

**BEREXCO LLC
Kelle No.1-4
1370' FNL and 1330' FEL
NE NE SW NE
Sec 4 T16S R25W
Ness County, Kansas**

**Geological Report
by**

**Macklin M. Armstrong, P.G.
License Number 743**

Scale 1:240 Imperial

Well Name:	Kelle No. 1-4	
Surface Location:	Sec 4 T16S R25W	
Bottom Location:	1370' FNL and 1330' FEL	
API:	15-135-25564	
License Number:	34318	
Spud Date:	4/2/2013	Time: 5:15 PM
Region:	Ness County, Kansas	
Drilling Completed:	4/12/2013	Time: 10:55 AM
Surface Coordinates:	741709 & 1547011	
Bottom Hole Coordinates:		
Ground Elevation:	2519.00ft	
K.B. Elevation:	2526.00ft	
Logged Interval:	3500.00ft	To: 4602.00ft
Total Depth:	4600.00ft	
Formation:	Mississippi	
Drilling Fluid Type:	Chemical/Fresh Water Gel	

OPERATOR

Company:	BEREXCO LLC	
Address:	2020 North Bramblewood Wichita, Kansas 67206	
Contact Geologist:	Dana Wreath	
Contact Phone Nbr:	316-265-3311	
Well Name:	Kelle No. 1-4	
Location:	Sec 4 T16S R25W	API: 15-135-25564
Pool:	Oil	Field: Wildcat
State:	Kansas	Country: USA

SURFACE CO-ORDINATES

Well Type:	Vertical	
Longitude:	100.0870423	Latitude: 38.6929512
N/S Co-ord:	741709	
E/W Co-ord:	1547011	

CONTRACTOR

Contractor:	American Eagle Drilling	
Rig #:	2	
Rig Type:	mud rotary	
Spud Date:	4/2/2013	Time: 5:15 PM
TD Date:	4/12/2013	Time: 10:55 AM
Rig Release:	4/13/2013	Time: 6:00 AM

ELEVATIONS

NOTES

Date	Depth at 7 am	Activity
4-02-13	MIRT	Spud at 5:15 pm
4-03-13	304	WOC
4-04-13	1887	Drilling
4-05-13	2855	Drilling
4-06-13	3437	Drilling
4-07-13	3963	Drilling
4-08-13	4348	Drilling
4-09-13	4482	OB with DST No. 1
4-10-13	4482	Repairing Brake Band
4-11-13	4490	OB with DST No. 3
4-12-13	4514	Drilling
4-13-13	4600	P & A

Surface Casing: 8 5/8" 23# at 304'
Production Casing: None set

Deviation: 304' - 1/2°, 4482' - 1/2°, 4600' - 3/4°

Bit Record:	Make	Type	Depth In	Depth Out	Hours
	JZ	HA20Q	304	4382	95 1/2
	JZ	F27	4282	4600	4.5

Drill Stem Tests:

DST No. 1 4470 to 4482 Formation: Mississippi
15-30-60-90 (Tool slid to bottom 20" into 2nd Open)
Recovery: 120' Mud
IHP 2271 FHP 2164
IFP 45-49 FFP 55
ISIP 961 FSIP No measurement
Temp 125°

DST No. 2 4476 to 4490 Formation: Mississippi
Misrun due to packer failure

DST No. 3 4474 to 4490 Formation: Mississippi
15-30-60-90
Recovery: 50' Mud
IHP 2323 FHP 2122
IFP 26-29 FFP 31-42
ISIP 944 FSIP 1022
Temp 124°

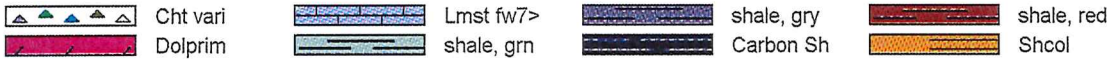
DST No. 4 4474 to 4500 Formation: Mississippi
15-30-60-90
Recovery: 40' Mud with oil spots in tool
IHP 2302 FHP 2171
IFP 23-28 FFP 31-43
ISIP 945 FSIP 1042
Temp 119°

