

JUSTIN D. CARTER

CONSULTING GEOLOGIST

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: HIBBERT-GATES 1-7
Location: SW, SE, NW, NE Sec. 7 - 22S - 13W Stafford Co., KS
License Number: 15-185-24051-0000
Spud Date: 04/10/19
Surface Coordinates: 1000' FNL, 1750' FEL
Region: Wildcat
Drilling Completed: 04/17/19

Bottom Hole Coordinates: 432': 1/4 DEG, 3614': 3/4 DEG

Ground Elevation (ft): 1917' K.B. Elevation (ft): 1926'
Logged Interval (ft): 3100' To: 3920' Total Depth (ft): 3920'
Formation: L/KC, VIOLA, ARBUCKLE
Type of Drilling Fluid: Chemical Mud

Printed by WellSight Log Viewer from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: BIRD DOG OIL, LLC
Address: 1801 Broadway, Suite #200
Denver, CO 80202-3840
Co. Geo.: Mr. Scott Stewart

GEOLOGIST

Name: Justin D. Carter
Company: Consulting Geologist
Address: 1640 N. Roosevelt Ave.
Liberal, KS 67901
Phone: 620-655-1187

Comments

Drilling Contractor: Southwind Drilling Rig #3
Tool Pusher: Jay Krier

8 5/8" surface casing set at 432'

Mud: MudCo
Engineer: Jason Whiting

Gas Detector: Blue Stem

DSTs: Diamond Testing
Tester: Ricky Ray

Open-Hole Loggers: Halliburton Wireline



Company: Bird Dog Oil, LLC
Lease: Hibbert-Gates #1-7

SEC: 7 TWN: 22S RNG: 13W
 County: STAFFORD
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1917 CL
 Field Name: Unnamed
 Pool: Infield
 Job Number: 331

Operation:
 Operation

DATE
 April
 14
 2019

DST #1 Formation: LKC I-J Test Interval: 3570 - 3614' Total Depth: 3614'

Time On: 15:35 04/14 Time Off: 23:50 04/14
 Time On Bottom: 18:09 04/14 Time Off Bottom: 21:24 04/14

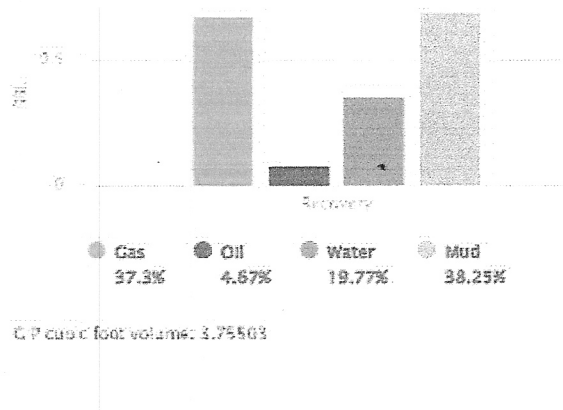
Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Feet	SBLS					
47	0.66891	G	100	0	0	0
16	0.22768	SLWCOOH	0	25	10	65
63	0.89549	SLOCIWCM	0	3	37	50

Total Recovered: 126 ft
 Total Barrels Recovered: 1.79298

Reversed Out:
 NO

Initial Hydrostatic Pressure	1721	PSI
Initial Flow	14 to 25	PSI
Initial Closed in Pressure	599	PSI
Final Flow Pressure	25 to 51	PSI
Final Closed in Pressure	614	PSI
Final Hydrostatic Pressure	1729	PSI
Temperature	107	°F
Pressure Change Initial Close / Final Close	0.0	%

Recovery at a glance





Company: Bird Dog Oil, LLC
Lease: Hibbert-Gates #1-7

SEC: 7 TWN: 22S RNC: 13W
 County: STAFFORD
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1817 GL
 Field Name: Unnamed
 Pool: Infield
 Job Number: 331

Operation:
 [Blank]

DATE
 April
 15
 2019

DST #2 **Formation:** LKC K **Test Interval:** 3615 - 3650' **Total Depth:** 3650'
Time On: 06:58 04/15 **Time Off:** 13:58 04/15
Time On Bottom: 09:20 04/15 **Time Off Bottom:** 11:35 04/15

Recovered

Feet	BBLS
15	0.21345

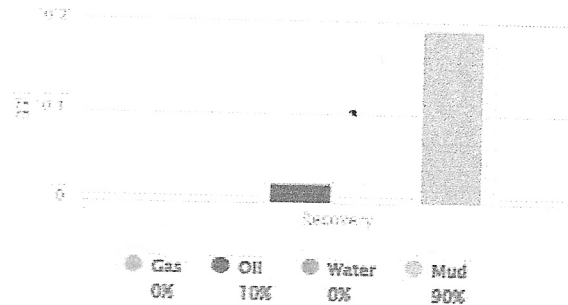
Description of Fluid
 SLOCM

Gas %	Oil %	Water %	Mud %
0	10	0	90

Total Recovered: 15 ft
Total Barrels Recovered: 0.21345

Reversed Out:
 NO

Recovery at a glance



Initial Hydrostatic Pressure	1742	PSI
Initial Flow	12 to 14	PSI
Initial Closed in Pressure	514	PSI
Final Flow Pressure	14 to 17	PSI
Final Closed in Pressure	544	PSI
Final Hydrostatic Pressure	1743	PSI
Temperature	102	°F
Pressure Change Initial Close / Final Close	0.0	%

