KOLAR Document ID: 1855266

Confidentiality Requested:
☐ Yes ☑ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

Form ACO-1
January 2018
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 34916
Name: FourWinds Oil Corporation
Address 1: PO BOX 1063
Address 2:
City: HAYS State: KS Zip: 67601 + 1063
Contact Person: Dan Windholz
Phone: (785) 259-8403
CONTRACTOR: License # 31548
Name: Discovery Drilling
Wellsite Geologist: Cameron Brin
Purchaser:

Designate Type of Completion:
☑ New Well ☐ Re-Entry ☐ Workover
☑ Oil ☐ WSW ☐ SWD
☐ Gas ☐ DH ☐ EOR
☐ OG ☐ GSW
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:
Operator:
Well Name:
Original Comp. Date: Original Total Depth:
☐ Deepening ☐ Re-perf. ☐ Conv. to EOR ☐ Conv. to SWD
☐ Plug Back ☐ Liner ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ EOR Permit #:
☐ GSW Permit #:

4/21/2025 Spud Date or Recompletion Date
4/26/2025 Date Reached TD
4/27/2025 Completion Date or Recompletion Date

API No.: 15-147-20764-00-00
Spot Description:
N2 - SE - SE - NE Sec. 29 Twp. 5 S. R. 20 ☐ East ☑ West
2300 Feet from ☑ North / ☐ South Line of Section
330 Feet from ☑ East / ☐ West Line of Section
Footages Calculated from Nearest Outside Section Corner:
☑ NE ☐ NW ☐ SE ☐ SW
GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*
Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84
County: Phillips
Lease Name: DG HANSEN Well #: 2
Field Name:
Producing Formation: Reagan Sand
Elevation: Ground: 2220 Kelly Bushing: 2228
Total Vertical Depth: 3655 Plug Back Total Depth:
Amount of Surface Pipe Set and Cemented at: 221 Feet
Multiple Stage Cementing Collar Used? ☐ Yes ☑ No
If yes, show depth set: Feet
If Alternate II completion, cement circulated from: 3653
feet depth to: 0 w/ 455 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 5000 ppm Fluid volume: 320 bbls
Dewatering method used: Evaporated
Location of fluid disposal if hauled offsite:
Operator Name:
Lease Name: License #:
Quarter Sec. Twp. S. R. ☐ East ☐ West
County: Permit #:

AFFIDAVIT

I am the affiant and I hereby certify that 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.

Submitted Electronically

KCC Office Use ONLY

☐ **Confidentiality Requested**
Date:
☐ **Confidential Release Date:**
☑ **Wireline Log Received** ☐ **Drill Stem Tests Received**
☑ **Geologist Report / Mud Logs Received**
☐ **UIC Distribution**
ALT ☐ **I** ☑ **II** ☐ **III** **Approved by:** Alexis Vincent **Date:** 08/11/2025

Operator Name: FourWinds Oil Corporation Lease Name: DG HANSEN Well #: 2

Sec. 29 Twp. 5 S. R. 20 ☐ East ☑ West County: Phillips

INSTRUCTIONS: Show important tops 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.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken *(Attach Additional Sheets)*	☐ Yes	☑ No
Samples Sent to Geological Survey	☑ Yes	☐ No
Cores Taken	☐ Yes	☑ No
Electric Log Run	☑ Yes	☐ No
Geologist Report / Mud Logs	☑ Yes	☐ No

List All E. Logs Run:

Micro
Dual Induction
Neutron?Comp

☐ Log Formation (Top), Depth and Datum ☑ Sample

Name	Top	Datum
Topeka	3150	-922
LKC	3390	-1162
Reagan	3652	-1424

CASING RECORD ☑ New ☐ 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	12.25	8.675	23	221	80/20	180	2%gel
Production	7.875	5.5	15.5	3653	qpro	455	10%salt

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☐ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	3651-3655			
	-			

1. Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☑ No *(If No, skip questions 2 and 3)*
2. Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*
3. Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

Date of first Production/Injection or Resumed Production/ Injection: 8/6/2025	Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*					
Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity	

DISPOSITION OF GAS:	METHOD OF COMPLETION:	PRODUCTION INTERVAL:	
		Top	Bottom
☐ Vented ☐ Sold ☐ Used on Lease *(If vented, Submit ACO-18.)*	☑ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*	3651	3655

Shots Per Foot	Perforation Top	Perforation Bottom	Bridge Plug Type	Bridge Plug Set At	Acid, Fracture, Shot, Cementing Squeeze Record *(Amount and Kind of Material Used)*
4	3651	3655			