Formation	Sample	E-Log	Datum	Well 1	Well 2	Well 3
Anhydrite	1939	1940	+586	-14	-7	-10
B/Anhydrite	1969	1968	+558	-10	+1	0
Topeka	3558	3566	-1040	-11	+3	
Heebner	3819	3824	-1298	-12	-3	+2
Lansing	3861	3866	-1340	-12	-1	+1
Stark	4102	4105	-1579	-14	-4	-3
Hushpuckney	4138	4140	-1614	-12	-5	+1
B/Kansas City	4167	4170	-1644	-18	-9	
Marmaton	4211	4215	-1689	-14	-9	
Pawnee	4288	4291	-1765	-16	-4	-3
Fort Scott	4368	4370	-1844	-15	-6	-1
Cherokee Shale	4392	4394	-1868	-15	-7	0
Mississippi	4474	4476	-1950	-7	-9	+4
Total Depth	4600	4602	-2076			

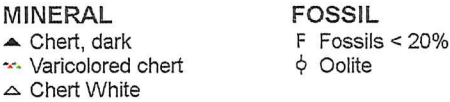
Well 1: Palomino Petroleum, Inc. Randa No. 1 2200' FSL and 350' FEL Sec 4 T16S R25W
Well 2: Mack Oil Company Estelene No. 1 C NW NE Sec 4 T16S R25W
Well 3: Pickrell Drilling Company Carter L No. 1 E2 NE NE Sec 4 T16S R25W

Due to the low structural psition, the results of the Drill Stem Tests, and the electric log calculations, it was decided to plug this test well.

