

CONFIDENTIAL

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

RECEIVED
KANSAS CORPORATION COMMISSION

8/10/09

Form ACO-1
September 1999

Form Must Be Typed

ORIGINAL

AUG 13 2007

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE CONSERVATION DIVISION
WICHITA, KS

Operator: License # 7311
Name: Shakespeare Oil Company, Inc.
Address: 202 West Main Street
City/State/Zip: Salem, IL 62881
Purchaser: NCRA
Operator Contact Person: Donald R. Williams
Phone: (618) 548-1585
Contractor: Name: Murfyn Drilling Co., Inc.
License: 30606
Wellsite Geologist: Tom Funk

Designate Type of Completion:
 New Well Re-Entry Workover
 Oil SWD SLOW Temp. Abd.
 Gas ENHR SIGW
 Dry Other (Core, WSW, Expl., Cathodic, etc)

If Workover/Re-entry: Old Well Info as follows:
Operator: _____
Well Name: _____

Original Comp. Date: _____ Original Total Depth: _____
 Deepening Re-perf. Conv. to Enhr./SWD
 Plug Back _____ Plug Back Total Depth _____
 Commingled _____ Docket No. _____
 Dual Completion _____ Docket No. _____
 Other (SWD or Enhr.?) _____ Docket No. _____

6/25/07	7/3/07	7/31/07
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 109-20782-00-60
County: Logan
C N/2 SE SW Sec. 16 Twp. 13 S. R. 32 East West
990 feet from (S) N (circle one) Line of Section
1980 feet from E (W) (circle one) Line of Section

Footages Calculated from Nearest Outside Section Corner:
(circle one) NE SE NW (SW)
Lease Name: Badger Well #: 1-16

Field Name: Unnamed
Producing Formation: LKC / Ft. Scott / Johnson
Elevation: Ground: 3000' Kelly Bushing: 3010'
Total Depth: 4669' Plug Back Total Depth: 4626'
Amount of Surface Pipe Set and Cemented at 212 Feet
Multiple Stage Cementing Collar Used? Yes No
If yes, show depth set 2498 Feet
If Alternate II completion, cement circulated from 2498
feet depth to surface w/ 410 sx cmt.

Drilling Fluid Management Plan AHHS 2-16-09
(Data must be collected from the Reserve Pit)
Chloride content 6500 ppm Fluid volume 2500 bbls
Dewatering method used evaporation
Location of fluid disposal if hauled offsite: _____
Operator Name: _____
Lease Name: _____ License No.: _____
Quarter _____ Sec. _____ Twp. _____ S. R. _____ East West
County: _____ Docket No.: _____

INSTRUCTIONS: An original and two copies of this form shall be filed with the Kansas Corporation Commission, 130 S. Market - Room 2078, Wichita, Kansas 67202, within 120 days of the spud date, recompletion, workover or conversion of a well. Rule 82-3-130, 82-3-106 and 82-3-107 apply. Information of side two of this form will be held confidential for a period of 12 months if requested in writing and submitted with the form (see rule 82-3-107 for confidentiality in excess of 12 months). One copy of all wireline logs and geologist well report shall be attached with this form. ALL CEMENTING TICKETS MUST BE ATTACHED. Submit CP-4 form with all plugged wells. Submit CP-111 form with all temporarily abandoned wells.

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature: Donald R. Will
Title: Vice President Date: 8/10/07

Subscribed and sworn to before me this 10th day of August, 2007.


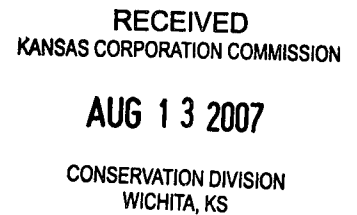
Notary Public: Melissa A. McCormick
Date Commission Expires: 4-11-11

OFFICIAL SEAL
MELISSA A. MCCORMICK
Notary Public, State of Illinois
My Commission Expires 04-11-11

KCC Office Use ONLY
 Letter of Confidentiality Received
If Denied, Yes Date: _____
 Wireline Log Received
 Geologist Report Received
 UIC Distribution

Operator Name: Shakespeare Oil Company, Inc. Lease Name: Badger Well #: 1-16
 Sec. 16 Twp. 13 S. R. 32 East West County: Logan

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed. Attach copy of all Electric Wireline Logs surveyed. Attach final geological well site report.

Drill Stem Tests Taken <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i> Samples Sent to Geological Survey <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Cores Taken <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Electric Log Run <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <i>(Submit Copy)</i> List All E. Logs Run: DIL/GR, CDL, CNL, ML, SONIC, CBL/GR	<input checked="" type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample Name Top Datum See Geological Report <div style="text-align: center;">   </div>
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CASING RECORD <input checked="" type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12 1/4"	8 5/8"	23#	212'	Common	165	2% gel, 3% CaCl
Production	7 7/8"	4 1/2"	10.5#	4667'	ASC	150	5#/sx Gilsonite, 3/4% CFR

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	#Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input checked="" type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone	2498'-0'	Pozmix	410	65/35 w/ 6% gel & 1/4#/sx flocele

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type		Acid, Fracture, Shot, Cement Squeeze Record	
	Specify Footage of Each Interval Perforated		(Amount and Kind of Material Used)	
4	Johnson 4556-58, 4563-68	500 gal 15% MCA, 1000 gal 15% NeFe	Depth	
4	Ft. Scott 4484-86, 4494-97	500 gal 15% MCA, 1000 gal 15% NeFe	4556-68	
4	LKC "I" & "J" 4188-95, 4212-16	500 gal 15% MCA, 1000 gal 15% NeFe	4484-97	
			4188-4216	

TUBING RECORD		Size <u>2 3/8"</u>	Set At <u>4620'</u>	Packer At	Liner Run <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Date of First, Resumerd Production, SWD or Enhr. <u>8/1/07</u>			Producing Method <input type="checkbox"/> Flowing <input checked="" type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other (Explain)		
Estimated Production Per 24 Hours	Oil Bbls. <u>100</u>	Gas Mcf	Water Bbls. <u>10</u>	Gas-Oil Ratio	Gravity <u>38</u>

Disposition of Gas METHOD OF COMPLETION Production Interval

Vented Sold Used on Lease Open Hole Perf. Dually Comp. Commingled
(If vented, Submit ACO-18.) Other (Specify) _____

ALLIED CEMENTING CO., INC.