TUBING RECORD:	Size:	Set At:	Packer At:	
	2.875	3625		

Mail to: KCC - Conservation Division, 266 N. Main, Suite 220, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	FourWinds Oil Corporation
Well Name	DG HANSEN 2
Doc ID	1855266

Casing

Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.675	23	221	80/20	180	2%gel
Production	7.875	5.5	15.5	3653	qpro	455	10%salt

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 4385

Date	Sec.	Twp.	Range	County	State	On Location	Finish
4/27/25	22	5	21	Phillips	Kansas		8:45am

Location Logan 3S 3/4W 5 into

Lease DG Hansen Well No. 2

Owner

Contractor Discovery Rig 4

To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Type Job Long string

Hole Size 7 7/8 T.D. 3655

Charge To Four winds Oil Co

Csg. 5 1/2 15.5# Depth 3653.5

Street

Tbg. Size Depth

City State

Tool Depth

The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. 42.6 Shoe Joint 42.6

Cement Amount Ordered 150 com 10% salt 5% gil 400 60/20 QMDC 1/4# flow 500 gal mud clear

Meas Line Displace 86

EQUIPMENT

Pumptrk 17 No. Cementer Helper Bryant David

Bulktrk 21 No. Driver Driver Doug

Bulktrk 20 No. Driver Driver Corey

JOB SERVICES & REMARKS

Remarks:

Rat Hole - 30 sks

Mouse Hole - 20 sks

Centralizers - # 1, 3, 5, 7, 9, 11, 45

Baskets # 2, 10, 46

D/V or Port Collar

Ran 5 1/2 and est circulation
Mixed 500 gal mud clear
Cemented 5 1/2 with 500 sks

Cement Did circulate

Lift pressure @ 1100#
Landed Plug @ 1800#

Common 150

~~Poz. Mix~~ 400 60/20 QMDC

Gel.

Calcium

Hulls

Salt 13

Flowseal 100#

Kol-Seal 750#

Mud CLR 48 500 gal

CFL-117 or CD110 CAF 38

Sand

Handling 571

Mileage

FLOAT EQUIPMENT

Guide Shoe

Centralizer - 7

Baskets - 3

AFU Inserts

Float Shoe - 1

Latch Down - 1

Pumptrk Charge Prod String

Mileage 64

Tax

Discount

Total Charge

Thanks

X Signature

QUALITY OILWELL CEMENTING, INC.

Federal Tax I.D.# 20-2886107

Phone 785-483-1071
Cell 785-324-1041

Home Office P.O. Box 32 Russell, KS 67665

No. 4382

Date	Sec.	Twp.	Range	County	State	On Location	Finish
4/21/25	22	5	21	Phillips	Kansas		2:15pm

Location Logan 3S 3/4W 5in to

Lease D G Hansen | Well No. 2 | Owner

Contractor Discovery | To Quality Oilwell Cementing, Inc.
You are hereby requested to rent cementing equipment and furnish cementer and helper to assist owner or contractor to do work as listed.

Type Job Surface

Hole Size 12 1/4 | T.D. 222 | Charge To Fourwinds Oil

Csg. 8 5/8 | Depth 221.37 | Street

Tbg. Size | Depth | City State

Tool | Depth | The above was done to satisfaction and supervision of owner agent or contractor.

Cement Left in Csg. 15 | Shoe Joint | Cement Amount Ordered 160 60/40 3%cc 2%gel

Meas Line | Displace 13

EQUIPMENT

Pumptrk 5 No. Cementer Helper Joe

Bulktrk 9 No. Driver Doug

Bulktrk P.U. No. Driver David

JOB SERVICES & REMARKS

Remarks:

Rat Hole

Mouse Hole

Centralizers

Baskets

D/V or Port Collar

Ran 8 5/8 and est. Circulation cemented with 160 sks and displaced

Cement Did Circulate

Common	145
Poz. Mix	35
Gel.	3
Calcium	7
Hulls	
Salt	
Flowseal	
Kol-Seal	
Mud CLR 48	
CFL-117 or CD110 CAF 38	
Sand	
Handling	190
Mileage	

FLOAT EQUIPMENT

Guide Shoe	
Centralizer	
Baskets	
AFU Inserts	
Float Shoe	
Latch Down	

Pumptrk Charge	Surface
Mileage	64
Tax	
Discount	
Total Charge	

Thanks

x Signature Ryan Gaskill

TRILOBITE TESTING INC.