ROCK TYPES



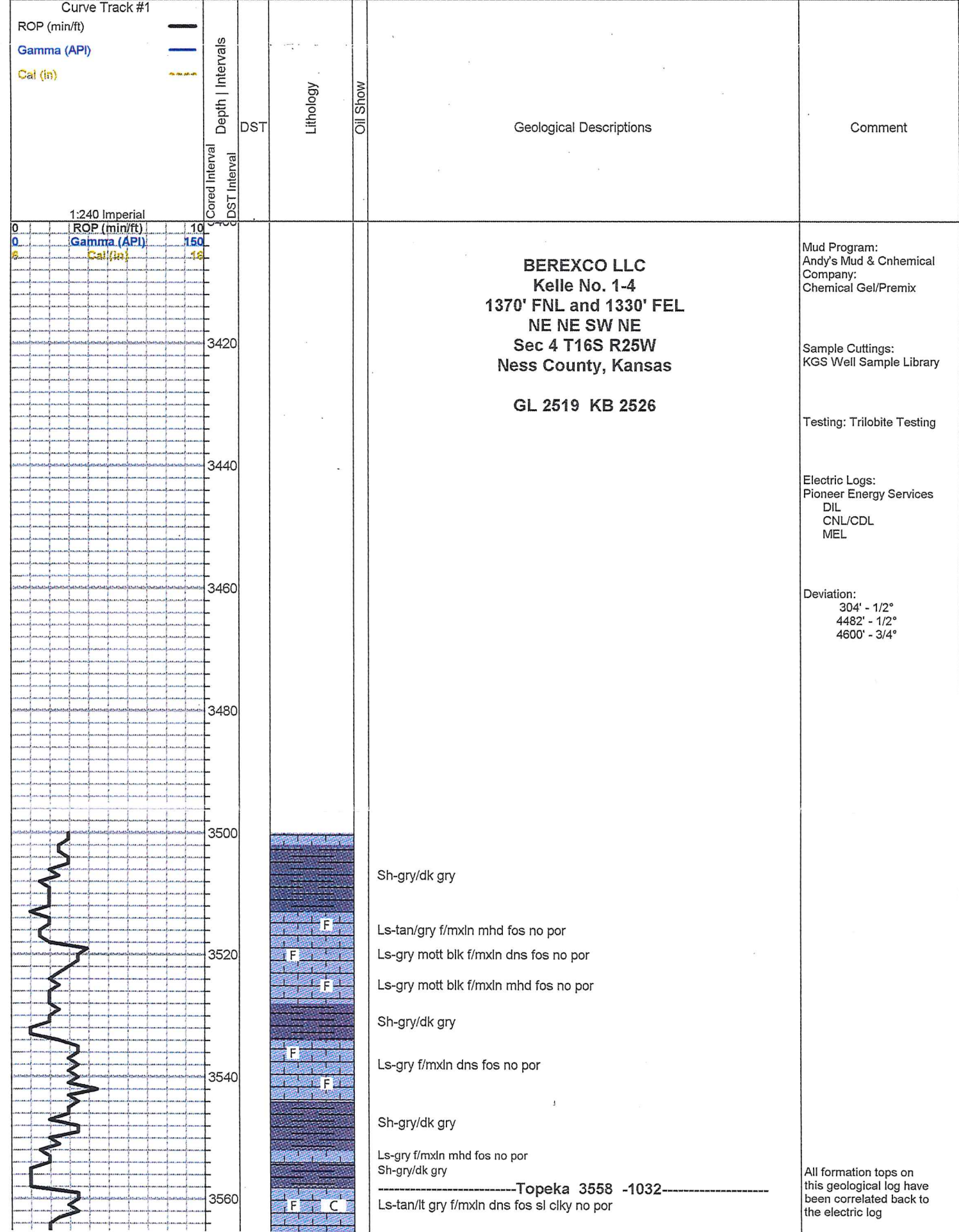
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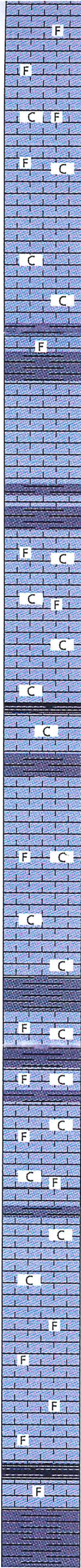
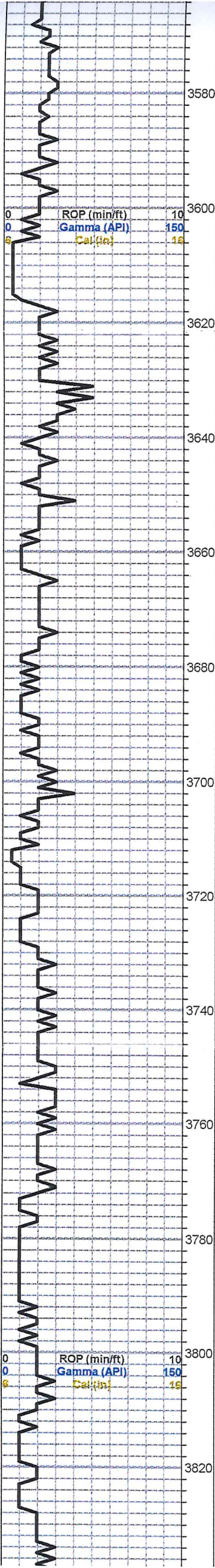


OTHER SYMBOLS



Printed by GEOstrip VC Striplog version 4.0.7.0 (www.grsi.ca)





Ls-tan/gry f/mxln mnd/dns fos no por

Ls-AA

Ls-tan/lt gry f/mxln mhd sl fos sl clky no por

Ls-AA

Ls-crm/tan fxln mhd no por

Ls-AA

Ls-crmtan f/mxln soft clky no por

Ls-AA

Sh-gry/dk gry

Ls-gry mxln dns fos no por

Sh-gry/dk gry

Ls-tan/gry f/mxln dns no por

Ls-tan/gry f/mxln mhd/dns no por

Ls-tan/gry/brn fxln mhd trc inter xln por nsfo

Sh-gry/dk gry

Ls-tan/gry fxln dns no por

Sh-gry/dk gry

Ls-crm/lt tan fxln soft clky sl fos fr inter xln por nsfo

Ls-crm/lt tan/brn fxln mdh sl fos sl clky no por

Ls-AA

Ls-tan/lt gry fxln mhd sl clky no por

Ls-AA

Sh-blk carb

Ls-tan/lt gry fxln mhd clky no por with sm Ls-wt fxln soft clky

Sh-gry/dk gry

Ls-tan/lt gry fxln dns no por

Ls-tan/lt gry fxln mhd no por

Ls-crm/lt tan fxln soft/mhd sl fos trc inter xln por nsfo sm Ls-wt fxln soft clky