28615

EMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

OAKLEY KS

DATE <u>7-12-07</u>	SEC. <u>16</u>	TWP. <u>13</u>	RANGE <u>32W</u>	CALLED OUT	ON LOCATION <u>11:00am</u>	JOB START <u>2:30pm</u>	JOB FINISH <u>4:15pm</u>
LEASE <u>Badger</u>	WELL # <u>1-16</u>	LOCATION <u>OAKLEY 12S-1W-15-</u>			COUNTY <u>LOGAN</u>	STATE <u>KS</u>	
OLD OR <u>NEW</u> (Circle one)			<u>12W-1N</u>				

CONTRACTOR Cypress Well Service
 TYPE OF JOB Part Collar
 HOLE SIZE _____ T.D. _____
 CASING SIZE 4 1/2 DEPTH _____
 TUBING SIZE 2 3/8 DEPTH 2500'
 DRILL PIPE _____ DEPTH _____
 TOOL _____ DEPTH _____
 PRES. MAX _____ MINIMUM _____
 MEAS. LINE _____ SHOE JOINT _____
 CEMENT LEFT IN CSG. Bridge Plug @ 3875
 PERFS. Part Collar 2500
 DISPLACEMENT 9.75 Bbls

OWNER same
 CEMENT
 AMOUNT ORDERED 550 lbs 65/35
690 gel 114# Clo-seal
(used 410 SKS)
 COMMON _____
 POZMIX _____
 GEL _____
 CHLORIDE _____
 ASC _____
 LITE 410 @ 11.85 = 4858.50
 Flo-seal 103 @ 2.00 = 206.00
 Sand 1 SK @ 10.50 = 10.50
 HANDLING 593 @ 1.90 = 1126.70
 MILEAGE 0.94 SKY mile = 800.55
 TOTAL 7002.25

EQUIPMENT

PUMP TRUCK CEMENTER Tuzz4
 # 422 HELPER Wayne
 BULK TRUCK
 # 218 DRIVER Terry
 BULK TRUCK
 # 394 DRIVER Jerry

REMARKS:

Load hole circ oil into sub tanks start Brid Plug to 1000'
Spd 1sk sand on Bridge Plug
open tool mix 410SKS 65/35 690 gel
114# Clo-seal cement did circulate
Displace 9.14 Bbls. Reverse to clean
* press to 1000' reverse to clean
wash sand off Bridge Plug
Job complete @ 4:15pm
THANKS Tuzz4 crew

SERVICE

DEPTH OF JOB 2500'
 PUMP TRUCK CHARGE 955.00
 EXTRA FOOTAGE _____
 MILEAGE 15 @ 6.00 = 90.00
 MANIFOLD _____
 TOTAL 1045.00

CHARGE TO: Shakespeare Oil & Gas
 STREET _____
 CITY _____ STATE _____ ZIP _____

PLUG & FLOAT EQUIPMENT

RECEIVED

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TOTAL _____

TAX _____
 TOTAL CHARGE _____
 DISCOUNT _____ IF PAID IN 30 DAYS

T.C. LARSON

PRINTED NAME

To Allied Cementing Co., Inc.
 You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

SIGNATURE T.C. Larson

ALLIED CEMENTING CO., INC. 25951

SHIP TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT:

Oakley

DATE <u>6-25-07</u>	SEC <u>16</u>	TWP. <u>13^s</u>	RANGE <u>32^w</u>	CALLED OUT	ON LOCATION <u>11:00 PM</u>	JOB START <u>11:45 PM</u>	JOB FINISH <u>midnight</u>
LEASE <u>Badger</u>	WELL # <u>1-16</u>	LOCATION <u>Oakley 12S-14-15-1/2W</u>			COUNTY <u>Logan</u>	STATE <u>Ks</u>	
OLD OR <u>NEW</u> (Circle one)				<u>N.S.</u>			

CONTRACTOR MurFin Dcls Co #14

TYPE OF JOB Surface

HOLE SIZE 12 1/4 T.D. 215'

CASING SIZE 8 5/8 DEPTH 212'

TUBING SIZE DEPTH

DRILL PIPE DEPTH

TOOL DEPTH

PRES. MAX MINIMUM

MEAS. LINE SHOE JOINT

CEMENT LEFT IN CSG. 15'

PERFS.

DISPLACEMENT 12 7/4 BBL

OWNER Same

CEMENT

AMOUNT ORDERED 165 SKS com

3% CC - 2% Gel

COMMON	<u>165 SKS @</u>	<u>12.60</u>	<u>2079.00</u>
POZMIX		@	
GEL	<u>3 SKS @</u>	<u>16.65</u>	<u>49.95</u>
CHLORIDE	<u>5 SKS @</u>	<u>46.60</u>	<u>233.00</u>
ASC		@	
		@	
		@	
		@	
		@	
		@	
		@	
		@	

KCC
AUG 10 2007
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EQUIPMENT

PUMP TRUCK CEMENTER Walt

422 HELPER Wayne

BULK TRUCK

218 DRIVER Alvin

BULK TRUCK

DRIVER

HANDLING	<u>173 SKS @</u>	<u>1.90</u>	<u>328.70</u>
MILEAGE	<u>9.4 per SK/mile</u>		<u>250.00</u>
TOTAL			<u>2940.65</u>

REMARKS:

Cement Did Cure

Thank You

SERVICE

DEPTH OF JOB			
PUMP TRUCK CHARGE			<u>815.00</u>
EXTRA FOOTAGE		@	
MILEAGE	<u>15-miles</u>	@	<u>6.00</u> <u>90.00</u>
MANIFOLD		@	
		@	
		@	

CHARGE TO: Shakespeare Oil Co Inc

STREET _____

CITY _____ STATE _____ ZIP _____

TOTAL 905.00

PLUG & FLOAT EQUIPMENT

<u>1-Surface Plug</u>	<u>8 5/8</u>	@	<u>60.00</u>
RECEIVED		@	
KANSAS CORPORATION COMMISSION		@	
AUG 13 2007		@	
CONSERVATION DIVISION WICHITA, KS		@	
TOTAL			<u>60.00</u>

To Allied Cementing Co., Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read & understand the "TERMS AND CONDITIONS" listed on the reverse side.

