KOLAR Document ID: 1360580

Confident	tiality Request	ed:
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 -	·D	ESCRIPTION	N OF W	ELL &	LEASE

OPERATOR: License #	API No.:					
Name:	Spot Description:					
Address 1:						
Address 2:	Feet from North / South Line of Section					
City: State: Zip:+	Feet from East / West Line of Section					
Contact Person:	Footages Calculated from Nearest Outside Section Corner:					
Phone: ()						
CONTRACTOR: License #	GPS Location: Lat:, Long:					
Name:	(e.g. xx.xxxxx) (e.gxxx.xxxxx)					
Wellsite Geologist:	Datum: NAD27 NAD83 WGS84					
Purchaser:	County:					
Designate Type of Completion:	Lease Name: Well #:					
New Well Re-Entry Workover	Field Name:					
	Producing Formation:					
	Elevation: Ground: Kelly Bushing:					
	Total Vertical Depth: Plug Back Total Depth:					
CM (Coal Bed Methane)	Amount of Surface Pipe Set and Cemented at: Feet					
Cathodic Other (Core, Expl., etc.):	Multiple Stage Cementing Collar Used?					
If Workover/Re-entry: Old Well Info as follows:	If yes, show depth set: Feet					
Operator:	If Alternate II completion, cement circulated from:					
Well Name:	feet depth to:w/sx cmt.					
Original Comp. Date: Original Total Depth:						
Deepening Re-perf. Conv. to EOR Conv. to SWD	Drilling Fluid Management Plan					
Plug Back Liner Conv. to GSW Conv. to Producer	(Data must be collected from the Reserve Pit)					
	Chloride content: ppm Fluid volume: bbls					
Commingled Permit #:	Dewatering method used:					
Dual Completion Permit #:						
SWD Permit #:	Location of fluid disposal if hauled offsite:					
EOR Permit #:	Operator Name:					
GSW Permit #:	Lease Name: License #:					
Spud Date or Date Reached TD Completion Date or	Quarter Sec TwpS. R East West					
Spud Date or Date Reached TD Completion Date or Recompletion Date Recompletion Date	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: Date:				

KOLAR Document ID: 1360580

Operator Name:				Lease Name:	Well #:
Sec	Twp	S. R	East West	County:	

Page Two

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 Yes No (Attach Additional Sheets)					og Formatio	n (Top), Depth	and Datum	Sample	
Samples Sent to Geolog	*		és 🗌 No	Ν	lame	e		Тор	Datum
Cores Taken Electric Log Run Geologist Report / Mud List All E. Logs Run:			ies No ies No ies No						
		Repo	CASING I] Ne	w Used rmediate, productio	on, etc.		
Purpose of String	Size Hole Drilled		ze Casing tt (In O.D.)	Weight Lbs. / Ft.		Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
			ADDITIONAL	CEMENTING /	SQU	EEZE RECORD			
Purpose: Depth Top Bottom Perforate		Туре	e of Cement	# Sacks Used	Ised Type and Percent Additives				
 Did you perform a hydra Does the volume of the is Was the hydraulic fractu Date of first Production/Inj 	total base fluid of the h ring treatment informa	nydraulic fra tion submit	acturing treatment	al disclosure regis	-	Yes Yes Yes Yes	No (If No, s	kip questions 2 ar kip question 3) ill out Page Three	
Injection:			Flowing	Pumping		Gas Lift 🗌 O	ther <i>(Explain)</i>		
Estimated Production Per 24 Hours	Oil	Bbls.	Gas	Mcf	Wate	er Bb	ls.	Gas-Oil Ratio	Gravity
DISPOSITION	I OF GAS:		M	ETHOD OF COM	/IPLE	TION:			ON INTERVAL:
Vented Sold (If vented, Subm	Vented Sold Used on Lease Open Hole ((If vented, Submit ACO-18.)		Open Hole		Dually Comp. Commingled (Submit ACO-5) (Submit ACO-4)		Bottom		
			Bridge Plug Set At		Acid,		ementing Squeeze		
TUBING RECORD:	Size:	Set At:		Packer At:					

Form	ACO1 - Well Completion
Operator	Krier, Kirby Oil, Inc.
Well Name	JACKIE 1
Doc ID	1360580

Casing

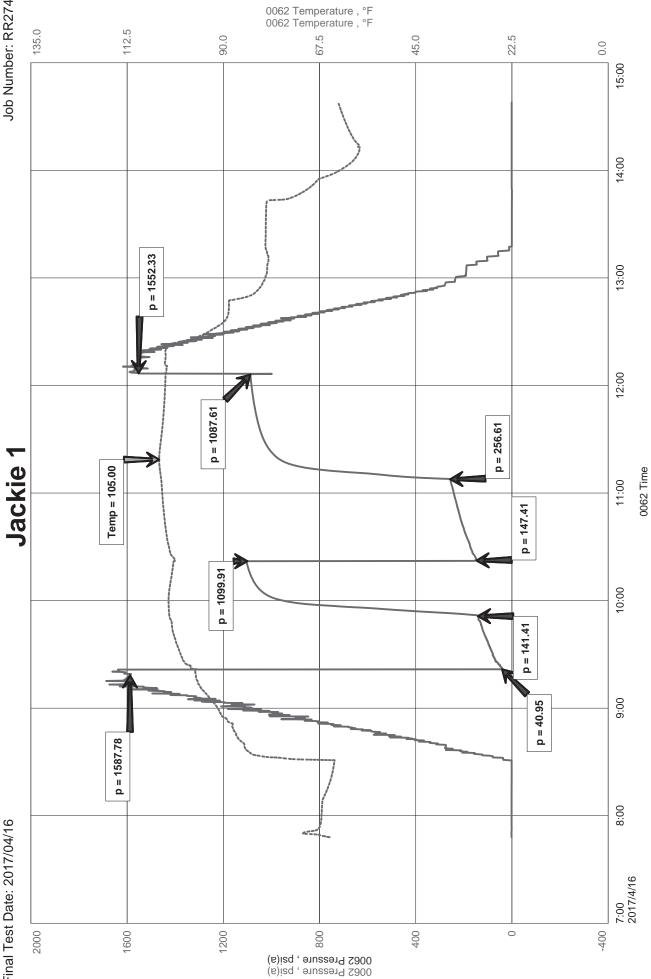
Purpose Of String	Size Hole Drilled	Size Casing Set	Weight	Setting Depth	Type Of Cement	Number of Sacks Used	Type and Percent Additives
Surface	12.25	8.62	23	788	COMMON	369	POZ. GEL. CALCIUM
Production	7.87	5.5	15	3502	COMMON	180	POZ. SALT KOL- SEAL MUD CLEAR