1515 Commerce Parkway • Hays, Kansas 67601

Test Ticket

NO. 72901

Well Name & No. D-G Hansen #2 Test No. 2 Date 04/26/2025

Company Four Winds Oil Corporation Elevation 2228 KB 2220 GL

Address PO Box 1063 Hays KS 67601 + 1063

Co. Rep / Geo Cameron Brin Rig Discovery #4

Location: Sec. 29 Twp 5S Rge. 20W Co. Phillips State KS

Interval Tested 3581' - 3655' Zone Tested Arb - Reagan

Anchor Length 74' Drill Pipe Run 3540' Mud Wt. 9.1

Top Packer Depth 3576' Drill Collars Run 30' Vis 55

Bottom Packer Depth 3581' Wt. Pipe Run — WL 7.6

Total Depth 3655 Chlorides 1000 ppm System LCM 2.5#

Blow Description IF- Slid 3" 10" in 2 mins; Plugged; Flushed; Built to 73.5"
ISI- Weak Surface Blow
FF- 130B 4 mins; Built to 60"
FSI- Very Weak Surface Blow

Rec	30'	Feet of	OCMW	%gas		%oil	10	%water 90 %mud
Rec	240'	Feet of	GMCOW	%gas	30	%oil	20	%water 40 %mud 10
Rec	180'	Feet of	GSWCOM	%gas	20	%oil	10	%water 5 %mud 65
Rec	630'	Feet of	GOCM	%gas	10	%oil	20	%water %mud 70
Rec	180'	Feet of	GSOCM	%gas	5	%oil	5	%water %mud 90
Rec		Feet of		%gas		%oil		%water %mud
Rec		Feet of		%gas		%oil		%water %mud

Rec Total 1260' BHT 106° Gravity — API RW .735 @ 55 °F Chlorides 11,000 ppm

Initial Hydrostatic 1757

Initial Flow 218 to 414

Initial Shut-In 1038

Final Flow 370 to 614

Final Shut-In 1038

Final Hydrostatic 1737

T- On Location

Initial Flow 15 T-Started 09:16

Initial Shut-In 30 T-Open 10:55

Final Flow 15 T-Pulled 12:25

Final Shut-In 30 T-Out 15:10

Comments drove to Phillipsburg between tests for food

2.87 BBL Oil

1.63 BBL Water 10.58 BBL Mud

☒ Test		☐ Ruined Shale Packer	
☐ Jars		☐ Ruined Packer	
☐ Circ Sub		☐ Hotel	
☐ Hourly Standby		☒ EM Tool Successful	
☒ Mileage	30R7	☐ Accessibility	
☐ Sampler		☐ Gas Sample	
☐ Straddle		☐ Oversized Hole	
☐ Shale Packer		☐ Sub Total	
☐ Extra Packer		☐ Total	
☐ Extra Recorder		☐ Tool Loaded	@
☐ Day Standby		☐ MP/DST Disc't	

Approved By Our Representative

Scale 1:240 Imperial

Well Name:	D.G. HANSEN #2		
Surface Location:	N2, SE, SE, NE, Sec. 29, T5S, R20W		
Bottom Location:			
API:	15-147-20764		
License Number:	34916		
Spud Date:	4/21/2025	Time:	9:15 AM
Region:	PHILLIPS COUNTY		
Drilling Completed:	4/25/2025	Time:	6:30 PM
Surface Coordinates:	2300' FNL & 330' FEL		
Bottom Hole Coordinates:			
Ground Elevation:	2220.00ft		
K.B. Elevation:	2228.00ft		
Logged Interval:	3050.00ft	To:	3655.00ft
Total Depth:	3655.00ft		
Formation:	ARBUCKLE, REAGAN SAND		
Drilling Fluid Type:	CHEMICAL MUD		

OPERATOR

Company:	FOURWINDS OIL CORPORATION		
Address:	PO BOX 1063 HAYS, KS 67601		
Contact Geologist:	DAN WINDHOLZ		
Contact Phone Nbr:	785-259-8403		
Well Name:	D.G. HANSEN #2		
Location:	N2, SE, SE, NE, Sec. 29, T5S, R20W		
API:	15-147-20764		
Pool:		Field:	RAY
State:	KS	Country:	

SURFACE CO-ORDINATES

Well Type:	Vertical
Longitude:	-99.591129
Latitude:	39.590049
N/S Co-ord:	2300' FNL
E/W Co-ord:	330' FEL

LOGGED BY

Company:	KEYSTONE CONSULTING, LLC		
Address:	1302 W 42ND HAYS, KS 67601		
Phone Nbr:	(785) 639-0721		
Logged By:	Geologist	Name:	CAMERON BRIN