G.P. (ft) x (ft) volume: 0



Company: Bird Dog Oil, LLC
Lease: Hibbert-Gates #1-7

SEC: 7 TWN: 22S RNC: 13W
 County: STAFFORD
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1917 CL
 Field Name: Curtis Exp
 Pool: Infield
 Job Number: 331

Operation:
 Completion
 04/16/2019

DATE
 April
 16
 2019

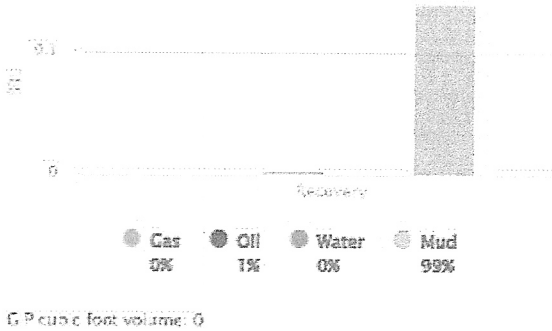
DST #3 Formation: Viola Test Interval: 3712 - 3777' Total Depth: 3777'
 Time On: 02:53 04/16 Time Off: 06:52 04/16
 Time On Bottom: 04:58 04/16 Time Off Bottom: 06:03 04/16

Recovered		Description of Fluid	Gas %	Oil %	Water %	Mud %
Feet	BBLS					
10	0.1423	SLOCM	0	1	0	99

Total Recovered: 10 ft
 Total Barrels Recovered: 0.1423

Reversed Out:
 NO

Recovery at a glance



Initial Hydrostatic Pressure	1791	PSI
Initial Flow	13 to 16	PSI
Initial Closed in Pressure	236	PSI
Final Flow Pressure	17 to 18	PSI
Final Closed in Pressure	0	PSI
Final Hydrostatic Pressure	1793	PSI
Temperature	102	°F
Pressure Change Initial Close / Final Close	0.0	%



Company: Bird Dog Oil, LLC
Lease: Hibbert-Gates #1-7

SEC: 7 TWN: 22S RNC: 13W
 County: STAFFORD
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1817 GL
 Field Name: Curtis Ext
 Pool: Infield
 Job Number: 331

Operation:
 Test Interval

DATE
 April
 16
 2019

DST #4 **Formation: Arbuckle** **Test Interval: 3773 - 3836'** **Total Depth: 3836'**
 Time On: 19:09 04/16 Time Off: 03:55 04/17
 Time On Bottom: 21:22 04/16 Time Off Bottom: 00:52 04/17

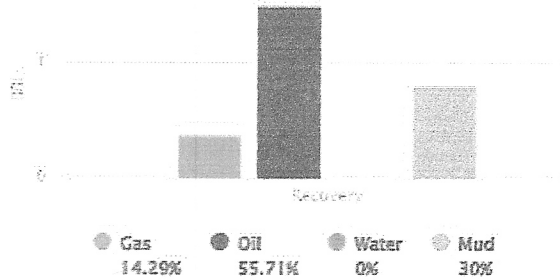
Recovered

Feet	SEIS	Description of Fluid	Gas %	Oil %	Water %	Mud %
27	0.38421	G	100	0	0	0
89	1.40877	O	0	100	0	0
63	0.88649	SLOCH	0	10	0	90

Total Recovered: 189 ft
 Total Barrels Recovered: 2.68947

Reversed Out:
 NO

Recovery at a glance



Initial Hydrostatic Pressure	1767	PSI
Initial Flow	14 to 25	PSI
Initial Closed in Pressure	1278	PSI
Final Flow Pressure	29 to 85	PSI
Final Closed in Pressure	1256	PSI
Final Hydrostatic Pressure	1768	PSI
Temperature	109	°F
Pressure Change Initial Close / Final Close	1.8	%

GP cubic foot volume: 2.15715



Company: Bird Dog Oil, LLC
Lease: Hibbert-Gates #1-7

SEC: 7 TWP: 22S RNG: 13W
 County: STAFFORD
 State: Kansas
 Drilling Contractor: Southwind Drilling, Inc - Rig 3
 Elevation: 1817 GL
 Field Name: Curtis Ex.
 Pool: Infield
 Job Number: 331

Operation:
 Production

DATE
 January
 01
 1970

DST #5 **Formation: Arbuckle** **Test Interval: 3836 - 3840'** **Total Depth: 3840'**
 Time On: 00:00 01/01 Time Off: 16:06 04/17
 Time On Bottom: 00:00 01/01 Time Off Bottom: 03:15 01/01