TAX _____

TOTAL CHARGE _____

DISCOUNT _____ IF PAID IN 30 DAYS

SIGNATURE Greg Unruh

Greg Unruh
PRINTED NAME

KCC
AUG 10 2007
CONFIDENTIAL

Thomas J. Funk
Petroleum Geologist
785-542-3359

GEOLOGIST'S REPORT
DRILLING TIME AND SAMPLE LOG

OPERATOR Shakespeare Oil Co., Inc
LEASE Badger WELL NO. 1-16
FIELD Wildcat
LOCATION 990' ESL : 1980' FWL
SEC. 16 TWP. 13s RGE 32w
COUNTY Logan STATE KANSAS

APT # 15-109-20782
ELEVATION
KB 3010
DF _____
GL 3000
Measurements Are All
From KB

CASING RECORD

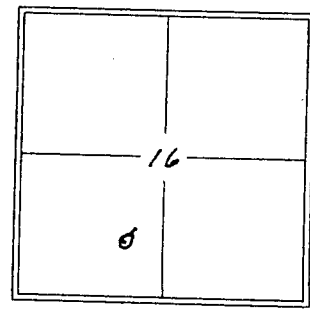
SURFACE 8 5/8" at 212' KB
4 1/2" 165 ss
PRODUCTION _____

CONTRACTOR Murfin Drilg Co Rig #14
COMM: 6/25/07 COMP: 7/4/07
RTD 4665 LOG TD 4669
SAMPLES SAVED FROM 3650 TO TD
DRILLING TIME KEPT FROM 3650 TO TD
SAMPLES EXAMINED FROM 3650 TO TD
GEOLOGICAL SUPERVISION FROM 3850 TO TD
MUD UP 3500 TYPE MUD Chemical

ELECTRICAL SURVEYS

Log Tech
DIL
CDL/CNL
MEL
B+C/S

FORMATION	LOG		SAMPLE		STRUCT. COMP.
	TOP	DATUM	TOP	DATUM	
Anhydrite	2477	(+533)	2477	(+533)	
B/Anhydrite	2500	(+510)	2500	(+510)	
Tapoka	3791	(-781)	3789	(-779)	
Heebner Sh	3953	(-943)	3950	(-940)	
Lansing	3995	(-985)	3993	(-983)	
Murrie Creek	4144	(-1134)	4141	(-1131)	
Stack Sh	4226	(-1216)	4224	(-1214)	
Marmaton	4329	(-1319)	4325	(-1315)	
Pawnee	4428	(-1418)	4424	(-1414)	
Fort Scott	4482	(-1472)	4478	(-1468)	
Cherokee Sh	4511	(-1501)	4508	(-1498)	
Johansen Zone	4552	(-1542)	4552	(-1542)	
Mississippian	4600	(-1590)	4597	(-1587)	
TD	4669		4665		



REFERENCE WELL FOR STRUCTURAL COMPARISON Shakespeare Oil Co #1-9 Frey
800' ESL : 500' FWL sec 9-13s-32w, Logan County, Kansas

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CONSERVATION DIVISION
WICHITA, KS

DRILL STEM TESTS

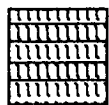
No.	Interval	IFP/Time	ISIP/Time	FFP/Time	FSIP/Time	IH-FHH	RECOVERY
1	4137- 4165	12-20 30"	1245 30"	23-26 5"	N/A out	2046- 1988 113°F	10' mud
2	4167- 4215	20-76 30"	1245 30"	89-149 45"	1273 90"	2072- 2070 117°F	186' GIP 186' mcb (30" g, 30" w, 40" m) 186' mcb (30" g, 30" w, 20" m) 372' Total Fluid
3	4219- 4245	34-66 30"	1207 30"	71-98 30"	1221 60"	2102- 2013 117°F	93' mcb w/ oil sps (10" w) 93' mcb (30" w, 70" m) 186' Total Fluid Chls: 27,000 ppm
4	4526- 4573	18-45 30"	281 30"	45-71 60"	1100 90"	2342- 2198 122°F	98' Gocm (25" g, 5" w, 75" m)

REMARKS AND RECOMMENDATIONS

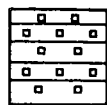
Based upon DST recovery, log analysis, and sample examination it was determined that pipe be set and further testing be performed at the #1-16 Bagger.