Ls-crm/tan fxln mhd no por

Ls-crm/wt fxln soft clky trc inter xln por nsfo

Ls-crm/lt tan fxln mhd sl clky no por sm Ls-wt fxln soft clky

Sh-gry/dk gry

Ls-crm/lt tan f/mxln mhd sl clky sl fos no por

Sh-gry/dk gry

Ls-crm/lt gry f/mxln mhd sl clky sl fos no por

Sh-gry/dk gry

Ls-crm/lt gry/tan f/mxln mhd sl fos sl clky no por

Ls-AA

Ls-crm/lt tan f/mxln mhd/dns sl fos sl clky no por

Sh-gry/dk gry

Ls-crm/lt tan/wt fxln soft clky no por

Ls-AA

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Ls-crm/tan/lt gry f/mxln mdh/dns sl fos no por

Ls-AA

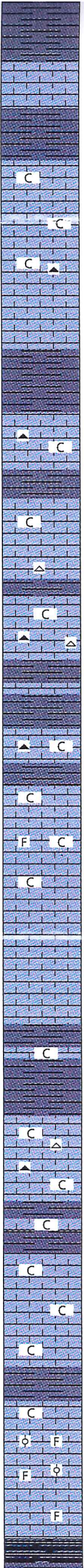
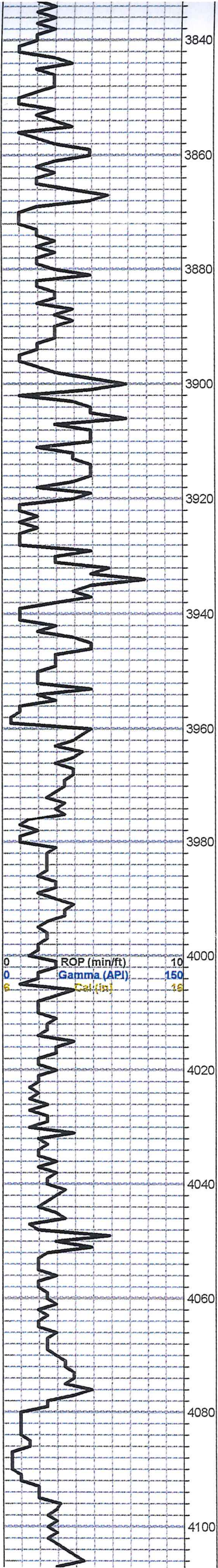
Ls-tan/gry/brn fxln mhd sl fos no por

-----Heebner 3819 -1293-----

Sh-blk carb

Ls-tan/gry fxln mhd sl fos no por

Sh-gry/dk gry



Sh-AA

Ls-crm/tan fxln mhd/dns no por

Sh-gry/dk gry

Lansing 3861 -1335

Ls-crm/lt tan fxln soft/mhd clky trc inter xln por nsfo

Ls-ctm/tan fxln dns sl clky no por

Ls-crm/lt tan fxln soft/mhd clky fr inter xln por nsfo sm Ls-wt fxln soft clky

Ls-AA sm Cht-lt gry fsh opaq

Ls-crm/lt tan fxln mhd/dns no por

Ls-AA

Sh-gry/dk gry

Sh-AA

Ls-crm/tan fxln mhd/dns sl clky no por sm Cht-wt fsh opaq

Sh-gry/dk gry

Ls-crm/tan fxln mhd sl clky fr inter xln por nsfo

Ls-tan fxln dns no por sm Cht-gry/crm/wt fsh opaq

Sh-gry/dk gry

Ls-crm/tan fxln mhd sl clky fr inter xln por nsfo

Ls-tan fxln dns no por sm Cht-gry/crm/wt fsh opaq

Sh-gry/dk gry

Ls-tan fxln dns no por

Sh-gry/dk gry

Ls-crm/lt tan fxln dns sl clky no por sm Ls-wt fxln soft clky and Cht-crm/lt gry fsh opaq