CONTRACTOR

Contractor:	DISCOVERY DRILLING		
Rig #:	4		
Rig Type:	MUD ROTARY		
Spud Date:	4/21/2025	Time:	9:15 AM
TD Date:	4/25/2025	Time:	6:30 PM
Rig Release:	4/27/2025	Time:	9:45 AM

ELEVATIONS

K.B. Elevation: 2228.00ft Ground Elevation: 2220.00ft
K.B. to Ground: 8.00ft

CASING SUMMARY

	Surface	Intermediate	Main
Bit Size	12.25 in		7.88 in
Hole Size	12.25 in		7.88 in

	Size	Set At	Type	# of Joints	Drilled Out At
Surf Casing	8.625 in	221' ft	MWPW	5	4/21/2025 10:15 PM
Int Casing					
Prod Casing	5.5 in	3653' ft	MWPW	88	

CASING SEQUENCE

Type	Hole Size	Casing Size	At
MWPW	12.25 in	8.63	221.00 ft
MWPW	7.88 in	5.50	3653.00 ft

NOTES

DUE TO POSITIVE RESULTS ON DST #2, DECISION WAS MADE TO RUN 5 1/2" PRODUCTION CASING TO FURTHER EVALUATE THE D.G. HANSEN #2 WELL.

TOPS COMPARISON

	D.G. HANSEN #2				• D.G. HANSEN #1 FOURWINDS OIL CORP N2, NE, SE, NE, Sec 29-5-20						P&A 1/24/1973 REESE D #2 CITIES SERVICE SW, SE, NE, Sec. 29, T5S, R20W						P&A 1/27/89 WALLGREEN A #4 CITIES SERVICE NE, NE, SE, Sec. 29, T5S, R20W						P&A 4/17/13 VEHIGE B #1 CITIES SERVICE SW, SW, NW, Sec. 28, T5S, R20W					
	KB	2228	GL	2220	KB	2241					KB	2191					KB	2206					KB	2201				
	LOG TOPS		SAMPLE TOPS		COMP CARD		LOG		SMPL.		COMP. CARD		LOG		SMPL.		LOGS		LOG		SMPL.		LOG		LOG		SMPL.	
FORMATION	DEPTH	DATUM	DEPTH	DATUM	DEPTH	DATUM	CORR.		CORR.		DEPTH	DATUM	CORR.		CORR.		DEPTH	DATUM	CORR.		CORR.		DEPTH	DATUM	CORR.		CORR.	
ANHYDRITE TOP	1753	475	1752	476	1764	477	-	2	-	1	1725	466	+	9	+	10							1730	471	+	4	+	5
BASE	1782	446	1781	447	1793	448	-	2	-	1																		
TOPEKA	3152	-924	3150	-922	3169	-928	+	4	+	6													3130	-929	+	5	+	7
HEEBNER SHALE	3350	-1122	3348	-1120	3365	-1124	+	2	+	4							3330	-1124	+	2	+	4						
TORONTO	3373	-1145	3374	-1146	3391	-1150	+	5	+	4																		
LKC	3390	-1162	3390	-1162	3406	-1165	+	3	+	3	3343	-1152	-	10	-	10	3367	-1161	-	1	-	1						
BKC	3584	-1356	3584	-1356	3599	-1358	+	2	+	2							3567	-1361	+	5	+	5						
GORHAM																												
ARBUCKLE	3634	-1406	3633	-1405							3596	-1405	-	1	+	0	3612	-1406	+	0	+	1						
REAGAN	3652	-1424	3652	-1424	3650	-1409	-	15	-	15	3631	-1440	+	16	+	16	3625	-1419	-	5	-	5	3618	-1417	-	7	-	7
GRANITE											3682	-1491																
TOTAL DEPTH	3655	-1427	3655	-1427	3659	-1418	-	9	-	9	3688	-1497	+	70	+	70	3631	-1425	-	2	-	2	3675	-1474	+	47	+	47

DST #2 3581'-3655' (ARB-REAGAN)

TRILOBITE TESTING, INC

DRILL STEM TEST REPORT

FourWinds Oil Corporation

PO Box 1063
Hays KS 67601+1063

ATTN: Cameron Brin

29-5S-20W Phillips KS

DG Hansen #2

Job Ticket: 72901 **DST#: 2**

Test Start: 2025.04.26 @ 09:16:00

GENERAL INFORMATION:

Formation: **Arb-Reagan**
Deviated: No Whipstock: ft (KB)
Time Tool Opened: 10:54:12
Time Test Ended: 15:10:32