Handwritten Signature
Petroleum Geologist

LEGEND



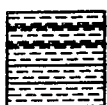
Anhydrite



Salt



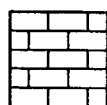
Sandstone



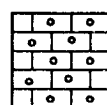
Shale



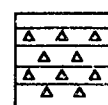
Carb sh



Limestone



Ool. Lime



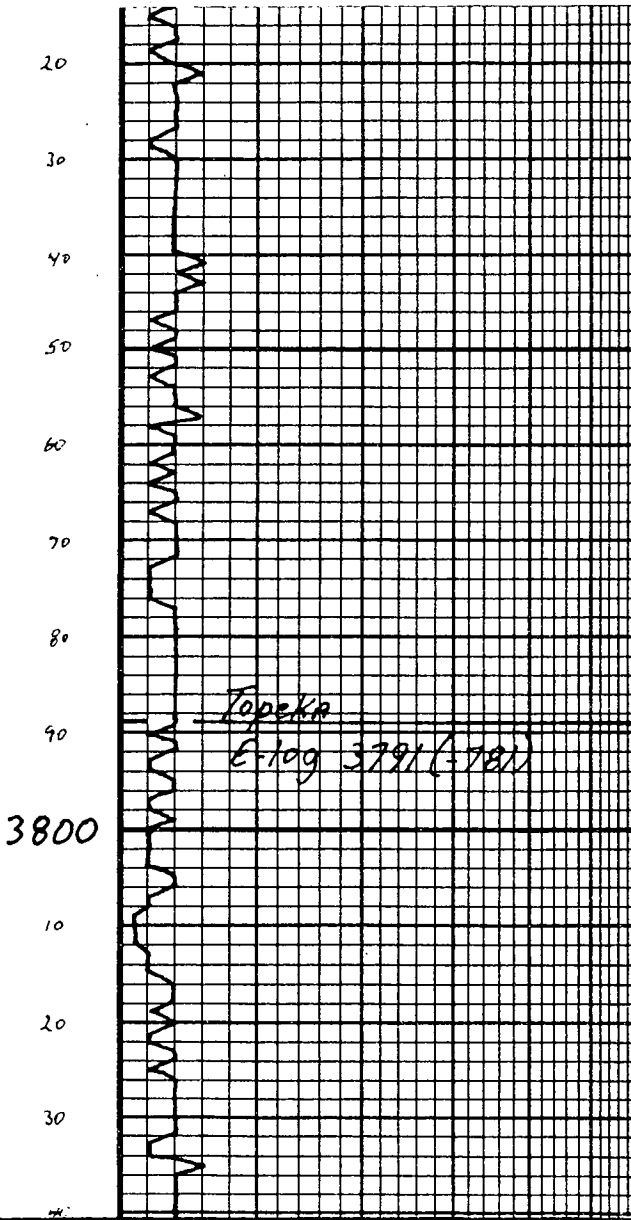
Chert



Dolomite

LOG 7704

LITHOLOGY	DEPTH	<p style="text-align: center;">DRILLING TIME IN MINUTES PER FOOT</p> <p style="text-align: center;">Rate of Penetration Increases</p> <p style="text-align: center;">5" 10" 15" 20" 25"</p>	SAMPLE DESCRIPTIONS	REMARKS
Limestone	50			
Limestone	60		Sh. gray & green, soft.	
Limestone	70		LS. con-ty. f.aly, chalky in pt, foss sh. bed, w/ 4c ppt. of ss.	
Limestone	80		Sh. gray, soft.	
Limestone	90		Sh. green & gray	
Limestone	3700		LS. in. d. w. v.f. ss, foss frags, brittle, bed	
Limestone	10		LS. in. d. w. v.f. ss, foss frags, brittle, bed	



pt.

Sh. gray, blue, & marl, soft.

LS. lt gray, v. dark, micaceous, bed blocky, mott & argill. in part.

LS. con-ty. f. sh., foss, arg. & chalky & soft.

LS. lt. tv. f. sh., mott. foss. frags, mott, v. soft p. pt. v.

LS. gray, dark, argill, mott.

Topokka
E-log 3791 (-781)

LS. tv. f. sh., dark, foss, blocky, soft mott. p. pt. v.

LS. con-ty. f. sh., soft arg. frags, frags, soft chalky, w/ f. pt. & foss. mott. p. mott, blk. tabry mott str, w/ chert, con. arg.

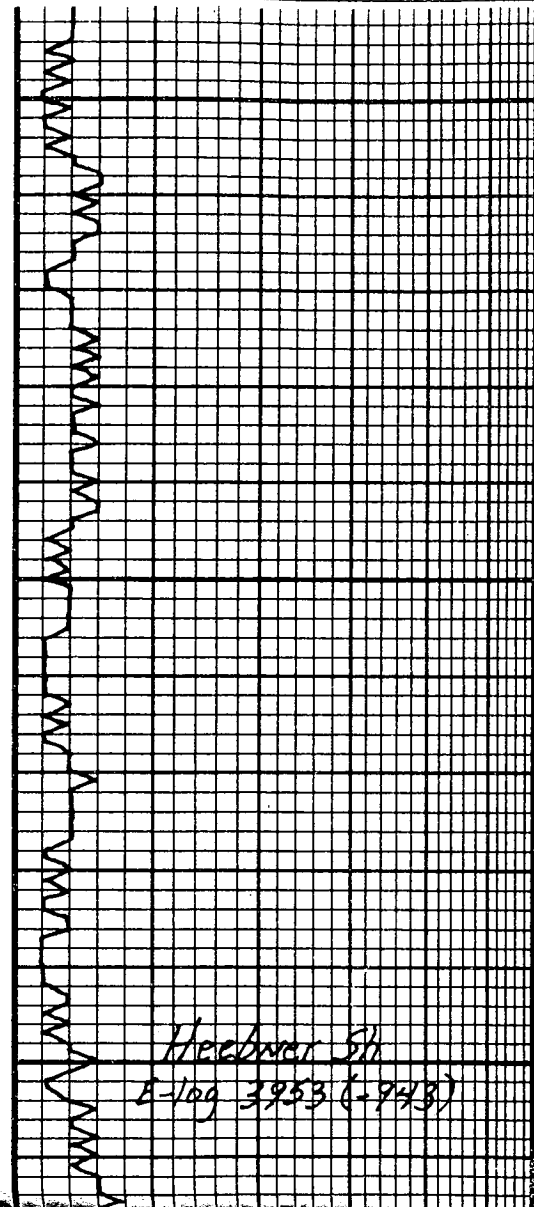
LS. lt. gray, v. dark, v. f. sh., foss in part, mott, blocky.

Sh. green & gray.

6/29/07 3787
WT 8.6
Vis 54
WT 6.8
CHI 2.700



50
60
70
80
90
3900
10
20
30
40
50
60



siltst. lt gray, argill, soft, mica
6 py in pt

LS, dk gray, v. dark, argill

LS, tan, F-xlv, m. co-ool, chalky,
soft, pt vis. 0.25

sh, gray, calc.

AP. br. LS, gray, dk, argill, m. pt in
pt

sh, green-gray

LS, com. f. xlv, dk, F-sh, East,
chty, v. f. m. d. d. p. used,
s. f. blk. l. arg. oil, no odor, no
smell

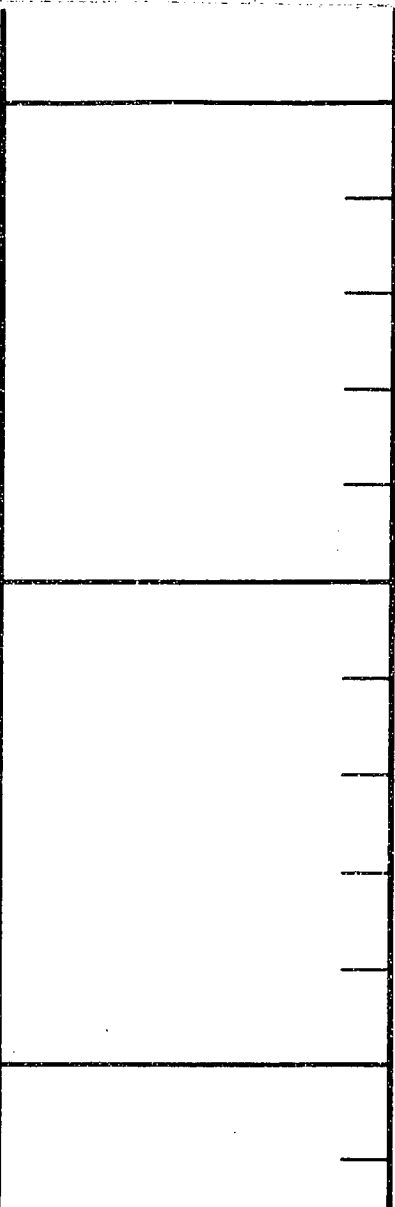
LS, tan, f. xlv, v. dark, v. F-xlv, foss
in pt