	P.O. I HOISINGTON, (800) 5	D TESTING Box 157 KANSAS 67544 542-7313 I TEST TICKET 1 dst 2	TIME ON: TIME OFF:		
Company_Krier, Kirby Oil Inc		Lease & Well No. Jac	kie 1		
Contractor Southwind Drilling Rig 3		Charge to Krier Kirby			
Elevation1856 Sur Formation	Lan KC H-	K Effective Pay	Ft.	Ticket No.	RR274
Date_April-16-2017_Sec18Twp					KANSAS
Test Approved By Jim Musgrove		_ Diamond Representative	9	Ricky Ray	
Formation Test No2 Interval Teste	d from 33	334 ft. to	3410 ft. Total Dep	oth	3410 ft.
Packer Depth3329 ft. Size6		Packer depth		Martin Contraction Contraction	in.
		Packer depth	ft.	Size 6 3/4	in.
Depth of Selective Zone Set					
Top Recorder Depth (Inside)	3324 _{ft.}	Recorder Number	0062 Cap	. 50	00 P.S.I.
Bottom Recorder Depth (Outside)	3402 ft.	Recorder Number	8471 Ca	p50	⁰⁰ P.S.I.
Below Straddle Recorder Depth	ft.	Recorder Number			
Mud Type Chem Viscosity	52	Drill Collar Length	<u>ft</u> .	I.D. <u>2</u>	1/4in.
Weight 9.3 Water Loss		Weight Pipe Length_	ft.	I.D. 2 7	7/8in
Chlorides	500 P.P.M.	Drill Pipe Length	3309 _{ft.}	I.D3 *	1/2 in
Jars: Make STERLING Serial Number	na	Test Tool Length		Tool Size 3	1/2-IF in
Did Well Flow? naReversed Out	na	Anchor Length	76A (13P) _{ft.}	Size4	1/2-FH ir
Main Hole Size 7 7/8 Tool Joint Size	4 1/2 xh_in.	Surface Choke Size_	1in.	Bottom Choke S	size_5/8_in
Blow: 1st Open: 3/4" Blow (BOB in 2	1/2 mins)		6 1/2" BB	-	
^{2nd Open:} 1 1/4 Blow (BOB in 4 r	mins)		BBBB		1
Recovered 155' ft. of GIP					
Recovered <u>124 ft. of</u> <u>0</u> 100% O	35 Gravity @	60 Deg			
Recovered 156' ft. of GMO 10% G	60% C	O 30% M			
Recovered 305' ft. of SLW MO 85%	O 5% W	/ 10%M			
Recovered 5 ft. of M 100% M			Price	e Job	
Recovered 590 ft. of Total Fluid			Othe	er Charges	
Remarks: Tool Sample: 50% O	10% V	V 40% M	Insu	rance	
2					
			A.M.		
	ime Started Off Bo	12:05 PM		Temperature	105
Initial Hydrostatic Pressure		(A)	1588 P.S.I.		
Initial Flow Period Minute		(B)	P.S.I. to (C)	141	_P.S.I.
Initial Closed In Period Minute		(D)	1100 P.S.I.		
Final Flow Period Minute		(E)	147 P.S.I. to (F)	257	P.S.I.
Final Closed In PeriodMinute	s 60	(G)	1088 P.S.I.		

1552 _{P.S.I.} Diamond Testing shall not be liable for damages of any kind to the property or personnel of the one for whom a test is made or for any loss suffered or sustained, directly or indirectly, through the use of its equipment, or its statement or opinion concerning the result of any test. Tools lost or damaged in the hole shall be paid for at cost by the party for whom the test is made.







Tast



Diamond Testing LLC P.O. Box 157 HoisingtonKS 67544

Ricky Ray - Tester (620) 617-7261



Wellsite Report

Company Name	Krier Kirby Oil Inc
Contact	Kirby Krier
Well Operator	Krier Kirby Oil Inc
Well Name	Jackie 1
Surface Location	Sec: 18-19s-13w (Barton County)
Field	Walnut Valley
Well Type	Vertical
Pool	Pool Ext
Test Purpose (AEUB)	Initial Test
Qualified By Gauge Name	0062

Test Information

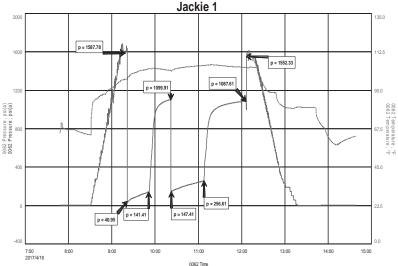
Job Number Test Type Well Fluid Type Formation Start Test Date Start Test Time Final Test Date Final Test Time

RR274

Test Results

Recovery:

155' 124'	GIP O	100% O	35 Grav	vity @ 60 Deg
156'	GMO	10% G	60% O	30% M
305'	SLWN	10 85% O	5% W	105 M
5'	Μ	100% M		
590'	Total	Fluid		
Tool Sample:	50% C	0 10% W	40% M	



QUALITY OILWELL CEMENTING, INC. Federal Tax I.D.# 20-2886107

			C.C.R	1 64.0	. u .			2000		
Home	01	fice	P.0). В	ox	32	R	ussell,	KS	67665

No.1693

Phone 785-483-2025 Cell 785-324-1041

					· · · · · · · · · · · · · · · · · · ·	
Date 4-17-17 18	Twp. Ra	10	County	State	On Location	Finish 5°30PM
Date 4-17-11 18	19 12		(yen		212 5/ 1	120 20410
Lease Jackie	[on or 81+c	Surcis Rd -	2W, Start	<u>></u>
	Well No		Owner To Quality O	ilwell Cementing, Inc.		
Contractor Southwind	2		You are here	by requested to rent	cementing equipment	
Type Job Longstring	<u>)</u>	(BC)		d helper to assist ow		o work as listed.
Hole Size 11/8		5051	To h	irby Krien	<u> </u>	
csg. 52" 15, 50" New	Depth 35	562'	Street	<u> </u>		
Tbg. Size	Depth		City		State	
Tool	Depth		The above wa	as done to satisfaction a	A.m.1 (1)	
Cement Left in Csg. 11.71	Shoe Joint	.71'		ount Ordered		% Salt 5%
Meas Line	Displace X	3 Bis	Gilsonite	- 500 god n	und Clear 48	
EQUIPM	IENT		Common	80		
	caus		Poz. Mix 🤰			
Bulktrk 3 No. Driver Day	id		Gel.			
Butterk DIU, No. Driver Di	k		Calcium			
JOB SERVICES	& REMARKS		Hulls			1. A. S.
Remarks:		10000000000000000000000000000000000000	Salt	15		N.J.
Rat Hole			Flowseal	'		
Mouse Hole			Kol-Seal	oo#		
Centralizers 1-9			Mud CLR 48	500 0	al	
Baskets 3-6			CFL-117 or (CD110 CAF 38	s	
D/V or Port Collar Dipe on bo	Hum break	Circulation	Sand			
Dump 500 gal mud C		ug Rothde	Handling	193		
W 305> Hook to 5	" + mix 1	130.5x	Mileage			27 0
Cenent, Shut down	wash r	inmo 4		FLOAT EQUIPM	ENT	
	ng w/83	1	Guide Shoe			
of HZD, Released 4	0		Centralizer	9		
		y:	Baskets	2		
Lift pressure.	ISD H	alla ay 177	AFU Inserts		a states	
- Province -			Float Shoe	1		
Land plug to 1:	500 \$	- <u>* 0</u>	Latch Down)		
	200		Rotating	head Assi	4	
·	1000 100	5 M 6 200	TIOLOGIN	(in a second	J	
			Pumptrk Cha	arge prod	Steina	
	, ,		Mileage	15 (mm.1	and the second	
	110	*			Tax	
	All	n <u>an ann an ann an ann an ann an ann an</u>			Discount	
X Signature	H	<u> </u>			Total Charge	
	- in the second second	<u></u>				