Sh-gry/dk gry

Ls-crm/lt tan fxln dns sl clky no por

Ls-crm/lt tah f/mxln soft/mhd sl clky sl fos trc inter xln por nsfo

Ls-crm/tan fxln mhd/dns sl clky no por

Ls-crm/lt tan/lt gry fxln mhd no por

Ls-AA

Sh-gry/dk gry

Ls-crm/tan fxln mhd sl clky no por

Sh-gry/dk gry

Ls-tan/lt gry fxln mhd sl clky no por sm Cht-tan/lt gry/wt fsh opaq

Ls-AA

Sh-gry/dk gry

Ls-tan/lt gry fxln mhd sl clky no por

Sh-gry/dk gry

Ls-crm/lt tan fxln mhd sl clky no por

Ls-AA

Ls-crm/lt tan fxln mhd/dns sl clky no por

Sh-gry/dk gry

Ls-crm/tan fxln dns sl clky no por

Ls-crm/tan fxln mhd fos sl ool fr ooc por nsfo

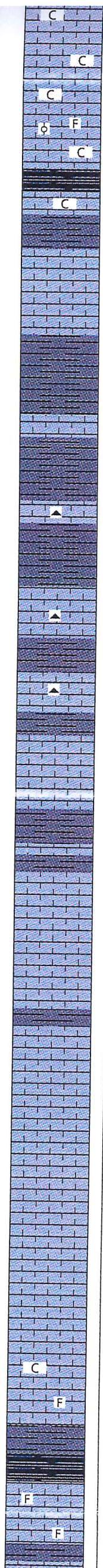
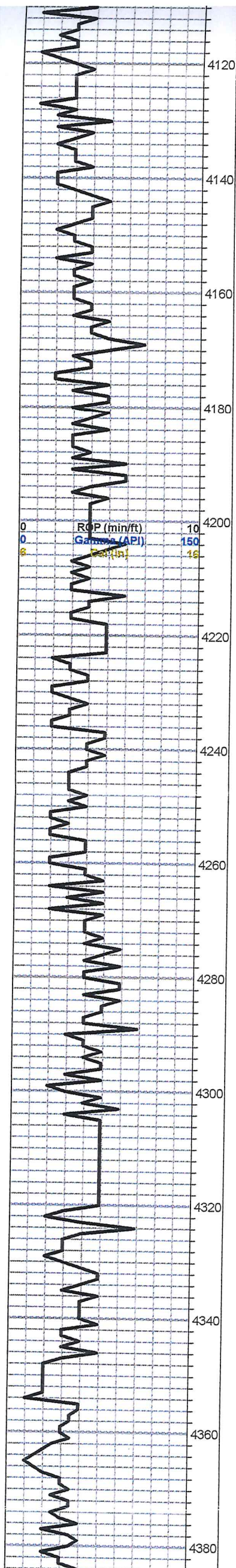
Ls-AA