Test Type: Conventional Bottom Hole (Reset)
Tester: Spencer J Staab
Unit No: 75

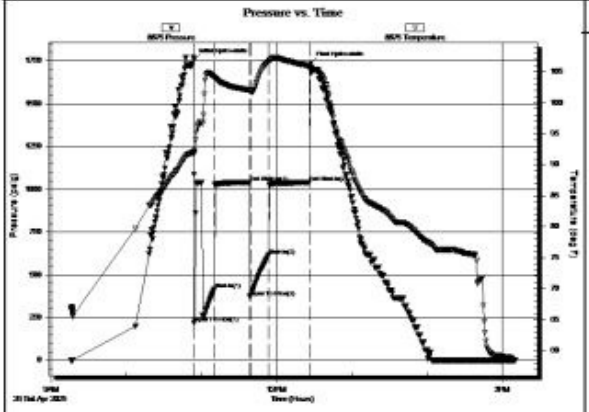
Interval: 3581.00 ft (KB) To 3655.00 ft (KB) (TVD)
Total Depth: 3655.00 ft (KB) (TVD)
Hole Diameter: 7.88 inches Hole Condition: Poor

Reference Elevations: 2228.00 ft (KB)
2220.00 ft (CF)
KB to GR/CF: 8.00 ft

Serial #: 8875 **Inside**

Press@RunDepth:	614.19 psig @	3587.00 ft (KB)		Capacity:	psig
Start Date:	2025.04.26	End Date:	2025.04.26	Last Calib.:	2025.04.26
Start Time:	09:16:01	End Time:	15:10:32	Time On Btm:	2025.04.26 @ 10:54:02
				Time Off Btm:	2025.04.26 @ 12:27:22

TEST COMMENT: 15-IF-Slid 3' 10" Blow in 2 mins Plugged Flushed Built to 73.5"
30-ISI-Weak Surface Blow
15-FF-BOB 4 mins Built to 60"
30-FSI-Very Weak Surface Blow



PRESSURE SUMMARY

Time (Min.)	Pressure (psig)	Temp (deg F)	Annotation
0	1757.26	92.14	Initial Hydro-static
1	218.54	91.70	Open To Flow (1)
17	414.12	104.05	Shut-In(1)
45	1038.95	102.02	End Shut-In(1)
45	370.19	101.86	Open To Flow (2)
60	614.19	106.69	Shut-In(2)
93	1038.85	105.97	End Shut-In(2)
94	1737.35	105.05	Final Hydro-static

Recovery

Length (ft)	Description	Volume (bbl)
30.00	OCW 10%O 90%W	0.15
240.00	GMCOW 30%G 20%O 10%M 40%W	3.40
180.00	GSWCOM 20%G 5%W 10%O 65%M	2.55
630.00	GOCM 10%G 20%O 70%M	8.93
180.00	GSOCM 5%G 5%O 90%M	2.55

* Recovery from multiple tests

Gas Rates

	Choke (inches)	Pressure (psig)	Gas Rate (Mcf/d)