QUALITY OILV	VELL CEMENTING, INC. eral Tax I.D.# 20-2886107
	ce P.O. Box 32 Russell, KS 67665 No. 017
Date 41/2-17 18 19 13	Barton State On Location Finish
	Location Great Band N 10 30 Ywashing Ton
Lease Lease Well No. 1	Owner //c/W
Contractor Southwind 3 Type Job Long Sur Pace	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 Ling Surface, Hole Size 12-14 T.D. 789	Charge Kin 6 Mg Rois N
Csg. 85 Depth 788	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. 20 Shoe Joint	Cement Amount Ordered 350 120 3 4 2
Meas Line Displace	
EQUIPMENT	Common 145
Pumptrk B No. Cementer	Poz. Mix 105
Bulktrk & No. Driver	$\frac{S}{1}$ Gel. 7
Bulktrk OJ No. Driver	Calcium @ 12
JOB SERVICES & REMARKS	Hulls
Remarks:	Salt
Rat Hole	Flowseal
Mouse Hole A A A	Kol-Seal
Centralizers	Mud CLR 48
Baskets	CFL-117 or CD110 CAF 38
D/V or Port Collar	Sand
	Handling 365 369
	Miléage
11	FLOAT EQUIPMENT
pt 11	Guide Shoe
	Baskets
	AFU Inserts
	Float Shoe
······	Latch Down
	Pumptrk Charge Long Surface
	Mileage 15 (Mins)
	Tax
X AMA T	Discount
X Signature	Total Charge
V V	



NOTES

Company: Kirby Krier Oil, Inc.

Lease: Jackie #1

Location: <u>SE-NE-NW-NE (375' FNL & 1585' FEL)</u> Sec: <u>18</u> Twsp: <u>19S</u> Rge: <u>13W</u> County: <u>Barton</u> State: <u>Kansas</u> Field: <u>Walnut Valley</u>

KB: <u>1866'</u> GL: <u>1858'</u>

 Contractor:
 Southwind Drilling, Inc. (Rig #3)

 Spud:
 04/11/2017
 Comp:
 04/17/2017

 RTD:
 3505'
 LTD:
 3506'

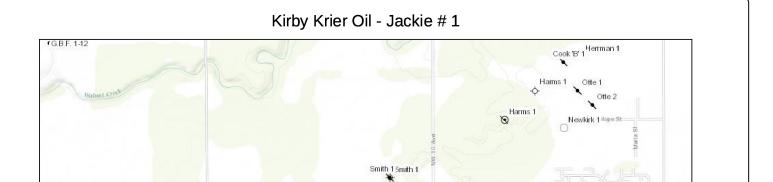
 Mud Up:
 2755'
 Type Mud:
 Chemical

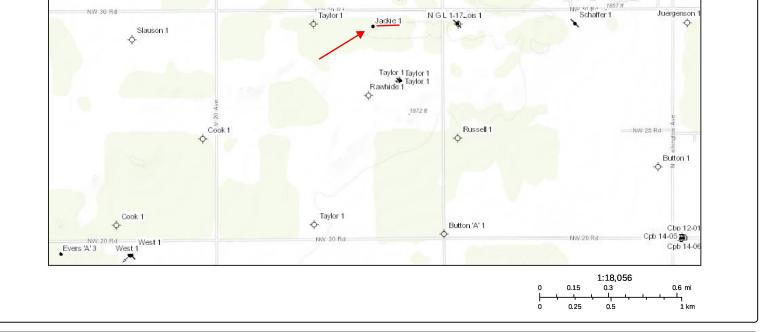
 API #:
 15-009-26162-00-00
 15-009-26162-00-00
 16-000

Samples Saved From: <u>3000' to RTD</u> Drilling Time Kept From: <u>3000' to RTD</u> Samples Examined From: <u>3000' to RTD</u> Geological Supervision from: <u>3000' to RTD</u> Geologist on Well: <u>Jim Musgrove</u>

Surface Casing: <u>8 5/8"@ 789'</u> Production Casing: <u>5 1/2" @ 3503'</u>

Electronic Surveys: Logged by Pioneer; DIL/MEL, BHCS, DCPL





Kirby Krier Oil - Jackie #1 well comparison sheet OMPARISON ARISON WEL Kirby Krier Oil- Jackie #1 Barnett Oil- Taylor #1 R.G. Smith- Smith #1 SE-NE-NW-NE NE-NE-NW SW-SE-SE 18-19s-13**W** 18-195-1**3W** 7-195-13W Structural Structural 1866 KB 1866 KB Relationship 1864 KB Relationship Formation Log Sample Sub-Sea Log Sub-Sea Log Sub-Sea Sample Log Sub-Sea Sample Log 787 793 785 Anhydrite 787 1079 1079 1073 1079 6 6 0 0 813 802 B. Anhydrite 1053 813 1053 1062 -9 -9 Heebner 3111 -1245 3106 -1240 3130 -1264 19 24 3109 -1245 0 5 3125 -1259 3120 -1254 3143 -1277 18 23 -1260 6 3124 Toronto 1 3143 -1277 3139 -1273 3142 -1278 5 Douglas 1 3201 3227 24 Brown Lime -1337 -1361 26 3205 -1341 4 3203 -1335 6 Lansing 3215 3213 -1349 -1347 3241 -1375 26 28 3222 -1358 9 11 BKC 3429 -1563 3430 -1564 Conglomerate 3438 -1572 3439 -1573