Recovered

Foot	BARLS
48	0.68304
78	1.10894
189	2.68947

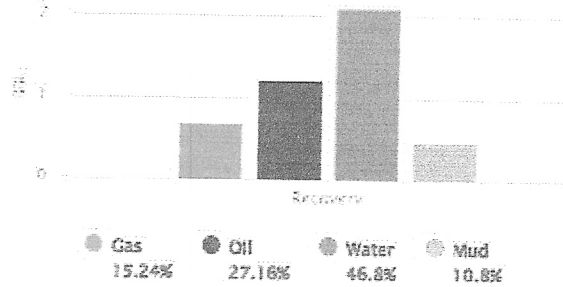
Description of Fluid	Gas %	Oil %	Water %	Mud %
G	100	0	0	0
O	0	100	0	0
SLOCSLMCW	0	4	78	18

Total Recovered: 315 ft
 Total Barrels Recovered: 4.48245

Reversed Out:
 NO

Initial Hydrostatic Pressure	1836	PSI
Initial Flow	16 to 42	PSI
Initial Closed in Pressure	1281	PSI
Final Flow Pressure	44 to 131	PSI
Final Closed in Pressure	1259	PSI
Final Hydrostatic Pressure	1836	PSI
Temperature	118	°F
Pressure Change Initial Close / Final Close	1.7	%

Recovery at a glance



GP cubic foot volume: 3.53493

Remarks

After careful review of the sample log, electric logs, and DST reports, the decision was made to P&A the Hibbert-Gates #1-7.

Respectfully submitted,

Curtis D. Carter

ROCK TYPES

	Anhy		Gyp		Shgy		Sandylms
	Bent		Igne		Sltst		Shale
	Brec		Lmst		Ss		Sltstn
	Cht		Meta		Till		Shlyslts
	Clyst		Mrst		Carb sh		Sitysh
	Coal		Salt		Dol		Lms
	Congl		Shale		Dtd		
	Dol		Shcol		Gry sh		

ACCESSORIES

FOSSIL	MINERAL		Salt		Dol
	Algae		Sandy		Grysh
	Amph		Silt		Grysit
	Belm		Sil		Lms
	Bioclst		Sulphur		Sandylms
	Brach		Tuff		Sh
	Bryozoa		Chlorite		Sltstn
	Cephal		Dol		
	Coral		Sand	TEXTURE	
	Crin		Silty		Boundst
	Echin				Chalky
	Fish	STRINGER			Cryxln
	Foram		Anhy		Earthy
	Fossil		Arg		Finexln
	Gastro		Bent		Grainst
	Oolite		Coal		Lithogr
	Ostra		Dol		Microxln
	Pelec		Gyp		Mudst
	Pellet		Ls		Packet
	Pisolite		Mrst		Wackest
	Plant		Sltstrg		
	Strom		Ssstrg		
	Fuss		Carbsh		
	Oomold		Clystn		

OTHER SYMBOLS

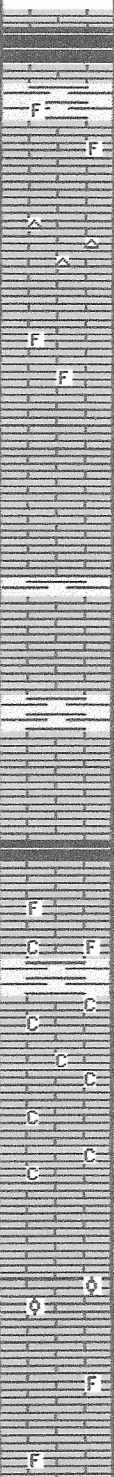
INTERVALS		Dst	OIL SHOWS		Ques	
	Core			Even		Dead
	Dst			Spotted		Gas show

Curve Track 1				Remarks
ROP (min/ft)				TG (units)
Gamma (API)				C1 (units)
				C3 (units)
				C4 (units)
				C8 (units)
Depth	Lithology	Geological Descriptions		

BIT #2
VAREL 7 7/8"
HE-29
S/N: 1602888
3/14s
IN @ 432'



3100
3150
3200
3250



NO ANHYDRITE TOP, GEOLOGRAPH MALFUNCTION

DISPLACE HOLE @ 2850'