Ls-crm/tan/lt gry fxln dns sl fos no por

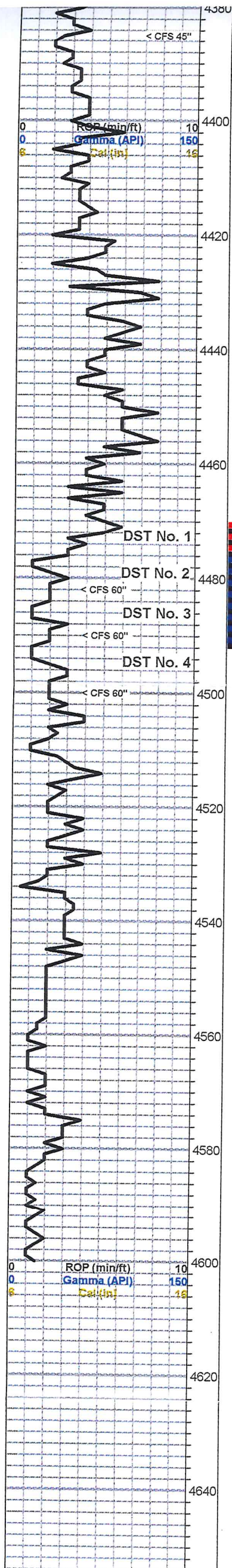
Stark 4102 -1576

Sh-blk carb

Mud Data at 4006'
10:00 am 4-07-13
Wt 9.1
Vis 57
WL 8
pH 10
Chl 4000
Sol 2.2%
YP 16
LCM 1#



Ls-crm/lt tan fxln mhd sl clky no por
Ls-crm/lt tan/wt fxln mhd clky no por
Ls-crm/tan fxln dns sl clky no por
Ls-AA with sm Ls-tan fxln mhd sl ool and ooc no por
Hushpuckney 4138 -1612
Sh-blkcarb
Ls-crm/tan fxln dns sl clky no por
Sh-gry/dk gry
Ls-crm/tan/lt gry fxln dns no por
Ls-AA
B/Kansas City 4167 -1641
Sh-gry/dk gry
Sh-AA
Ls-tan/brn fxln mhd/dns no por
Sh-gry/dk gry
Ls-tan/gry fxln dns no por sm Cht-lt gry fsh opaq
Sh-gry/dk gry
Marmaton 4211 -1685
Ls-gry/tan fxln dns no por sm Cht-lt gry fsh opaq
Sh-gry/dk gry
Ls-gry/tan fxln dns no por sm Cht-lt gry/gry/brn fsh opaq
Sh-gry/dk gry
Ls-tan/lt gry/crm fxln dns no por
Ls-tan/lt gry/crm mhd/dns no por
Sh-gry/dk gry
Ls-tan/gry fxln dns no por
Sh-gry/dk gry
Ls-crm/tan fxln dns no pr
Ls-AA
Ls-crm/tan/lt gry fxln dns no por
Ls-AA
Pawnee 4288 -1762
Ls-gry/tan/brn fxln dns no por
Ls-AA
Ls-gry/tan/brn fxln dns no por
Ls-AA
Ls-gry/tan fxln mhd no por
Ls-AA
Ls-gry/gry brn fxln dns no por
Ls-AA
Ls-crm/lt gry fxln mhd sl clky no por
Ls-gry/brn f/mxln dns sl fos no por
Sh-gry/dk gry
Sh-blk carb
Fort Scott 4368 -1842
Ls-crm/lt gry/tan fxln mhd/dns no por sm Ls-tan fxln dns sl fos no por
Sh-gry/dk gry



Sh-gry/dk gry

Ls-lt gry/gry fxln dns no por sm Cht-lt gry fsh opaq

-----Cherokee Shale 4392 -1866-----

Sh-blk carb

Ls-lt gry/gry fxln dns no por

Sh-gry/dk gry

Ls-tan/gry fxln dns no por sm Cht-lt gry fsh opaq

Sh-gry/dk gry

Ls-tan/lt gry fxln dns no por

Sh-gry/dk gry/grn

Sh-AA

Sh-AA

Ls-crm/tan fxln dns no por with Cht-tan/brn/sm yel fsh opaq and Cht-wt fsh to sl weat opaq fos