3469

3520

-1603

-1654

12

15

13

15

3449

3500

3492

-1585

-1636

-1628

-6

-3

-10

-5

-3

-12

3457

3505

3504

Arbuckle

RTD

LTD

-1591

-1639

-1638

3456

3505

3506

-1590

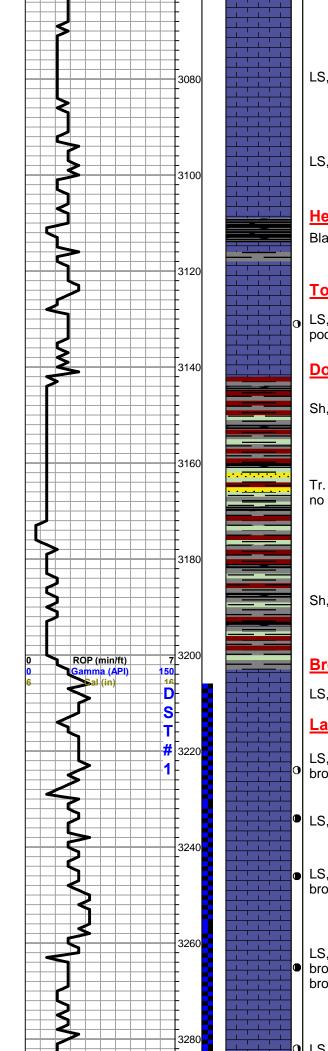
-1639

-1640

	P.O. I HOISINGTON,	D TESTING Box 157 KANSAS 67544	TIME ON:		
		42-7313	TIME OFF:	10.55	
	FILE: Jackie	1 dst 1			
Company_Krier, Kirby Oil Inc		Lease & Well No. J	ackie 1		
Contractor Southwind Drilling Rig 3		Charge to Krier Kirk	oy Oil Inc		
Elevation1856 Sur Formation	A-	F_Effective Pay	Ft.	Ticket No.	RR273
Date_April-15-2017_Sec. 18	wp 19 S R	ange	13 W County B	arton State	e KANSAS
Test Approved By_Jim Musgrove		_ Diamond Representat		Ricky Ray	
Formation Test No. 1 Interv	al Tested from32	206 ft. to	3285 ft. Total Dep	oth	3285 ft.
Packer Depth3201 ft. Siz	e <u>6 3/4</u> in.	Packer depth	ft.	Size 6 3/4	in.
Packer Depth3206 ft. Siz	e6_3/4in.	Packer depth	ft.	Size 6 3/4	in.
Depth of Selective Zone Set					
Top Recorder Depth (Inside)	3196 _{ft.}	Recorder Number_	0062 Cap	50	000 p.s.i.
Bottom Recorder Depth (Outside)	3274 _{ft.}	Recorder Number_	8471 Cap	o5	000 P.S.I.
Below Straddle Recorder Depth	ft.	Recorder Number_	Cap		P.S.I.
Mud Type Chem Viscosity	50	Drill Collar Length	ft. I		1/4 ir