GEOLOGIST ON LOCATION 10:00 A.M. 04/13/19

LS- BFF LT GY, HRD, VF-XLN, RE-XLN MTRX IP TO SUB-SUCRO MTRX IP TO TR SUB-CHLKY, TR IMBED FOSS FRAGS, NO FLO, NO VIS POR

LS- CRM, HRD DNS, VF-XLN, RE-XLN MTRX THRU, WHT CHRT IP, NO FLO, NO VIS POR

LS- LT TN, HRD TO BRITT IP, FVF-XLN, SLI GRNST MTRX THRU, IMBED FOSS FRAGS IP, NO FLO, NO VIS POR

LS- OFF WHT, BRITT, F-XLN, GRNST, NO FLO, FR INTER-XLN POR IP TO TR VUG POR IP, NS

LS- LT GY TN, HRD DNS, VF-XLN, RE-XLN MTRX IP TO GRNST IP, NO FLO, NO VIS POR

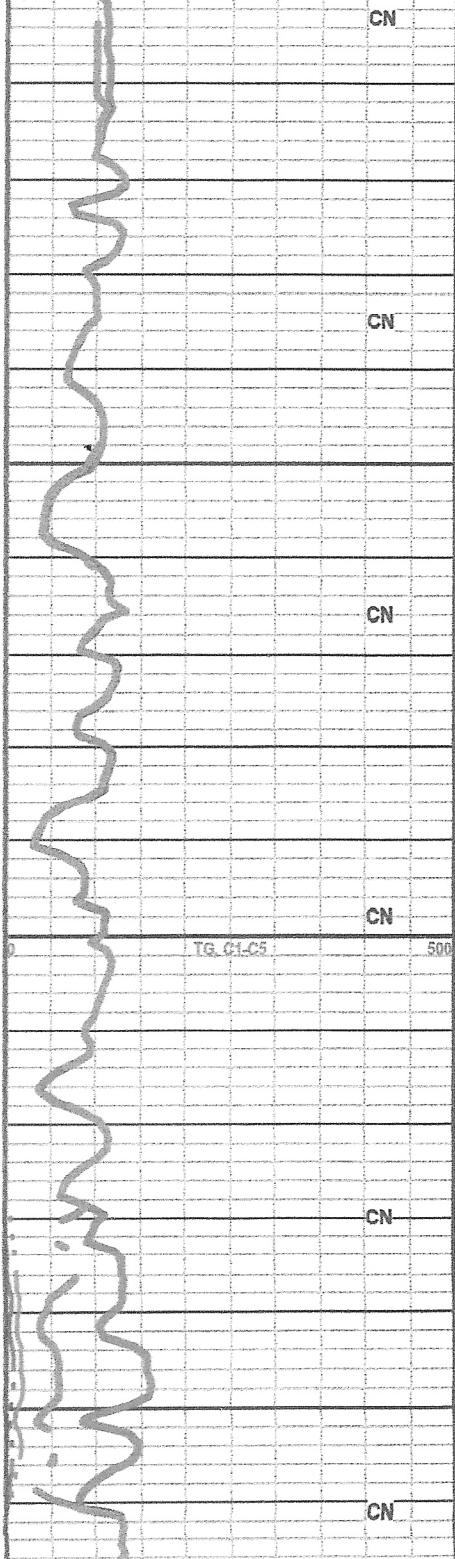
LS- LT TN, HRD TO BRITT IP, FVF-XLN, SUB-CHLKY MTRX THRU TO TR GRNST, IMBED FOSS FRAGS IP, TR SFT WHT CHLK, NO FLO, NO VIS POR

LS- OFF WHT, HRD TO BRITT IP, VF-XLN, RE-XLN MTRX IP, SFT WHT CHLK THRU, NO FLO, NO VIS POR

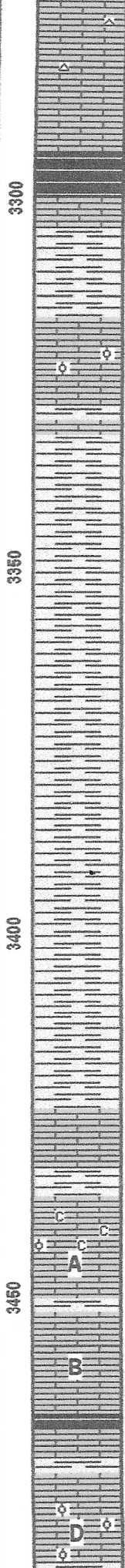
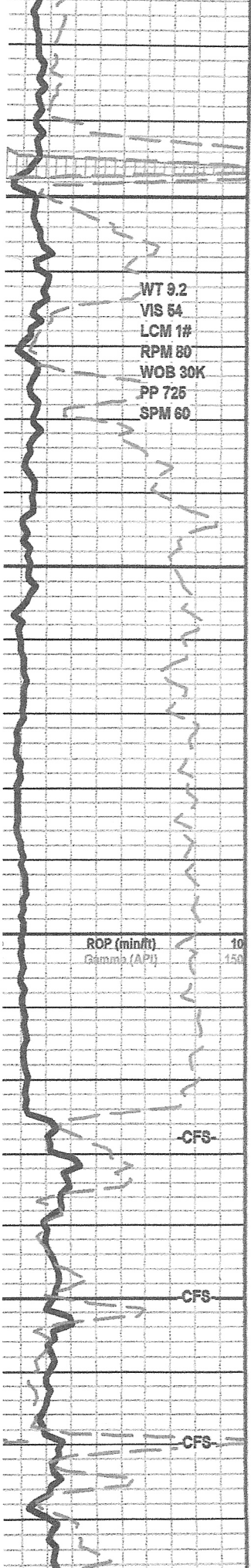
LS- TN, BRITT, F-XLN, GRNST, IMBED FOSS FRAGS IP, NO FLO, TR INTER-XLN POR, NS