Trilobite Testing, Inc Ref. No: 72901 Printed: 2025.04.29 @ 11:12:53

ROCK TYPES

Dolprim
Lmst fw7>
shale, gry
Carbon Sh
shale, red
Ss

ACCESSORIES

MINERAL
ᔓ Glauconite
P Pyrite
Sandy

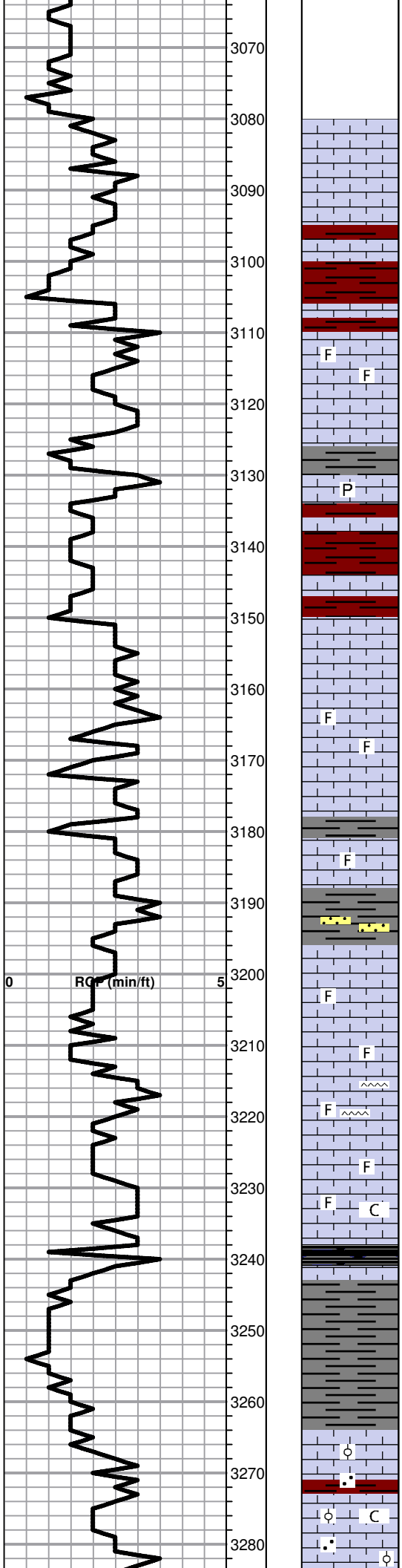
FOSSIL
F Fossils < 20%
Oolite

STRINGER
Chert
Sandstone

TEXTURE
C Chalky

Printed by GEOstrip VC Striplog version 4.0.8.15 (www.grsi.ca)

Curve Track #1 ROP (min/ft) 1:240 Imperial	Depth | Intervals Cored Interval DST Interval	DST	Lithology	Oil Show	Geological Descriptions	Curve Track #3 1:240 Imperial
0 ROP (min/ft) 5	3060				***1' DRILL TIME FROM 1700'-1800' FOR ANHYDRITE*** ***1' DRILL TIME FROM 3050'-RTD*** ***10' WET & DRY SAMPLES FROM 3100'-RTD***	SURVEY @ 221' (1/2°) DISPLACEMENT COMPLETE @ 3015'



Lm- crm-tan-gray, v.fnxln, tr oolitic

Sh- brn-gray

Lm- gray-tan, fnxln, scat foss, cherty in prt

Lm- gray-tan, fnxln-v.fngrn, tr oolitic

Sh- gray, muddy
Lm- crm-gray, fnxln, scat pyrite

Sh- brn-gray

TOPEKA: SPL 3150' (-922) LOG 3152' (-924)