Weight	9 V	Vater Loss	8.8	3 сс	. Weight Pipe Length		ft.	I.D.	2 7/8	in
Chlorides			400	0 P.P.M.	Drill Pipe Length			I.D.		in
And the second	ERLING	Serial Number		na	Test Tool Length		25 _{ft.}	102.0201	3 1/2-IF	in
Did Well Flow?	na			na	Anchor Length		(16P) _{ft.}		4 1/2-FH	in
Main Hole Size	7 7/8	Tool Joint S	Size 4	1/2 xh _in.	Surface Choke Size	1	in.	2	hoke Size 5/8	in
Blow: 1st Open: V		(Built to		" in 45 n			" BB			
2nd Open: V	the second second	(Built to	4 1/4"	in 45 min	s)	1.	/2" BB	and a second	1	
Recovered 2	220 ft. of GI				,					
	28 ft. of HM		5% O	85% M						
Recovered	ft. of									
Recovered										
Recovered							Pric	e Job		
	ft. of						Oth	er Charges		
Remarks: Tool Sa		2% G	3% (D 9	5% M		Insu	urance		
							Tot	al		
Time Set Packer(s)	s)1:4	<u>3 PM ^{A.M.} P.M.</u>	Time \$	Started Off B	ottom 4:43 PM	A.M. P.M.	Maximu	n Tempera	ture 99	
Initial Hydrostatic P	Pressure				(A)	1518 P	S.I.	-		
Initial Flow Period.				45	(B)				16 _{P.S.I.}	
Initial Closed In Pe				30	(D)	54 P			007-009	
Final Flow Period				45	(E)	-			19 _{P.S.I.}	
Final Closed In Per	riod	N	linutes	60	(G)	81 P.	S.I.			
Final Hydrostatic P					(H)	1503 _{P.}	S I			
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Ś	Н	P.O. DISINGTON,	D TESTING Box 157 KANSAS 67544 542-7313			07:48 14:36		
X			D	P.O. DISINGTON, (800) 5 RILL-STEM	Box 157 KANSAS 67544 542-7313 TEST TICKET			07:48 		
N. N	Kirby Oil	Inc	D	P.O. OISINGTON, (800) 5 RILL-STEN ILE: Jackie	Box 157 KANSAS 67544 542-7313 I TEST TICKET 1 dst 2					
Company Krier, I	Kirby Oil		D	P.O. DISINGTON, (800) 5 RILL-STEM	Box 157 KANSAS 67544 542-7313 I TEST TICKET 1 dst 2 Lease & Well No. Ja	ackie 1				
Company Krier, I	Kirby Oil	ng Rig 3	D F	P.O. DISINGTON, (800) 5 RILL-STEM	Box 157 <b>KANSAS 67544</b> 542-7313 <b>1 TEST TICKET</b> 1 dst 2 Lease & Well No. Ja Charge to <u>Krier Kirb</u>	ackie 1 vy Oil Inc	TIME OFI	= <u>14:36</u>	lo. RR274	
Company Krier, I Contractor Southw Elevation 18	Kirby Oil vind Drillir 56 Sur	ng Rig 3 Formation	<b>D</b> F	P.O. OISINGTON, (800) 5 RILL-STEN ILE: Jackie Lan KC H-	Box 157 KANSAS 67544 542-7313 1 TEST TICKET 1 dst 2 Lease & Well No. Ja Charge to Krier Kirb	ackie 1 ny Oil Inc	TIME OFI		10	
Company Krier, I Contractor Southw Elevation 18 Date April-16-20	Kirby Oil vind Drillir 56 Sur 17 Sec	ng Rig 3 Formation 18Twp.	<b>D</b> F	P.O. OISINGTON, (800) 5 RILL-STEN ILE: Jackie Lan KC H-	Box 157 <b>KANSAS 67544</b> 542-7313 <b>1 TEST TICKET</b> 1 dst 2 Lease & Well No. Ja Charge to <u>Krier Kirb</u>	ackie 1 y Oil Inc 13 W Cou	TIME OFI	t. Ticket N	_State_KAN	
Company Krier, I Contractor Southw Elevation 18 Date April-16-20 Fest Approved By Jim	Kirby Oil vind Drillir 556 Sur 17_Sec n Musgrove	ng Rig 3 Formation 18Twp.	D F	P.O. 1 DISINGTON, (800) 5 RILL-STEM ILE: Jackie Lan KC H- <u>19</u> S R	Box 157 KANSAS 67544 542-7313 TEST TICKET 1 dst 2 Lease & Well No. Ja Charge to Krier Kirb K Effective Pay ange Diamond Representati	ackie 1 y Oil Inc 13 W Cou ve	TIME OFI	t. Ticket N Barton Ricky Ra	_ StateKAN	SAS
Company Krier, I Contractor Southw Elevation 18 Date April-16-20 Test Approved By Jim	Kirby Oil vind Drillir 556 Sur 17_Sec n Musgrove	ng Rig 3 Formation 18Twp. 9 Interval T	D F	P.O. 1 OISINGTON, (800) 5 RILL-STEM ILE: Jackie Lan KC H- <u>19</u> S R	Box 157 KANSAS 67544 542-7313 I TEST TICKET 1 dst 2 Lease & Well No. Ja Charge to Krier Kirb K Effective Pay ange Diamond Representati	ackie 1 ny Oil Inc 13 W Cou ve 3410 ft	TIME OFI	t. Ticket N Barton Ricky Ray	_ StateKAN y	SAS
Company Krier, I Contractor Southw Elevation 18 Date April-16-20 Fest Approved By Jim Formation Test No. Packer Depth	Kirby Oil vind Drillir 56 Sur 17 Sec n Musgrove 2	ng Rig 3 Formation 18Twp. 	D F	P.O. 1 OISINGTON, (800) 5 RILL-STEM ILE: Jackie Lan KC H- 19 S R S R 33	Box 157 KANSAS 67544 542-7313 TEST TICKET 1 dst 2 Lease & Well No. Ja Charge to Krier Kirb K Effective Pay ange Diamond Representati 334 ft. to Packer depth	ackie 1 by Oil Inc 13 W Cou ve 3410 ft	TIME OFI	t. Ticket N Barton Ricky Ray	_ StateKAN y	SAS
Company Krier, I Contractor Southw Elevation 18 Date April-16-20 Test Approved By Jim Formation Test No. Packer Depth Packer Depth	Kirby Oil vind Drillir 56 Sur 17 Sec n Musgrove 2	ng Rig 3 Formation 18Twp. 9 Interval T	D F	P.O. 1 OISINGTON, (800) 5 RILL-STEM ILE: Jackie Lan KC H- <u>19</u> S R	Box 157 KANSAS 67544 542-7313 I TEST TICKET 1 dst 2 Lease & Well No. Ja Charge to Krier Kirb K Effective Pay ange Diamond Representati	ackie 1 by Oil Inc 13 W Cou ve 3410 ft	TIME OFI	t. Ticket N Barton Ricky Ray	_ StateKAN y	SAS
Company Krier, I Contractor Southw Elevation 18 Date April-16-20 Fest Approved By Jim Formation Test No. Packer Depth Packer Depth Depth of Selective Z	Kirby Oil vind Drillir 56 Sur 17 Sec. n Musgrove 2 Zone Set_	ng Rig 3 Formation 18Twp. 	D F	P.O. 1 OISINGTON, (800) 5 RILL-STEM ILE: Jackie Lan KC H- 19 S R S R 33 in. in.	Box 157 KANSAS 67544 542-7313 TEST TICKET 1 dst 2 Lease & Well NoJa Charge to_Krier Kirb K_Effective Pay ange Diamond Representati 334 ft. to Packer depth Packer depth	ackie 1 y Oil Inc 13 W Cou ve 3410 ft	TIME OFI	t. Ticket N Barton Ricky Ray opth Size	_ StateKAN y3410 6_3/4in 6_3/4in	SAS