LS- LT TN, HRD, VF-XLN, RE-XLN MTRX IP TO TR SUB-CHLKY, TR IMBED FOSS FRAGS, NO FLO, NO VIS POR

10:00 A.M. 04/13/19



CN
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CN



WHT CHRT, TR PYR, NO FLO, NO VIS POR

HEEBNER 3293' (-1367')

SH- GY, SFT, SLTY, FISS

TORONTO 3317' (1391')

LS- OFF WHT, BRITT TO HRD IP, F-XLN, GRNST, IMBED OOL IP, NO FLO, TR INTER-XLN POR TO TR INTER-OOL POR, NS

DOUGLAS 3332' (-1406')

SH- DK GY, FRM, BLK TO TR FISS, SLTY IP TO ARG IP

SH- GY DK GY, SFT, GMMY, ARG

LS- DK GY, SFT TO FRM IP, BLKY, ARG

SH- DK GY, FRM, BLKY, ARG, A/A

SHORT TRIP 24 STANDS @ 3428'

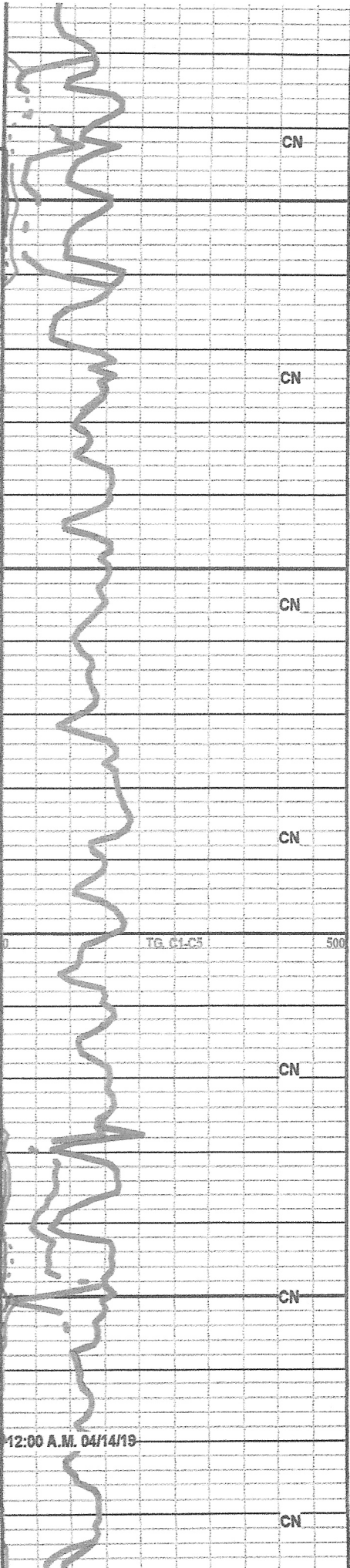
BROWN LIME 3425' (-1499')

LANSING 3435' (-1509')

LS- CRM OFF WHT, HRD DNS, VF-XLN, RE-XLN MTRX THRU TO TR SUB-CHKLY, TR SFT WHT CHLK, TR OOL, NO FLO, NO VIS POR

LS- LT CRM, HRD TO BRITT IP, F/VF-XLN, GRNST IP TO TR RE-XLN MTRX, TR SFT WHT CHLK, DLL YEL GLD FLO SCAT THRU, PR/FR FLUSH CUT TO TR BLU STRM CUT, FR INTER-XLN POR IP TO FR INTER-VUG POR IP, TR STAIN, NO ODOR

LS- CRM LT TN, HRD DNS, F/VF-XLN, RE-XLN MTRX IP TO GRNST IP, IMBED OOL IP, DLL YEL GLD FLO IN 70%, FAINT FLUSH TO PR SLO BLU STRM CUT, TR INTER-OOL POR, TR RESIDUAL BLK STAIN, NO ODOR