Sh-gry/dk gry/grn/mar/sm yel

-----Mississippi 4474 -1948-----

● Dolo-brn/tan fxln to fsuc mhd fr vug por brn spt stn ssfo on brk faint odor

● Dolo-brn fxln to fsuc mhd gd vug por brn sct/sat stn gsfo gd fluor gd odor

● Dolo-lt gry/tan fxln to fsuc mhd fr vug por ssfo on brk fr fluor sl odor

● Dolo-brn fxln to fsuc mhd gd vug por brn sat stn gsfo on brk gd fluor gd odor

● Dolo-brn fxln to fsuc mhd fr/gd vug por fsfo on brk fr fluor sl odor

● Dolo-tan/brn fxln to fsuc mhd gd vug por gsfo on brk gd fluor gd odor

Dolo-lt gry fsuc dns no por

Dolo-lt gry/gry fsuc dns no por

Dolo-lt gry/gry fsuc mhd trc vug pos nsfo

Dolo-lt gry/tan fsuc dns no por

Dolo-AA sm Cht-lt gry fsh opaq

Dolo-lt gry/tan fsuc mhd trc vug por nsfo sm Cht-AA

Dolo-lt gry/tan fsuc dns no por and Cht-lt gry/wt fsh opaq

Dolo and Cht-AA

Dolo-lt gry fxln to fsuc mhd no por and Cht-lt gry/wt fsh opaq

Cht-lt gry/wt fsh opaq and Dolo-AA

Cht and Dolo-AA

Dolo-lt gry fxln to fsuc dns no por and Cht-lt gry/wt fsh opaq

Cht-lt gry fsh opaq to semi trans and Dolo-AA

Cht and Dolo-AA

-----RTD 4650 -2074-----

Finished Drilling at 10:55 am on 4-12-13. Cir for Log - 90"

Finished Logging at 6:40 pm on 4-12-13

Mud Data at 4385'
10:00 am 4-08-13
Wt 9.1
Vis 51
WL 8.8
pH 9
Chl 4000
Sol 5.3%
YP 16
LCM 1 1/2#

Mud Data at 4482'
2:00 pm 4-09-13
Wt 9
Vis 46
WL 8.8
pH 9.5
Chl 4000
Sol 4.8%
YP 14
LCM 1 1/2#

DST No 1
4470 to 4482
15-30-60-90
1st Open: Weak blow
built to 1"
2nd open: Weak sur blow
for approx 20", then
tool slid to bottom
Recovery: 120' Mud
IHP 2271 FHP 2164
IFP 45-49 FFP 55
ISIP 961 FSIP No meas
Temp 125°

Pulled 30 stand short trip at
4482", then Cir for Test - 90"

Mud Data at 4482'
12:00 pm 4-10-13
Wt 9 Vis 43 WL 9.6 pH 9
Chl 4000 Sol 4.8% YP 11
LCM 1 1/2#

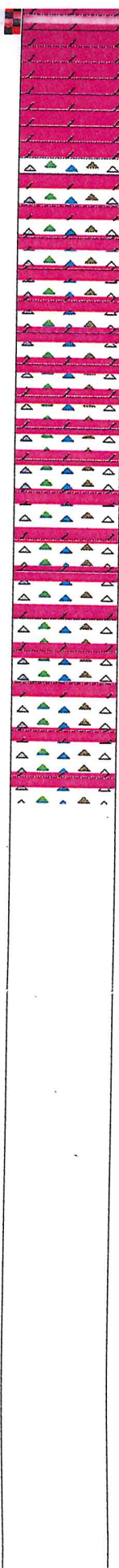
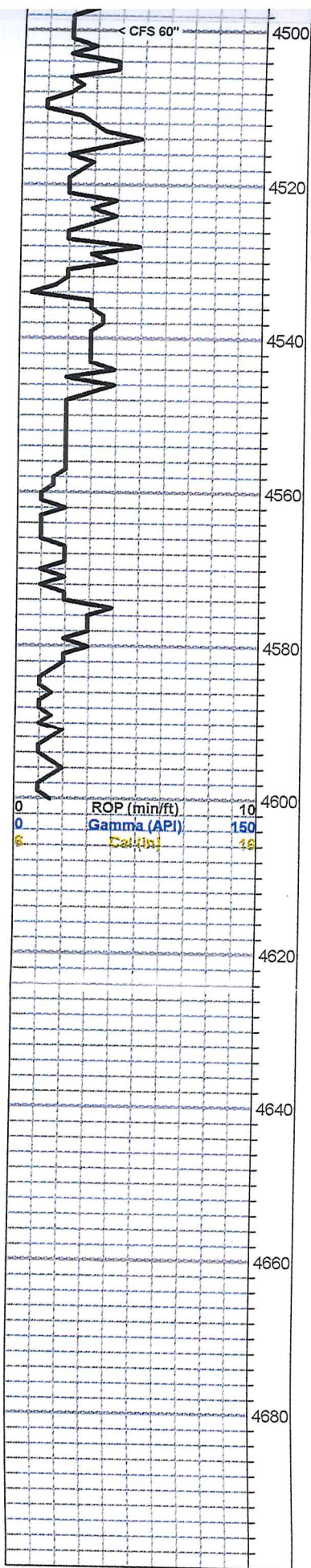
Mud Data at 4490'
10:00 pm 4-11-13
Wt 9.2 Vis 48 WL 10 pH 9
Chl 3000 Sol 6.3% YP 14
LCM 1 1/2#