Company Krier, I Contractor Southw Elevation 18 Date April-16-20 Fest Approved By Jim Formation Test No. Packer Depth Packer Depth Depth of Selective Z	Kirby Oil vind Drillir 56 Sur 17 Sec n Musgrove 2 Zone Set h (Inside)	ng Rig 3 Formation 18Twp. 	D F Sested from 6 3/4 6 3/4	P.O. 1 <b>DISINGTON</b> , (800) 5 <b>RILL-STEM</b> ILE: Jackie Lan KC H- <u>19</u> S R <u>19</u> S R <u>19</u> S R <u>19</u> S R <u>3324 ft.</u>	Box 157 KANSAS 67544 542-7313 TEST TICKET 1 dst 2 Lease & Well NoJa Charge to_Krier Kirb K_Effective Pay ange Diamond Representati 334 ft. to Packer depth Packer depth Recorder Number	ackie 1 by Oil Inc 13 W Cou ve 3410 ft	TIME OFI	t. Ticket N Barton Ricky Ray opth Size p		<u>SAS</u> <u>0</u> ft.
Company Krier, I Contractor Southwe Elevation 183 Date April-16-20 Fest Approved By Jim Formation Test No. Packer Depth Date Depth Depth of Selective Z Fop Recorder Depth Bottom Recorder Depth	Kirby Oil vind Drillir 56 Sur 17 Sec. n Musgrove 2 2 Zone Set h (Inside) epth (Outsid	ng Rig 3 Formation 18Twp. e Interval T 3329_ft_Size 3334_ft_Size de)	D F Sested from 6 3/4 6 3/4	P.O. 1 <b>DISINGTON</b> , (800) 5 <b>RILL-STEM</b> ILE: Jackie Lan KC H- 19 S R 19 S R 19 S R 19 S R 3324 ft. 3402 ft.	Box 157 KANSAS 67544 542-7313 TEST TICKET 1 dst 2 Lease & Well NoJa Charge to_Krier Kirb K_Effective Pay ange Diamond Representati 334 ft. to Packer depth Packer depth Recorder Number	ackie 1 y Oil Inc 13 W Cou ve	TIME OFI	t. Ticket N Barton Ricky Ra opth Size Size p ap		SAS <u>)</u> ft.
Company Krier, I Contractor Southw Elevation 18 Date April-16-20 Fest Approved By Jim Formation Test No. Packer Depth Depth of Selective Z Top Recorder Depth Bottom Recorder Depth Bottom Recorder Depth Bottom Recorder Depth	Kirby Oil vind Drillir 56 Sur <u>17</u> Sec n Musgrove 2 Zone Set h (Inside) epth (Outsid corder Depth	ng Rig 3 Formation 18Twp. 	D F	P.O. 1 DISINGTON, (800) 5 RILL-STEM ILE: Jackie Lan KC H- 19 S R 19 S R 10 S R	Box 157 KANSAS 67544 542-7313 TEST TICKET 1 dst 2 Lease & Well NoJa Charge to_Krier Kirb K_Effective Pay ange Diamond Representati 334 ft. to Packer depth Recorder Number Recorder Number Recorder Number	ackie 1 y Oil Inc 13 W Cou ve 3410 ft	TIME OFI	t. Ticket N Barton Ricky Ray epth Size Size p p	0	SAS <u>)</u> ft. I. I.
Company Krier, I Contractor Southwe Elevation 183 Date April-16-20 Fest Approved By Jim Formation Test No. Packer Depth Depth of Selective Z Fop Recorder Depth Bottom Recorder Depth Bottom Recorder Depth Bottom Recorder Depth Bottom Recorder Depth	Kirby Oil vind Drillir 56 Sur <u>17</u> Sec. n Musgrove 2 Zone Set h (Inside) epth (Outsid corder Depth Chem	ng Rig 3 Formation 18Twp. Interval T 3329 ft. Size 3334 ft. Size de) Viscosity	D F Sested from 6 3/4 6 3/4 52	P.O. 1 OISINGTON, (800) 5 <b>RILL-STEM</b> ILE: Jackie Lan KC H- 19 S R 	Box 157 KANSAS 67544 542-7313 TEST TICKET 1 dst 2 Lease & Well NoJa Charge to_Krier Kirb K_Effective Pay ange Diamond Representati 334 ft. to Packer depth Packer depth Recorder Number Recorder Number Recorder Number Drill Collar Length	ackie 1 y Oil Inc 13 W Cou ve 3410 ft	TIME OFI	t. Ticket N Barton Ricky Ray epth Size Size p p I.D		SAS ) ft.      
Company Krier, I Contractor Southw Elevation 18 Date April-16-20 Fest Approved By Jim Formation Test No. Packer Depth Depth of Selective Z Fop Recorder Depth Bottom Recorder Depth	Kirby Oil vind Drillir 56 Sur <u>17</u> Sec. n Musgrove 2 Zone Set h (Inside) epth (Outsid corder Depth Chem	ng Rig 3 Formation 18Twp. 	D F Sested from 6 3/4 6 3/4 52 8	P.O. 1 DISINGTON, (800) 5 RILL-STEM ILE: Jackie Lan KC H- 19 S R 19 S R 10 S R	Box 157 KANSAS 67544 542-7313 TEST TICKET 1 dst 2 Lease & Well NoJa Charge to_Krier Kirb K_Effective Pay ange Diamond Representati 334 ft. to Packer depth Packer depth Recorder Number Recorder Number Recorder Number Drill Collar Length Weight Pipe Length	ackie 1 y Oil Inc 13 W Cou ve 3410 ft	TIME OFI	t. Ticket N Barton Ricky Ray epth Size Size p p I.D	StateKAN StateKAN 3410 5 3/4 in 5 3/4 in 5000 P.S. 5000 P.S. 2 1/4 2 7/8	<u>SAS</u> <u>)</u> ft. I. I. _ in. _ in
Company Krier, I Contractor Southwe Elevation 183 Date April-16-20 Fest Approved By Jim Formation Test No. Packer Depth Depth of Selective Z Fop Recorder Depth Bottom Recorder Depth	Kirby Oil vind Drillir 56 Sur <u>17</u> Sec n Musgrove 2 2 Zone Set h (Inside) epth (Outsid corder Depth Chem 9.3 w	ng Rig 3 Formation 18Twp. Interval T 3329 ft. Size 3334 ft. Size 3334 ft. Size de) Viscosity /ater Loss	D F Sested from 6 3/4 6 3/4 52 8 50	P.O. 1 <b>DISINGTON</b> , (800) 5 <b>RILL-STEM</b> ILE: Jackie Lan KC H- 19 S R 19 S R 19 S R 3324 ft. 3402 ft. ft. 0 p.p.M.	Box 157 KANSAS 67544 542-7313 TEST TICKET 1 dst 2 Lease & Well NoJa Charge to_Krier Kirb K_Effective Pay ange Diamond Representati 334 ft. to Packer depth Packer depth Recorder Number Recorder Number Recorder Number Drill Collar Length Weight Pipe Length	ackie 1 y Oil Inc 13 W Cou ve 3410 ft	TIME OFI	t. Ticket N Barton Ricky Ra epth Size Size p p I.D I.D I.D	StateKAN y	SAS ft. in. in.