CN

CN

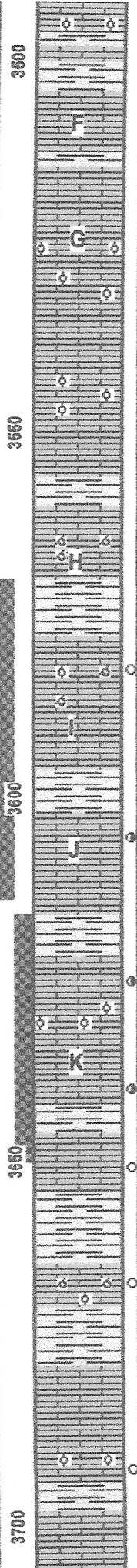
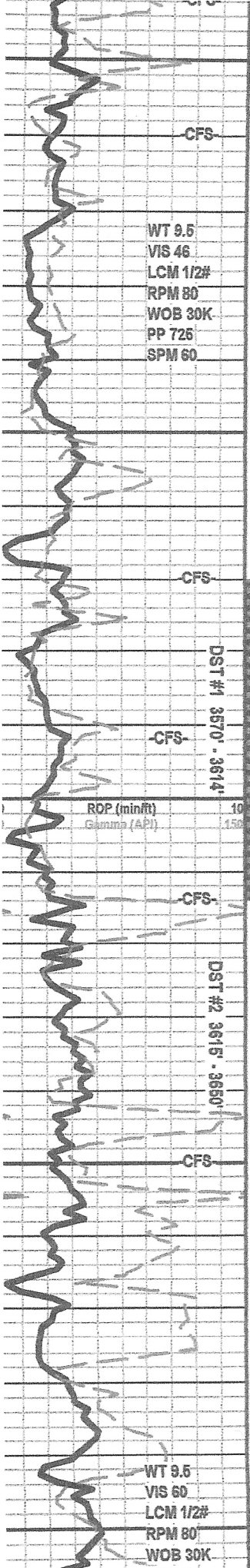
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LS- LT TN, HRD DNS, VF-XLN, RE-XLN MTRX IP, IMBED OOL SCAT THRU, NO FLO, NO VIS CUT, NO VIS POR

LS- LT CRM, HRD TO BRITT IP, FVF-XLN, GRNST IP TO TR SUCRO MTRX, NO FLO, TR INTER-XLN POR TO NO VIS POR THRU, NS

LS- OFF WHT LT TN, BRITT, FVF-XLN, RE-XLN MTRX IP TO GRNST IP, SFT WHT CHLK IP, IMBED OOL IP, NO FLO, TR INTER-OOL POR TO TR INTER-XLN POR, NS

LS- LT TN, HRD DNS, VF-XLN, RE-XLN MTRX THRU, IMBED OOL IP, NO FLO, TR INTER-OOL POR TO NO VIS POR IP, NS

LS- CRM, BRITT, VF-XLN, GRNST, TR IMBED OOL, NO FLO, NO VIS CUT, FR/GD OOMLD POR THRU, NS

LS- CRM, HRD TO BRITT IP, VF-XLN, GRNST, IMBED OOL IP, YEL GLD FLO IN 80%, FR FLUSH TO PR SLO BLU STRM CUT, PR/FR OOMLD POR THRU, LIVE BLK STAIN IN 40%, VIFAIN ODOR, TR GAS BUBBLS, NSFO

LS- WHT CRM, BRITT TO HRD IP, FVF-XLN, GRNST, IMBED OOL IP, TR BRIT YEL TO DLL YEL GLD FLO THRU, FAINT FLUSH TO PR SLO BLU STRM CUT, PR/FR OOMLD POR SCAT THRU, TR LIVE BLK STAIN, TR FREE OIL, VIFAIN ODOR

STRAP -2.04' SHORT TO THE BOARD

LS- CRM BFF, HRD TO BRITT IP, VF-XLN, GRNST, IMBED OOL SCAT THRU, DLL YEL GLD FLO THRU, FR FLUSH TO FR FAST BLU STRM CUT, PR/FR INTER-OOL POR IP TO TR MICRO PP POR, LIVE BLK STAIN, FR ODOR, TR FREE OIL

LS- OFF WHT, HRD, FVF-XLN, GRNST THRU, DLL YEL GLD FLO THRU, FR FLUSH TO FR FAST BLU STRM CUT, FR INTER-XLN POR IP, TR BLK LIVE STAIN, FAINT ODOR, TR FREE OIL, GAS BUBBLS

BKC 3643' (-1717')

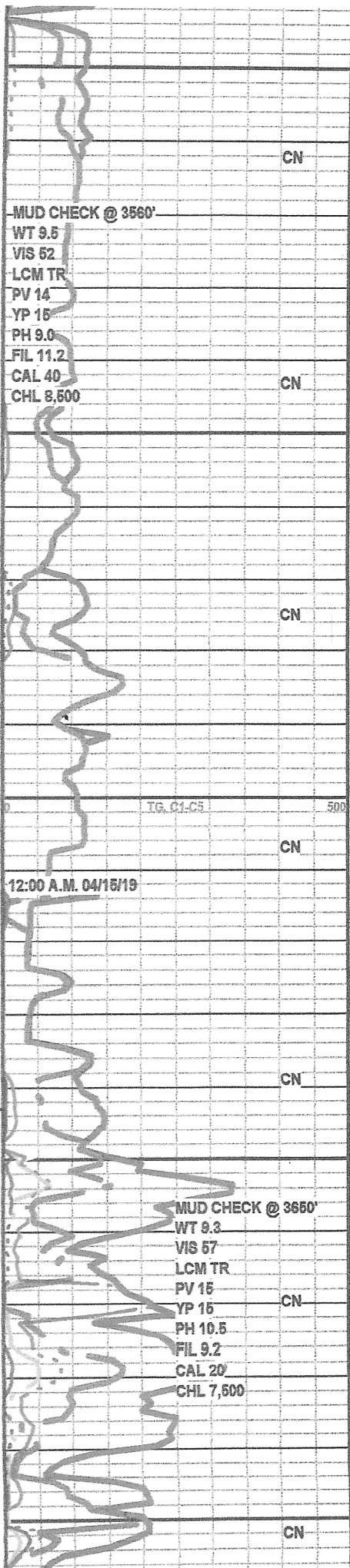
LS- TN CRM, HRD DNS, F-XLN, GRNST, BRIT YEL GLD FLO SCAT THRU, PR FLUSH TO FR BLU STRM CUT, PR/FR INTER-XLN POR IP TO TR VUG POR, DK TN STAIN IP, FAINT ODOR, TR FREE OIL

