 psi	Rec: 40' Gassy Mud
6. Final Flow: End	30	587 psi	(20% gas)
7. Final Shut-in: End	60	1260 psi	Note: Chart indicates
8. Final Hydrostatic		1999 psi	possible formation damage.

BHT: 106°F
Rw:

DST # 2 30046 Chart
Interval: 4040'-70' Depth: 4043'

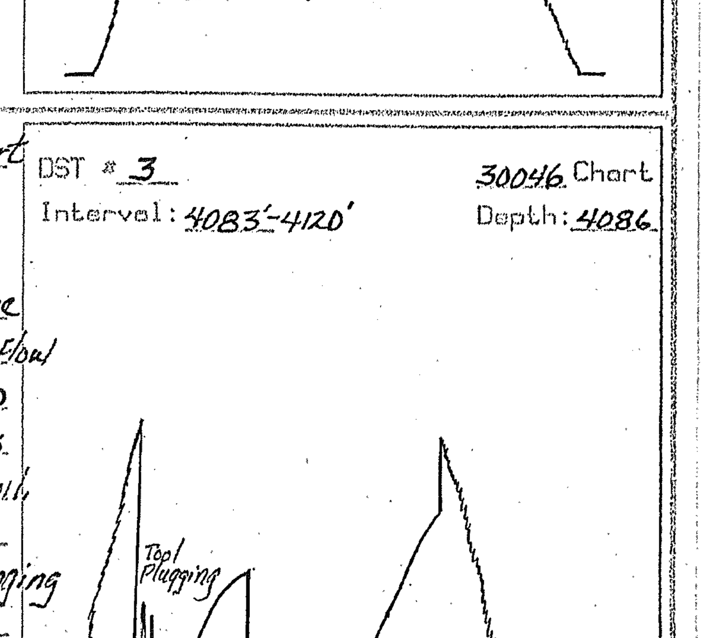


DST # 3 ZONE: Conglomerate + Miss. Osage Chert
INTERVAL: 4083'-4120'

Pressures:	Time	Press.	RECOVERY
1. Initial Hydrostatic		2068 psi	Gas to Surface
2. Initial Flow: Start	0	17 psi	5 Min. in 2nd Flow
3. Initial Flow: End	30	72 psi	Max. 2 MCFG/D
4. Initial Shut-in: End	60	1147 psi	Rec: 290' Gas
5. Final Flow: Start	0	74 psi	cut Mud, No oil,
6. Final Flow: End	60	132 psi	(30% gas)
7. Final Shut-in: End	90	1534 psi	Note: Tool plugging
8. Final Hydrostatic		2035 psi	during both flow periods.

BHT: 108°F
Rw:

DST # 3 30046 Chart
Interval: 4083'-4120' Depth: 4086



DST # ____ ZONE: ____
INTERVAL: ____

Pressures:	Time	Press.	RECOVERY
1. Initial Hydrostatic		psi	
2. Initial Flow: Start		psi	
3. Initial Flow: End		psi	
4. Initial Shut-in: End		psi	
5. Final Flow: Start		psi	
6. Final Flow: End		psi	
7. Final Shut-in: End		psi	
8. Final Hydrostatic		psi	

BHT:
Rw:

DST # ____ Chart
Interval: ____ Depth: ____

ABBREVIATIONS USED

ROCK TYPES:
Ls - limestone
Sh - Shale
Ss - Sandstone
Slts - Siltstone
Cg - Conglomerate
Cht - Chert
Qtz - Quartzite
Gran - Granite
Dol - Dolomite
Chlk - chalky

COLOR:
Wh - White
Crm - Cream
Clr - Clear
Rd - Red
Grn - Green
Gry - Grey
Blk - Black
Mot - Mottled

HARDNESS:
Sft - Soft
M.Sft - Moderately soft
Hrd - Hard
V.Hrd - Very hard

FABRIC:
Fn.grn - Finegrained
VFG - Very fine grained
Med - Medium
Crs - Coarse
Dtt - Detrital
Foss - Fossiliferous
Xln - Crystalline
Mxln - Microcrystalline
Ool - Oolitic
Oom - Oomoldic
Mat - Matrix

OTHER TERMS:
fl - Fluorescence (of oil)
min fl - mineral Fluorescence
pyr - pyritic
glau - glauconitic
carb - carbonaceous
stn - stain (of oil)
cut - oil cut
AA - as above
Ø - porosity
NSFOC - no stain, fluorescence, odor, or cut (of oil)
smpl - sample
perm - permeability
F.O. - Free oil
vug - vugular
tr - trace
w/ - with

MODIFIERS:
gd - Good
fr - Fair
pr - Poor
ex - excellent
v - very
w - well
tr - trace
occ - occasional
vis - visible
N - no
gran - granular
intgran - intergranular
PP - pinpoint
od - odor
gsy - gassy

TEXTURE:
Dns - Dense
Cly - Clayey
Fri - Friable
Earth - Earthy
Hack - Hackly
Fiss - Fissile
Vit - Vitreous
Vug - Vugular
Mic - Micritic

OIL SHOWS
○ Weak Oil Show
◔ Fair Oil Show
◑ Good Oil Show
● Excellent Oil Show