Company Krier, I Contractor Southw Elevation 18 Date April-16-20 Fest Approved By Jim Formation Test No. Packer Depth Depth of Selective Z Fop Recorder Depth Bottom Recorder De	Kirby Oil vind Drillir 56 Sur 17 Secn Musgrove 2 Zone Set h (Inside) epth (Outsid corder Depth Chem 9.3W RLING	ng Rig 3 Formation 18Twp. Interval T 3329 ft. Size 3334 ft. Size de) Viscosity /ater Loss Serial Number	D F Sested from 6 3/4 6 3/4 52 8 50	P.O. 1 <b>DISINGTON</b> , (800) 5 <b>RILL-STEM</b> ILE: Jackie Lan KC H- <u>19</u> S R <u>19</u> S R <u>3124</u> ft. <u>3402</u> ft. <u>11.</u> <u>19</u> S R <u>19</u> S R <u>19</u> S R <u>19</u> S R <u>19</u> S R <u>19</u> S R <u>19</u> S R <u>10</u> S R R R R R R R R R R R R R R R R R R	Box 157 KANSAS 67544 542-7313 TEST TICKET 1 dst 2 Lease & Well No. Ja Charge to Krier Kirb Keffective Pay ange Diamond Representati 334 ft. to Packer depth Packer depth Packer depth Recorder Number Recorder Number Recorder Number Drill Collar Length Drill Pipe Length Test Tool Length	ackie 1 y Oil Inc 13 W Cou ve 3410 ft	TIME OFI nty Total De ft 0062 Ca 8471 C Ca ft. ft. 3309 ft. 25 ft.	t. Ticket N Barton Ricky Ray opth Size Size p p I.D I.D I.D Tool Size	StateKAN StateKAN 3410 5 3/4 in 5 3/4 in 5000 P.S. 5000 P.S. 2 1/4 2 7/8 3 1/2 3 1/2-IF	SAS 
Company Krier, I Contractor Southw Elevation 183 Date April-16-20 Test Approved By Jim Formation Test No. Packer Depth Packer Depth Depth of Selective Z Top Recorder Depth Bottom Recorder Depth Bott	Kirby Oil vind Drillir 56 Sur 17 Sec. n Musgrove 2 2 Zone Set corder Deptt Chem 9.3 w ERLING na	ng Rig 3 Formation 18Twp. Interval T 3329 _{ft.} Size 3334 _{ft.} Size 3334 _{ft.} Size de) Viscosity /ater Loss Serial Number Reversed O	D F f fested from 6 3/4 6 3/4 6 3/4 52 8 50 0ut	P.O. 1 <b>DISINGTON</b> , (800) 5 <b>RILL-STEM</b> ILE: Jackie Lan KC H- 19 S R 19 S R 19 S R 19 S R 19 S R 3324 ft. 3402 ft. ft. 0 p.p.M. na na	Box 157 KANSAS 67544 542-7313 TEST TICKET 1 dst 2 Lease & Well NoJa Charge to_Krier Kirb K_Effective Pay ange Diamond Representati 334 ft. to Packer depth Packer depth Packer depth Recorder Number Recorder Number Recorder Number Drill Collar Length Drill Pipe Length Test Tool Length Anchor Length	ackie 1 y Oil Inc 13 W Cou ve 3410 ft 76A	TIME OFI nty Total De ft 0062 Ca 8471 C Ca 25 ft. (13P) ft.	t. Ticket N Barton Ricky Ray opth Size Size p p p I.D I.D I.D I.D J.D Size	StateKAN y	SAS ) ft.       
Company Krier, I Contractor Southw Elevation 183 Date April-16-20 Test Approved By Jim Formation Test No. Packer Depth Packer Depth Depth of Selective Z Top Recorder Depth Bottom Recorder Depth Bott	Kirby Oil vind Drillir 56 Sur 17 Sec	ng Rig 3Formation 18TwpInterval T 3329 ft. Size 3334 ft. Size de) Viscosity Viscosity Serial Number Reversed OTool Joint S	D F F Cested from 6 3/4 6 3/4 6 3/4 50 50 50 0ut ize 4 1	P.O. 1 DISINGTON, (800) 5 RILL-STEM ILE: Jackie Lan KC H- 19 S R 	Box 157 KANSAS 67544 542-7313 TEST TICKET 1 dst 2 Lease & Well NoJa Charge to_Krier Kirb K Effective Pay ange Diamond Representati 334 ft. to Packer depth Packer depth Recorder Number Recorder Number Recorder Number Drill Collar Length Weight Pipe Length Drill Pipe Length Test Tool Length Anchor Length	ackie 1 y Oil Inc 13 W Couve 3410 ft 3410 ft 76A 1	TIME OFI nty Total De ft 0062 Ca 8471 C 25 ft. (13P) ft. in.	t. Ticket N Barton Ricky Ray epth Size p p I.D I.D I.D I.D Size Bottom C	StateKAN StateKAN 3410 5 3/4 in 5 3/4 in 5000 P.S. 5000 P.S. 2 1/4 2 7/8 3 1/2 3 1/2-IF	SAS ) ft.       
Company Krier, I Contractor Southw Elevation 183 Date April-16-20 Fest Approved By Jim Formation Test No. Packer Depth Depth of Selective Z Fop Recorder Depth Bottom Recorder D	Kirby Oil vind Drillir 56 Sur 17 Sec. n Musgrove 2 Zone Set 2 Cone Set 0 h (Inside) epth (Outsid corder Depth Chem 9.3 W RLING na 7 7/8	ng Rig 3 Formation 18Twp. Interval T 3329 _{ft.} Size 3334 _{ft.} Size 3334 _{ft.} Size de) Viscosity /ater Loss Serial Number Reversed O Tool Joint S (BOB ir	D F fested from 6 3/4 6 3/4 6 3/4 52 8 50 52 8 50 0 0 ut ize 4 1 12 1/2	P.O. 1 OISINGTON, (800) 5 <b>RILL-STEM</b> ILE: Jackie Lan KC H- 19 S R 19 S R 19 S R 3324 ft. 3402 ft. ft. 0 P.P.M. na na 1/2 xh in. mins)	Box 157 KANSAS 67544 542-7313 TEST TICKET 1 dst 2 Lease & Well NoJa Charge to_Krier Kirb K_Effective Pay ange Diamond Representati 334 ft. to Packer depth Packer depth Packer depth Recorder Number Recorder Number Recorder Number Drill Collar Length Drill Pipe Length Test Tool Length Anchor Length	ackie 1 y Oil Inc 13 W Couve 3410 ft 3410 ft 76A 1	TIME OFI	t. Ticket N Barton Ricky Ray epth Size p p I.D I.D I.D I.D Size Bottom C	StateKAN y	SAS ) ft.       