Lm- tan, v.fnxln, cherty

Lm- gray-crm, v.fn-fnxln, scat foss
Sh- various color

Lm- crm-tan, v.fn-fnxln, cherty in prt, sli chalky

Sh- brn-blk

Lm- crm, fnxln, foss

Sh- gray
Ss- gray, v.fngrn, well sorted, well rounded

Lm- crm-gray, fnxln, scat foss, chalky

Lm- A/A
Chert- wt-tan, blocky-angular

Lm- crm,fnxln-v.fngrn, foss, chalkly in prt

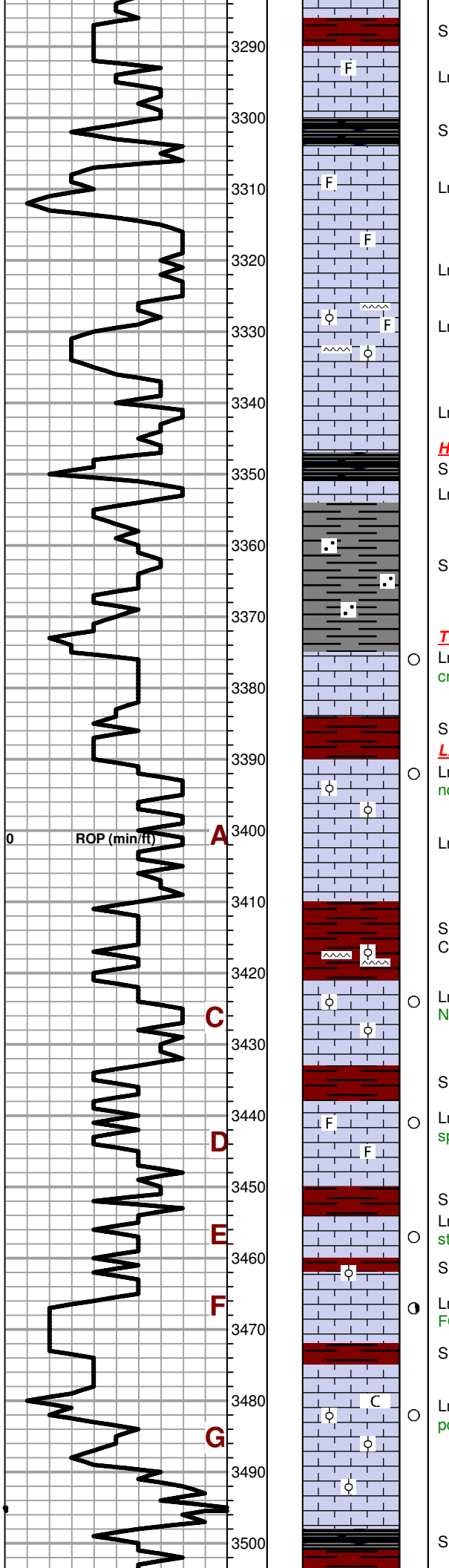
Sh- blk, carb

Sh- various color
Lm- tan, fnxln, mottled

Lm- crm, fnxln, oolitic

Sh- brn, sandy

Lm- crm, fnxln-fngrn, sandy in prt, oolitic, chalky in prt



Sh- brn, sandy

Lm- crm, fnxln, foss, sli chalky

Sh- blk, carb

Lm- crm, v.fn-fnxln, scat foss, cherty in prt

Lm- A/A

Lm- crm-tan, v.fn-fnxln, foss, scat tan oolitic chert, blocky-sub angular

Lm- crm, fnxln-v.fngrn, barren

HEEBNER: SPL 3348' (-1120) LOG 3350' (-1122)

Sh- blk, carb

Lm- tan, fnxln, dense

Sh- gray-brn, sandy

TORONTO: SPL 3374' (-1146) LOG 3373' (-1145)

Lm- crm, fnxln, pr ppt por, lt brn spotty stn in por, tr FO in cup & upon crush, mod odor

Sh- brn

LANSING: SPL 3390' (-1162) LOG 3390' (-1162)

Lm- crm, fnxln, oolitic, scat pr ppt-inoolitic por, lt brn spotty stn in por, no vis SFO, pr-no odor

Lm- crm, v.fnxln, cherty, dense, barren

Sh-brn

Chert- wt-gray, oolitic, fresh, angular-blocky

Lm- crm, fnxln, oolitic, scat pr inoolitic por, scat v. lt brn stn in por, NSFO, gd odor

Sh- brn

Lm- crm, v,fn-fnxln, foss, few scat pcs w/ pr ppt-infoss por, tr v. lt brn spotty stn in por, NSFO, mod odor

Sh- brn

Lm- crm, v.fn-fnxln, cherty in prt, foss, scat pr infoss por, tr lt brn spotty stn in por, NSFO, faint odor

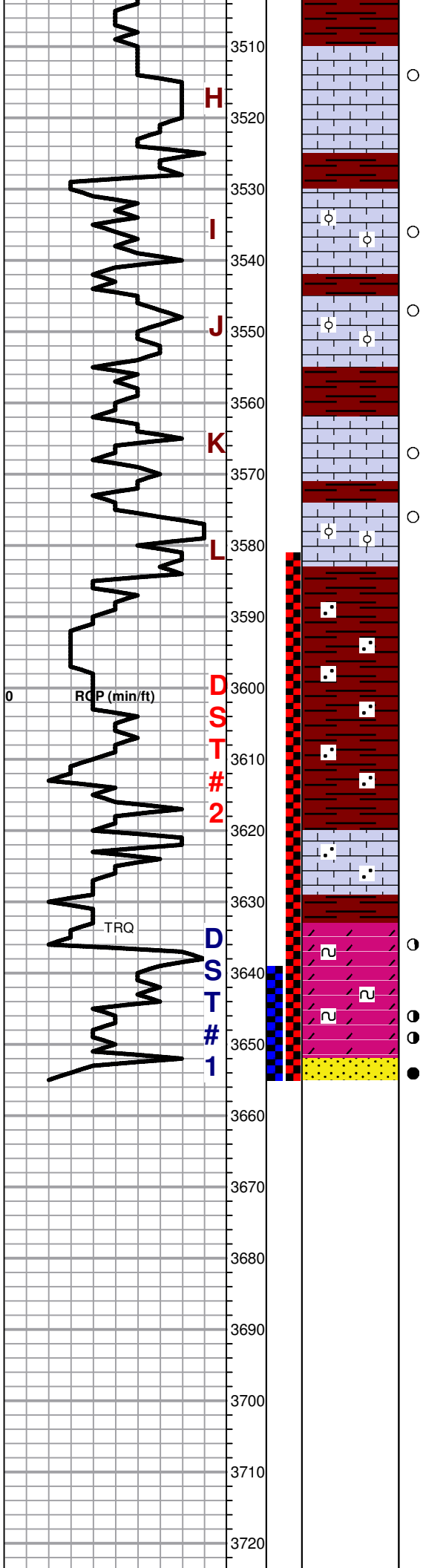
Sh- brn, sandy

Lm- crm, v.fn-fnxln, cherty in prt, pr ppt por, lt brn spotty stn in por, few FO drops in cup, fr odor