LS, com. f. xlv, v. chalky, soft,
pt vis. 0.25

Heebner Sh
E-log 3953 (6-943)

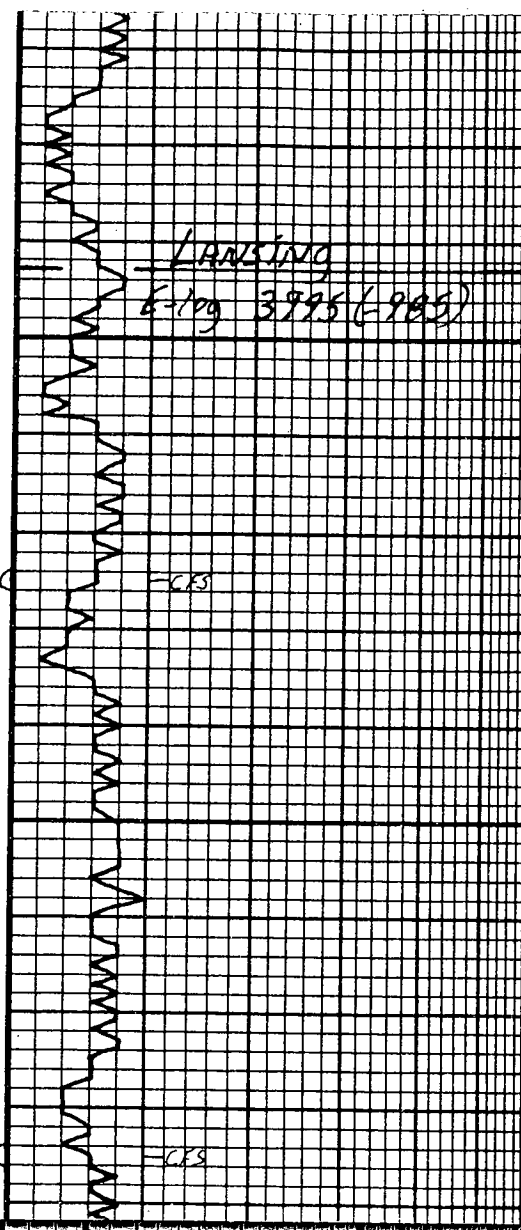
sh, blk, carb

sh, gray; br, silty





70
80
90
4000
10
20
30
40
50
60
70
80
90



LANSING
E-log 3995 (985)

LS. con-wht, con to f-xlv. Foss frags,
sm ool, chalky, v. soft middle p.
N.S.

abt sh, gray, box, 1/2 blk, silty, soft,
sm calc.

LS. con to con, f-xlv, dark, ool, var
part, Foss frag, brittle, con blocky
w/ fr to pr int-ool, v. int. f-xlv
sh to f-xlv show f-xlv bil, slt. ool,
set dck str, few p/s w/ wlx dull flint
show in 1/2 of sp.

LS. lt gray, con, v. f-xlv, blocky, soft
foss, sm argill.

abt sh, gray, silty, soft

LS. con-14' to f-xlv, dark, ool, brittle,
sm set frag, w/ pr to fr in int part
few p/s w/ show dck gray ool, N.S.
indur, set dck str, no float

sh, lt gray, calc, fine

LS. con, dark, mica-ool, occas Foss
frag, blocky, + ch, wbt, ppq

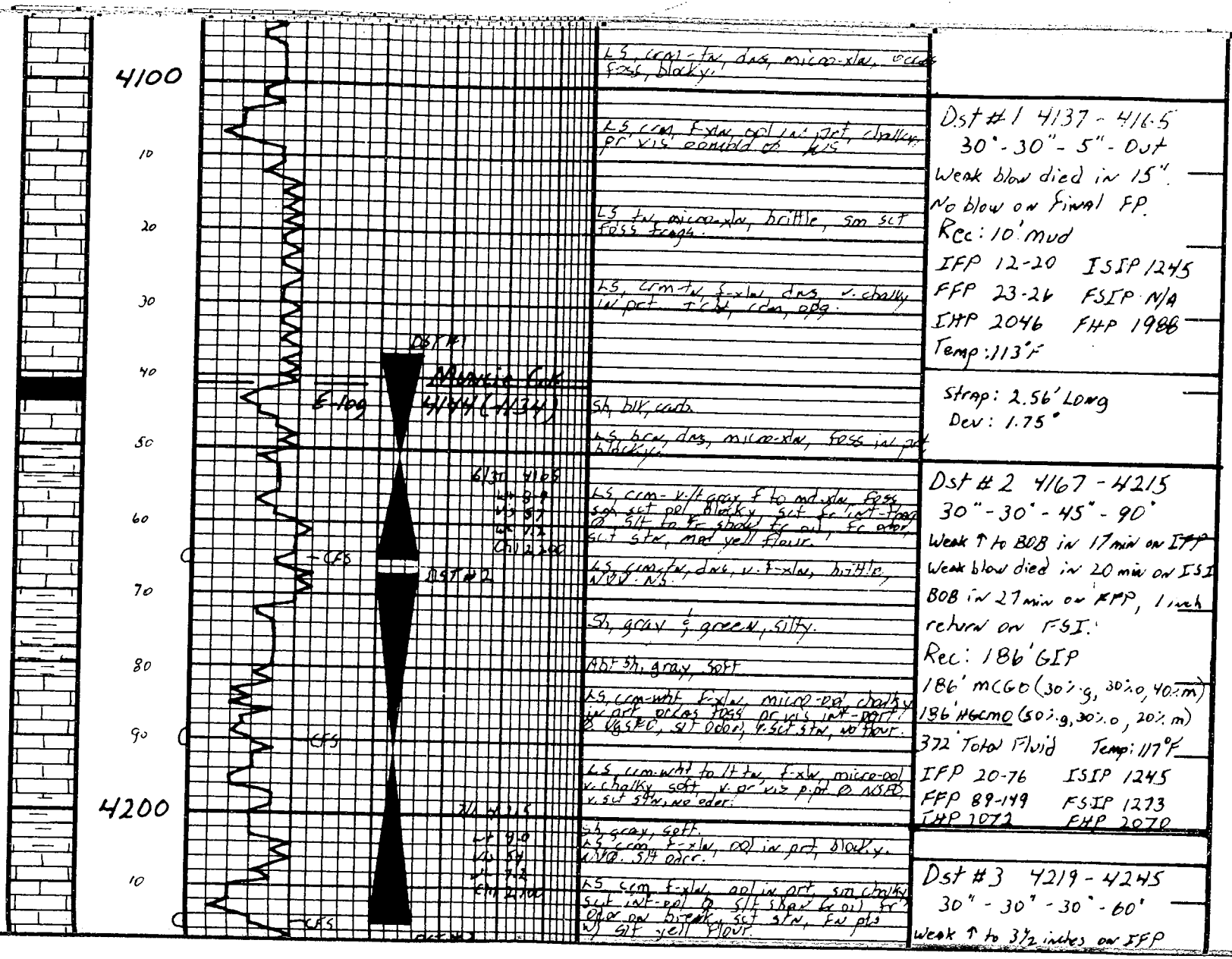
sh, lt gray
+ LS. con, dark, v. f-xlv, con, con
set foss, v. int ool, N.S. N.S.