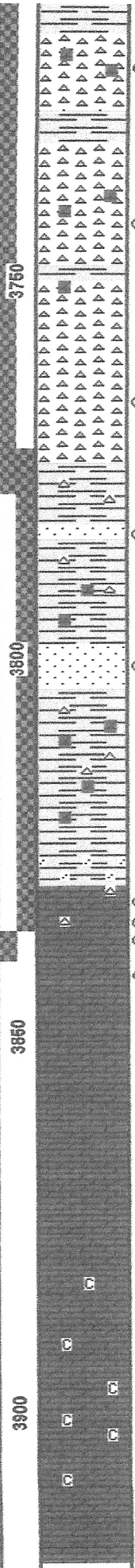
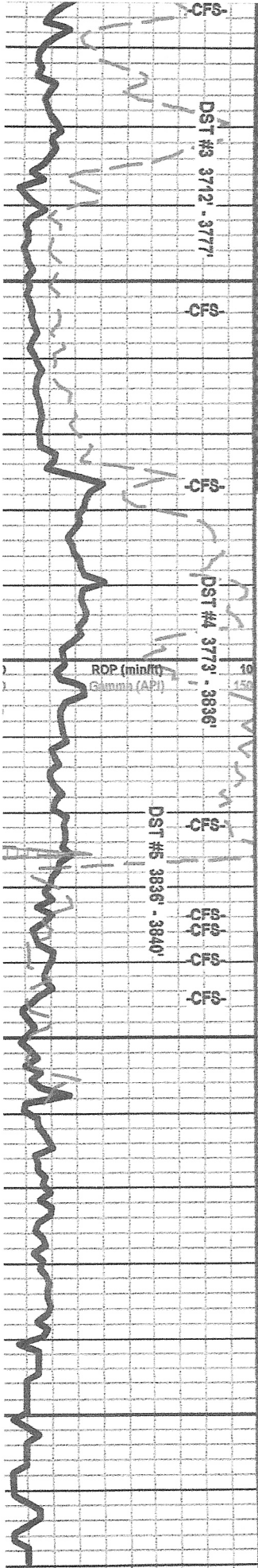
LS- OFF WHT, HRD DNS, VF-XLN, GRNST IP TO RE-XLN MTRX IP, IMBED OOL IP, TR BRIT YEL GLD FLO, FAINT FLUSH CUT, PR OOMLD POR IP TO TR INTER-OOL POR, TR STAIN, FAINT ODOR, NSFO

SH- RD GY, FRM TO SFT IP, BLKY, ARG

LS- CRM TN, HRD, VF-XLN, GRNST, IMBED OOL IP, YEL GLD FLO IN 70%, FAINT FLUSH TO PR SLO BLU STRM CUT, TR INTER-XLN POR TO TR MICRO PP POR, BLK STAIN IP, FAINT ODOR, TR FREE OIL

LS- WHT, BRITT TO HRD IP, FVF-XLN, GRNST IP TO





VIOLA 3718' (-1792')

CHRT- TN WHT, HRD, REWORKD, DOLO IP, BRIT YEL GLD FLO SCAT THRU, FR FLUSH TO FR FAST BLU STRM CUT, PR/FR INTER-XLN POR THRU, DK TN STAIN IN 70%, FAIR ODOR, GD SHOW FREE OIL

CHRT- OPQ DK BRN, HRD DNS, REWORKD, DOLO IP, BRIT YEL GLD FLO IN 60%, FR FLUSH TO FAINT BLU STRM CUT, FR INTER-XLN POR IP, DK BRN STAIN SCAT THRU, FAIR ODOR, GD SHOW FREE OIL

CHRT- WHT BLK, HRD DNS, DOLO IP, BRIT YEL GLD FLO IN 20%, FAINT FLUSH TO PR SLO BLU STRM CUT, PR INTER-XLN POR IP, BLK/DK TN STAIN IN 70%, FAIR ODOR, TR FREE OIL

SIMPSON 3775' (-1849')