Sh- brn, sandy

Lm- crm, fnxln, oolitic, chalky in prt, pr inoolitic por, brn spotty stn in por, sli sheen FO upon crush, mod odor

Sh- blk, carb



Sh- brn-gray

Lm- crm, fnxln, few scat pcs w/ pr ppt por, tr lt brn spotty stn in por, NSFO, no odor

Sh- brn

Lm- crm-tan, v.fn-fnxln, cherty in prt, oolitic in prt, few scat pcs w/ pr ppt-inoolitic por, tr brn spotty stn in por, NSFO no odor

Sh- brn

Lm- crm, v.fn-fnxln, cherty in prt, oolitic, scat pr ppt-inoolitic por, brn spotty stn in por, tr FO upon crush, faint odor

Sh- brn-gray

Lm- crm, fnxln, few scat pcs w. pr ppt por, tr brn spotty stn in por, NSFO, pr-no odor

Sh- brn, muddy red wash

Lm- crm, fnxln, oolitic, few scat pcs w/ pr inoolitic por, tr brn spotty stn in por, NSFO, faint odor

BKC: SPL 3584' (-1356) LOG 3584' (-1536)

Sh- brn, sandy

Sh- A/A

Lm- crm, fn-mdgrn, sandy

Sh- brn, sandy

ARBUCKLE: SPL 3633' (-1405) LOG 3634' (-1406)

3639'- Dolo- fnxln-fngrn, sandy in prt, glauc inclusions, tr pr inxln por, tr pr lt ben stn in por, tr FO upon crush, fr odor,
scat Ss clusters- clear-frosted, fn-mdgrn, well consolidated, calcite matrix, mod sorting & rnding, mostly tight ingrn por, brn spotty-sub sat stn, sli SFO upon crush, fr odor

REAGAN SAND: 3652' (-1424) LOG 3652' (-1424)

3648'- Dolo- fnxln-mdgrn, sandy, glauc inclusions, NSO
Ss- clear-frosted, fn-corgrn, mostly well consolidated, calcite matrix, mod sorting & rnding, pr-fr ingrn por, scat brn spotty-sub sat stn, sli SFO upon crush, gd odor

3648'- 30min- Dolo-crm, fn-mdxln & fn-mdgrn, sandy in prt, glauc inclusions, mostly tight inxln por, brn spotty-sub sat stn, mod sheen FO in cup & upon crush, fr-gd odor
few scat Ss clusters- clear, fn-mdgrn, pr-fr sorting & rnding, calcite matrix, pr in grn por, brn spotty- sub sat stn, sli SFO upon crush, fr-gd odor

3648'-60min- Dolo- A/A, shows became more spotty

3652'-30min- Dolo- A/A few more Ss clusters mixed in

3652'-60min- Dolo- A/A
scat Ss clusters, clear-frosted, fn-corgrn, mod sorting, sub rnded, calcited matrix, pr-fr ingrn por,brn spotty-sub sat stn, mod SFO upon crush, fr-gd odor

3655'-30min- Dolo-A/A
Ss- clear, fn-corgrn, mix of clusters & unconsolidated grns, mod sorting, sub rnded, calcite matrix, pr-fr ingrn por, brn sub sat & tr sat stn, sli SFO in cup & mod SFO upon crush, v. gd odor

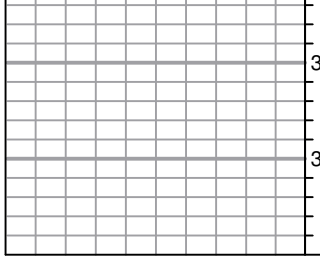
3655'- 60min- Ss- clear, fn-corgrn, well consolidated clusters mixed w/

DST #1
3639'-3655' (ARB-REAG)
MISRUN
8' OF FILL ON BOTTOM

CFS @ 3639'

CFS @ 3648'
CFS @ 3652'
CFS @ 3655'
SURVEY @ 3655' (3/4°)

DST #2
3581'-3655' (ARB-REAG)
15-30-15-30
30' OCW
(10% O)
240' GMCOW
(30%G, 20%O, 40%W)
180' GSWCOM
(20%G, 10%O, 5%W)'
630' GOCM
(10%G, 20%O)
180' GSOCM
(5%G, 5%O)
SIP: 1038-1038#
TOOL SLID 3' , PLUGGED AFTER 2 MIN, FLUSHED AND STARTED BULIDING AGAIN



unconsolidated grns, mod sorting, sub rnded, calcite matrix, pr-fr ingrn por, brn sub sat-sat stn, few FO drops in cup & fr SFO upon crush, gd odor

RTD: SPL 3655' (-1427) LOG 3655' (-1427)