LS. con, f-xlv, dark, Foss in part set
ool, chalky, pr v. N.S.F.O., few p/s
w/ blk edge str

sh, gray

-CES

-CES



4100

10

20

30

40

50

60

70

80

90

4200

10

LS, crm-tu, das, micro-xlw, v. chally, foss, blocky.

LS, crm, f-xlw, ool in prt, chally, pr vis could be N.S.

LS tu, micro-xlw, brittle, sm sct foss frags.

LS, crm-tu, f-xlw, das, v. chally, in prt, t-act, rdn, ool.

sh, blk, carb.

LS, brn, das, micro-xlw, foss in prt, blocky.

LS, crm - v. l gray, f to md-xlw, foss, soft sct ool, blocky, sct to int-top of silt to fr shale to oil, fr ool, sct str, med yell flour.

LS, gray, f, das, v. f-xlw, brittle, N.S.

sh, gray & green, silty.

sh, gray, soft.

LS, crm-whit, f-xlw, micro-ool, chally, in prt, ool as foss, pr vis, int-top of v. sct str, no ool, v. sct str, no ool.

LS, crm-whit to lt tan, f-xlw, micro-ool, v. chally, soft, v. pr vis p.p.t. @ N.S.P., v. sct str, no ool.

sh, gray, soft, LS, crm, f-xlw, ool in prt, blocky, N.S.P. silt ool.

LS, crm, f-xlw, ool in prt, sm chally, sct int-ool to silt shale to oil, fr ool, med brittle, sct str, f-xlw, v. sct str, med yell flour.

Dst #1 4137 - 4165
30" - 30" - 5" - Out
Weak blow died in 15"
No blow on final FP.
Rec: 10' mud
IFP 12-20 ISSIP 1245
FFP 23-24 FSIP N/A
IHP 2046 FHP 1986
Temp: 113°F

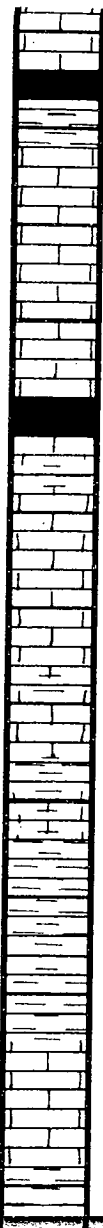
Strap: 2.56' Long
Dev: 1.75"

Dst #2 4167 - 4215
30" - 30" - 45" - 90"
Weak ↑ to BOB in 17 min on IFF
Weak blow died in 20 min on ISI
BOB in 27 min on FFP, 1 inch
return on FSI.

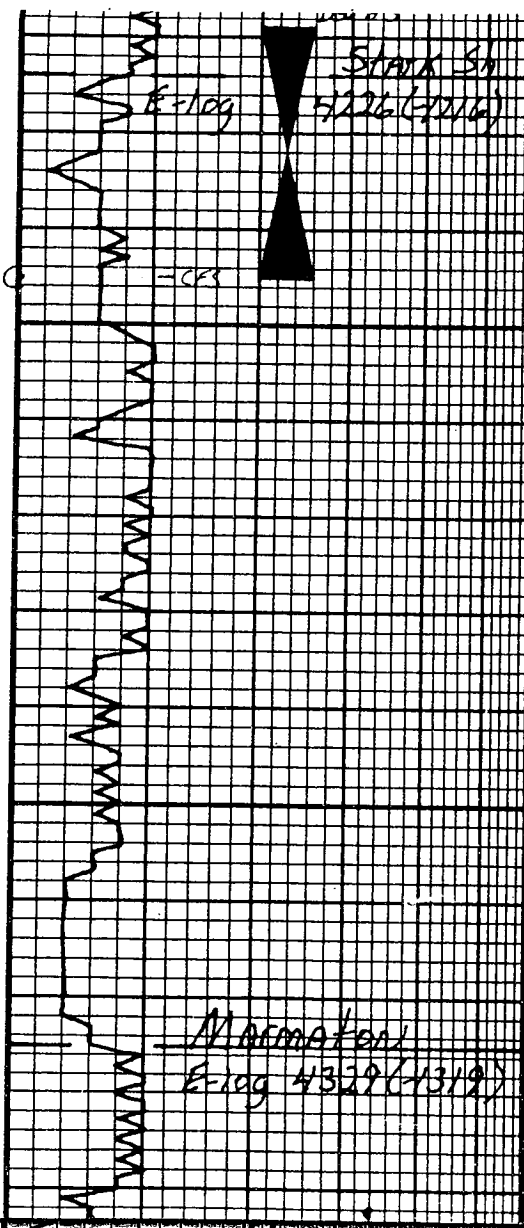
Rec: 186' GIP
186' MCGO (30% g, 30% o, 40% m)
186' MCGMO (50% g, 30% o, 20% m)
372 Total Fluid Temp: 117°F