DST No. 2
4476 to 4490
Misrun due to packer
failure

DST No 3
4474 to 4490
15-30-60-90
1st Open: Weak sur blow
built to 2"
2nd Open: Weak sur blow,
built to 1/4"
Recovery: 50' Mud
IHP 2323 FHP 2122
IFP 26-29 FFP 31-42
ISIP 944 FSIP 1022
Temp 124°

DST No 4
4474 to 4500
15-30-60-90
1st Open: Weak blow,
built to 2"
2nd Open: Weak blow,
built to 1"
Recovery: 40' Mud with oil
spots in tool
IHP 2302 FHP 2171
IFP 23-28 FFP 31-43
ISIP 945 FSIP 1040
Temp 119°

Mud Data at 4600'
11:00 pm 4-12-13
Wt 9.4 Vis 51 WL 10 pH 9
Chl 4000 Sol 7.6% YP 14
LCM 1 1/2#



Dolo-lt gry fsuc dns no por

Dolo-lt gry/gry fsuc dns no por

Dolo-lt gry/gry fsuc mhd trc vug pos nsfo

Dolo-lt gry/tan fsuc dns no por

Dolo-AA sm Cht-lt gry fsh opaq

Dolo-lt gry/tan fsuc mhd trc vug por nsfo sm Cht-AA

Dolo-lt gry/tan fsuc dns no por and Cht-lt gry/wt fsh opaq

Dolo and Cht-AA

Dolo-lt gry fxin to fsuc mhd no por and Cht-lt gry/wt fsh opaq

Cht-lt gry/wt fsh opaq and Dolo-AA

Cht and Dolo-AA

Dolo-lt gry fxin to fsuc dns no por and Cht-lt gry/wt fsh opaq

Cht-lt gry fsh opaq to semi trans and Dolo-AA

Cht and Dolo-AA

-----RTD 4650 -2074-----

Finished Drilling at 10:55 am on 4-12-13. Cir for Log - 90"

Finished Logging at 6:40 pm on 4-12-13

Chl 4000 Sol 4.8% YP 11
LCM 1 1/2#

Mud Data at 4490'
10:00 pm 4-11-13
Wt 9.2 Vis 48 WL 10 pH 9
Chl 3000 Sol 6.3% YP 14
LCM 1 1/2#

DST No. 2
4476 to 4490
Misrun due to packer failure

DST No 3
4474 to 4490
15-30-60-90
1st Open: Weak sur blow
built to 2"
2nd Open: Weak sur blow,
built to 1/4"
Recovery: 50' Mud
IHP 2323 FHP 2122
IFP 26-29 FFP 31-42
ISIP 944 FSIP 1022
Temp 124°

DST No 4
4474 to 4500
15-30-60-90
1st Open: Weak blow,
built to 2"
2nd Open: Weak blow,
built to 1"
Recovery: 40' Mud with oil
spots in tool
IHP 2302 FHP 2171
IFP 23-28 FFP 31-43
ISIP 945 FSIP 1040
Temp 119°

Mud Data at 4600'
11:00 pm 4-12-13
Wt 9.4 Vis 51 WL 10 pH 9
Chl 4000 Sol 7.6% YP 14
LCM 1 1/2#