SS- BLK TN, TT, VF-GRNS, FR SRT, SILI CMNT, IMBED CHRT IP, BRIT YEL FLO IN 80%, FAINT FLUSH TO PR SLO BLU STRM CUT, PR INTER-GRN POR SCAT THRU, BLK STAIN SCAT THRU, FAINT ODOR, NSFO

SS- LT GY FRSTY, TT, F-GRNS, GD SRT, SUB-ANG GRNS, SILI CMNT, IMBED SH IP, NO FLO, TR TR BRIT YEL GLD FLO WHEN CUT, FAINT BLU STRM CUT, PR/FR INTER-GRN POR THRU, NO STAIN, NO ODOR

SH- GRN GY RD, FRM TO SFT IP, BLKY TO FISS IP, ARG

ARBUCKLE 3830' (-1904')

DOLO- BFF TN, HRD, FVF-XLN, SUCRO MTRX THRU, TR BRIT YEL GLD FLO, TR SFT WHT CHLK, FR FLUSH TO FR BLU STRM CUT, PR INTER-XLN POR THRU TO TR VUG POR, DK TN STAIN IP, FREE OIL IP, FR/STRNG ODOR

3838' DOLO- OFF WHT TN, HRD DNS, FVF-XLN, SUCRO MTRX THRU TO TR RE-XLN MTRX, TR SFT WHT CHLK, BRIT YEL GLD FLO IN 80%, FR FLUSH TO GD BLU STRM CUT, PR/FR INTER-XLN POR THRU, BLK LIVE OIL STAIN IP, GD SHOW FREE OIL, STRNG ODOR

3844' DOLO- BFF, HRD DNS, FVF-XLN, SUCRO MTRX THRU TO TR RE-XLN MTRX, DLL YEL GLD FLO THRU, PR FLUSH TO PR BLU STRM CUT, PR INTER-XLN POR IP, TR LIVE STAIN, FR ODOR

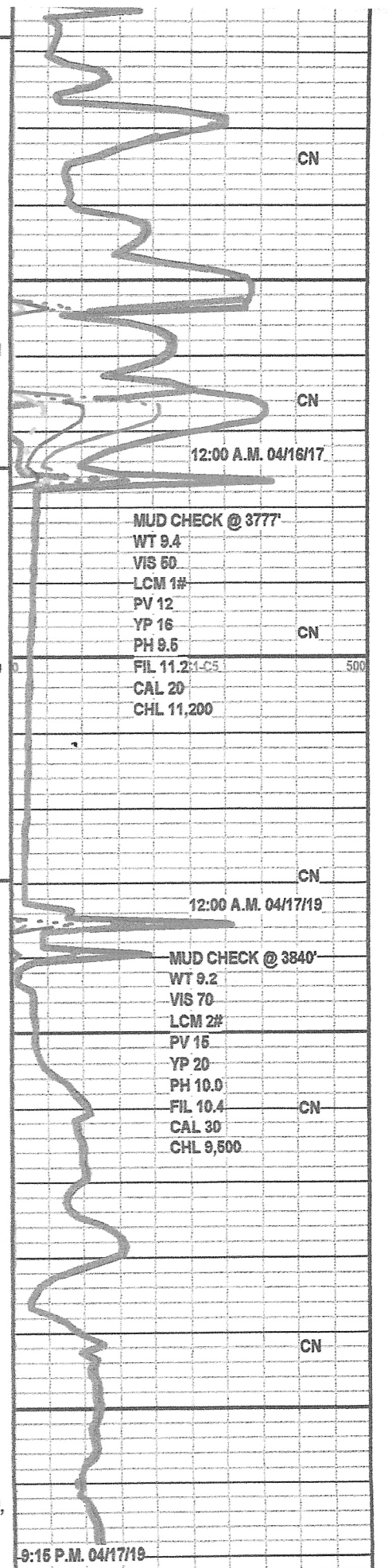
3856' DOLO- BFF, HRD, MDIF-XLN, SUCRO MTRX THRU, NO FLO, FR INTER-XLN POR THRU, NO FLO, NO VIS CUT, TR BLK RESIDUAL STAIN, FAINT ODOR

3875' DOLO- BFF CRM, HRD DNS, MDIF-XLN, SUCRO MTRX THRU TO TR RE-XLN MTRX, TR SFT WHT CHLK, NO FLO, PR/FR INTER-XLN POR THRU, NS

DOLO- CRM, HRD DNS, MD-XLN, SUCRO MTRX THRU, TR SFT WHT CHLK, NO FLO, FR INTER-XLN POR THRU, NS

DOLO- CRM, HRD DNS, MD-XLN, SUCRO MTRX THRU, SFT WHT CHLK IP, NO FLO, GD/FR INTER-XLN POR THRU, NS

DOLO- BFF CRM, HRD DNS, FVF-XLN, SUCRO MTRX THRU, NO FLO, PR/FR INTER-XLN POR IP TO FR VUG POR IP, NS



R.T.D. 3920'

FINISH E-LOGS 8:00 A.M. 04/18/19

L.T.D. 3919'

50