IFP 20-76 ISSIP 1245
FFP 89-149 FSIP 1273
IHP 1072 FHP 2070

Dst #3 4219 - 4245
30" - 30" - 30" - 60"
Weak ↑ to 3 1/2 inches on IFF



20
30
40
50
60
70
80
90
4300
10
20
30
40

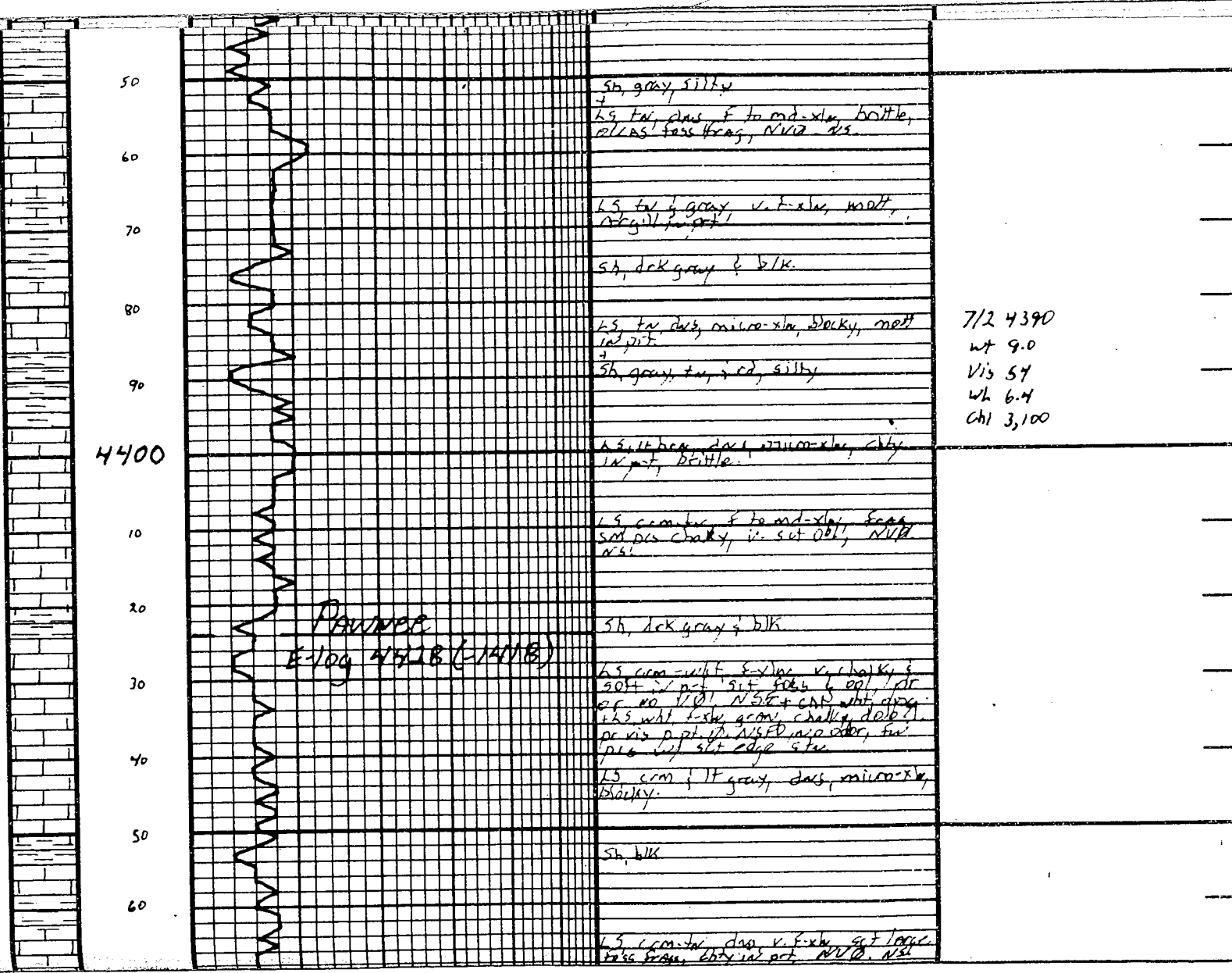


STAIN SH
E-log 4326 (4316)

sh blk carb
LS, blk, das, micro-xlw, fass in prt.
LS, com: tan, f-xlw, pal in prt, sm v. chalky, w/ sil in pt. - bol @ 4355 ft, gal odor, v. set str, wk dull flav.
LS, H tan, das, v. f-xlw, sm fass frags, chalky.
LS, tan, das, micro-xlw, hrd, brittle
Sh, blk, carb
LS, H gray, tan, das, v. f-xlw, gran in prt, hrd.
LS, H tan, v. das, micro-xlw, blocky.
LS, tan, f-xlw, gran, dolo, das, pr vis. B. NS
f. sh. gray-green, soft.
LS, gray, das, soft, argill.
Sh, gray, green, f. bear, soft, silty, sm set silty.
LS, tan, f. hrd, das, micro-xlw, cool in prt, brittle, NID. NS
Sh, gray, f. blk.

MAGMATON
E-log 4329 (4319)

Weak ↑ to 1/2 inches on FFP
Rec: 93' wcm w/oil spots
93' wcm (30% w, 70% m)
186' Total Fluid (LWS: 27,000 ppm)
IFP 34-66 ISIP 1207
FFP 71-98 FSIP 1221
IHP 2102 FHP 2013
Temp: 117°F



4400

50
60
70
80
90
10
20
30
40
50
60

PAVING
E-log 4428 (1418)

sh, gray, silty
 ls, tan, dark, fine to med-xls, brittle,
 PLAS! base frag, NVA NS

ls, tan & gray, v. fine xls, med,
 not full, not

sh, dk gray & blk.

ls, tan, dark, micro-xls, blocky, med
 not full

sh, gray, tan, red, silty

ls, tan, dark, micro-xls, chky
 not full, brittle!

ls, cream, fine to med-xls, frag,
 soft on chky, v. soft, NVA
 NS!

sh, dk gray & blk.

ls, cream with fine xls, v. chky &
 soft in part, soft edge & top, not
 or no NVA, NVA + can't with chky
 + ls, wht, fine grained, chky, dark
 or via part of NVA, also other, fine
 plus with slit edge etc.

ls, cream & if gray, dark, micro-xls,
 blocky.

sh, blk

ls, cream, dark, v. fine, soft large
 base frag, chky in part, NVA, NS!

7/2 4390
 wt 9.0
 vis 57
 wh 6.4
 chl 3,100

4600

10

20

30

40

50

60

70

80

90

4700

WV 159
E-log 4600 (1590)

LS cream-gray, f to v. fine, dark, ant
sd gen inclusions, sm foss frags, oolite,
cherty

LS dk gray, dark, v. f. fine, sandy in
part, cherty, soft

LS, gray, v. dark, v. f. fine, argill,
med. in part, soft
+ chert, dk gray, oolite

LS, cream-gray, v. f. fine, v. cherty in
part, sd gen inclusions

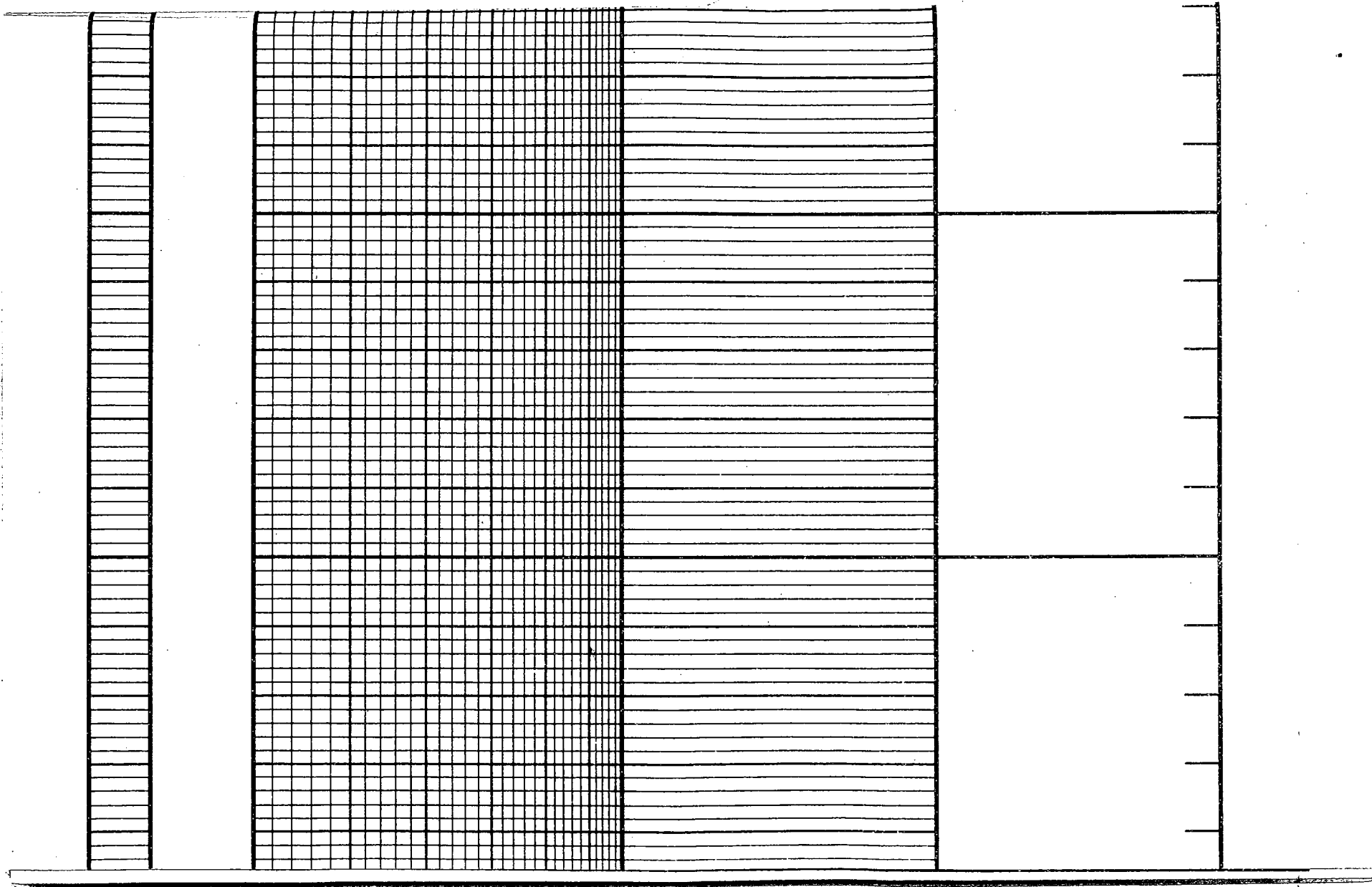
LS, cream to dk gray, dark, v. f. fine,
thin silt of glass, cherty, somewhat
argill

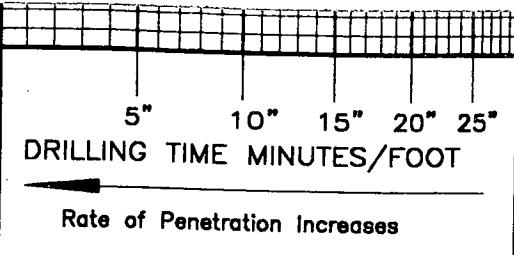
CEG Dev 185'

LS, cream to dark, v. f. fine, blocky,
silt foss frags, cherty in part

RTD 4665 LTD 4669

WL 9.6
CN 1500



LITHOLOGY	DEPTH	 5" 10" 15" 20" 25" DRILLING TIME MINUTES/FOOT ← Rate of Penetration Increases	SAMPLE DESCRIPTIONS	REMARKS
COMPANY <u>Shakespeare Oil Co., Inc</u> LEASE <u>#1-16 Badger</u> LOCATION <u>890' E 1/4 1980' E W 1/4</u> SEC. <u>16</u> TWP. <u>13 S</u> RGE. <u>32 W</u> COUNTY <u>Logan</u> STATE <u>KANSAS</u>				
			ELEVATION: <u>3010' KB</u>	