Recovered	124 _{ft. of} O	100% O	35 Gravity @ 60 E	beg				
Recovered_	156' ft. of GMO	10% G	60% O	30% M				
Recovered	305' ft. of SLW N	AO 85% O	5% W	10%M				_
Recovered_	5 _{ft. of} M	100% M			F	Price Job		_
Recovered	590 ft. of Total F	luid			(	Other Charges		_
Remarks: To	ol Sample:	50% O	10% W	40% M	1	Insurance		_
					1	Total		-
Time Set Pac	eker(s) 9:20 AN	Л А.М. Р.М. Tim	e Started Off Bottom		A.M. P.M. Maxir	mum Temperatu	ure 105	
	tatic Pressure				88 P.S.I.		-	
	eriod		30 _{(E}		41 P.S.I. to (	(C)	141 P.S.I.	
Initial Closed	In Period	Minutes_	30 ([	D)1	00 P.S.I.			
Final Flow Pe	riod	Minutes_	45 (E	E) [†]	47 P.S.I. to (	F)	257 _{P.S.I.}	
Final Closed I	In Period	Minutes_	60 (0	G)10	88 P.S.I.			
Final Hydrost	atic Pressure			H)15	52 _{P.S.I.}			
Chtcor	ngl	Lmst fw<7	ROCK TYP		shale, red			
Dolprir	-	shale, grn	Carbon					
			OTHER SYMI	BOLS				
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence	DST Int DST alt Core II tail pipe							
Good Show Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas	d DST alt d Core			Printed b	y GEOstrip \	VC Striplog ver	rsion 4.0.8.15 (w	ww.grsi.ca
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1	d DST alt d Core			Printed b	y GEOstrip \		rsion 4.0.8.15 (w TG, C1 - ( tal Gas (units)	
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft)	DST alt Core II tail pipe			Printed b	y GEOstrip \	То	TG, C1 - C otal Gas (units)	
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API)	DST alt Core II tail pipe			Printed b	y GEOstrip \	To C1	TG, C1 - C	
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API)	DST alt Core II tail pipe	ology show		Printed b	y GEOstrip \	To C1 C2	TG, C1 - C otal Gas (units) 1 (units)	
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API)	d DST alt d Core	Lithology Oil Show	Ge	Printed b		To C1 C2 C3	TG, C1 - C otal Gas (units) 1 (units) 2 (units)	
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API)	DST alt Core Itail pipe	Lithology Oil Show	Ge			To C1 C2 C3	TG, C1 - C otal Gas (units) 1 (units) 2 (units) 3 (units)	
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API)	DST alt Core Itail pipe	Lithology Oil Show	Ge			To C1 C2 C3	TG, C1 - C otal Gas (units) 1 (units) 2 (units) 3 (units)	
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API) (in)	DST alt Core II tail pipe	Lithology Oil Show	Ge			To C1 C2 C3	TG, C1 - C otal Gas (units) 1 (units) 2 (units) 3 (units)	C5
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API) (in) 1:240 Imperial ROP (min/ft) Gamma (API)	DST alt Core I tail pipe Cored Interval DST Interval DST Interval DST Interval DST Interval DST Interval	Lithology	Ge			To C1 C2 C3	TG, C1 - C tal Gas (units) 1 (units) 2 (units) 3 (units) 4 (units) 1:240 Imper Total Gas (units)	ial
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) nma (API) (in) 1:240 Imperial	DST alt Core Itail pipe DST Interval DST Interval DST DST DST	Lithology	Ge			To C1 C2 C3	TG, C1 - C tal Gas (units) 1 (units) 2 (units) 3 (units) 4 (units) 1:240 Imper 1:240 Imper Cf1 (Inits) Cf2 (units)	ial
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API) (in) 1:240 Imperial ROP (min/ft) Gamma (API)	DST alt Core I tail pipe Cored Interval DST Interval DST Interval DST Interval DST Interval DST Interval		Ge white, gry, fxl, gr	ological Descriptions	;	To C1 C2 C3	TG, C1 - C tal Gas (units) 1 (units) 2 (units) 3 (units) 4 (units) 1:240 Imper Total Gas (units)	ial
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API) (in) 1:240 Imperial ROP (min/ft) Gamma (API)	DST alt Core I tail pipe Cored Interval DST Interval DST Interval DST Interval DST Interval DST Interval			ological Descriptions	;	To C1 C2 C3	TG, C1 - C tal Gas (units) 1 (units) 2 (units) 3 (units) 4 (units) 1:240 Imper 1:240 Imper Cf1 (Inits) Cf2 (units)	ial
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API) (in) 1:240 Imperial ROP (min/ft) Gamma (API)	DST alt Core I tail pipe Cored Interval DST Interval DST Interval DST Interval DST Interval DST Interval	LS,		ological Descriptions	;	To C1 C2 C3	TG, C1 - C tal Gas (units) 1 (units) 2 (units) 3 (units) 4 (units) 1:240 Imper 1:240 Imper Cf1 (Inits) Cf2 (units)	ial
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API) (in) 1:240 Imperial ROP (min/ft) Gamma (API)	DST alt Core I tail pipe	LS,	white, gry, fxl, gr	ological Descriptions	;	To C1 C2 C3	TG, C1 - C tal Gas (units) 1 (units) 2 (units) 3 (units) 4 (units) 1:240 Imper 1:240 Imper Cf1 (Inits) Cf2 (units)	ial
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API) (in) 1:240 Imperial ROP (min/ft) Gamma (API)	DST alt Core I tail pipe	LS,	white, gry, fxl, gr ck carb shale	ological Descriptions	hows	To C1 C2 C3	TG, C1 - C tal Gas (units) 1 (units) 2 (units) 3 (units) 4 (units) 1:240 Imper 1:240 Imper Cf1 (Inits) Cf2 (units)	ial
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API) (in) 1:240 Imperial ROP (min/ft) Gamma (API)	DST alt Core I tail pipe	LS,	white, gry, fxl, gr	ological Descriptions	hows	To C1 C2 C3	TG, C1 - C tal Gas (units) 1 (units) 2 (units) 3 (units) 4 (units) 1:240 Imper 1:240 Imper Cf1 (Inits) Cf2 (units)	ial
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API) (in) 1:240 Imperial ROP (min/ft) Gamma (API)	DST alt Core I tail pipe	LS,	white, gry, fxl, gr ck carb shale	ological Descriptions	hows	To C1 C2 C3	TG, C1 - C tal Gas (units) 1 (units) 2 (units) 3 (units) 4 (units) 1:240 Imper 1:240 Imper Cf1 (Inits) Cf2 (units)	ial
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API) (in) 1:240 Imperial ROP (min/ft) Gamma (API)	DST alt Core I tail pipe	LS,	white, gry, fxl, gr ck carb shale white, tan, fxl, fo	ological Descriptions	hows	To C1 C2 C3	TG, C1 - C tal Gas (units) 1 (units) 2 (units) 3 (units) 4 (units) 1:240 Imper 1:240 Imper Cf1 (Inits) Cf2 (units)	ial
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API) (in) 1:240 Imperial ROP (min/ft) Gamma (API)	DST alt Core I tail pipe	LS,	white, gry, fxl, gr ck carb shale white, tan, fxl, fo	ological Descriptions	hows	To C1 C2 C3	TG, C1 - C tal Gas (units) 1 (units) 2 (units) 3 (units) 4 (units) 1:240 Imper 1:240 Imper Cf1 (Inits) Cf2 (units)	ial
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API) (in) 1:240 Imperial ROP (min/ft) Gamma (API)	DST alt Core I tail pipe	LS,	white, gry, fxl, gr ck carb shale white, tan, fxl, fo	ological Descriptions	hows	To C1 C2 C3	TG, C1 - C tal Gas (units) 1 (units) 2 (units) 3 (units) 4 (units) 1:240 Imper 1:240 Imper Cf1 (Inits) Cf2 (units)	ial
Fair Show Poor Show Spotted or Trace Questionable Stn Dead Oil Stn Fluorescence Gas Curve Track #1 P (min/ft) mma (API) (in) 1:240 Imperial ROP (min/ft) Gamma (API)	DST alt Core I tail pipe	LS,	white, gry, fxl, gr ck carb shale white, tan, fxl, fo	ological Descriptions	hows	To C1 C2 C3	TG, C1 - C tal Gas (units) 1 (units) 2 (units) 3 (units) 4 (units) 1:240 Imper 1:240 Imper Cf1 (Inits) Cf2 (units)	ial



LS, gry, few foss, slightly cherty (dense)

LS, a/a, tr. gry chert

#### Heebner 3111.0 (-1245.0)

Black carb shale

#### Toronto 3125.0 (-1260.0)

LS, white, tan, fxl chalky in pt., poor visible porosity, poor brown stain, tr. fo, no odor

#### Douglas 3143.0 (-1277.0)

Sh, maroon, gry, gryish green

Tr. lime green, vfg, mica silty sand, poorly developed no shows

Sh, v.c. few silty

#### Brown Lime 3203.0 (-1337.0)

LS, tan, slightly cherty (dense)

#### Lansing 3215.0 (-1349.0)

LS, tan, fxl, chalky in pts, scattered p.p. porosity, brown/golden brown stain, tr. fo, no odor

LS, a/a, fr. stain, sat, sfo, ??? odor

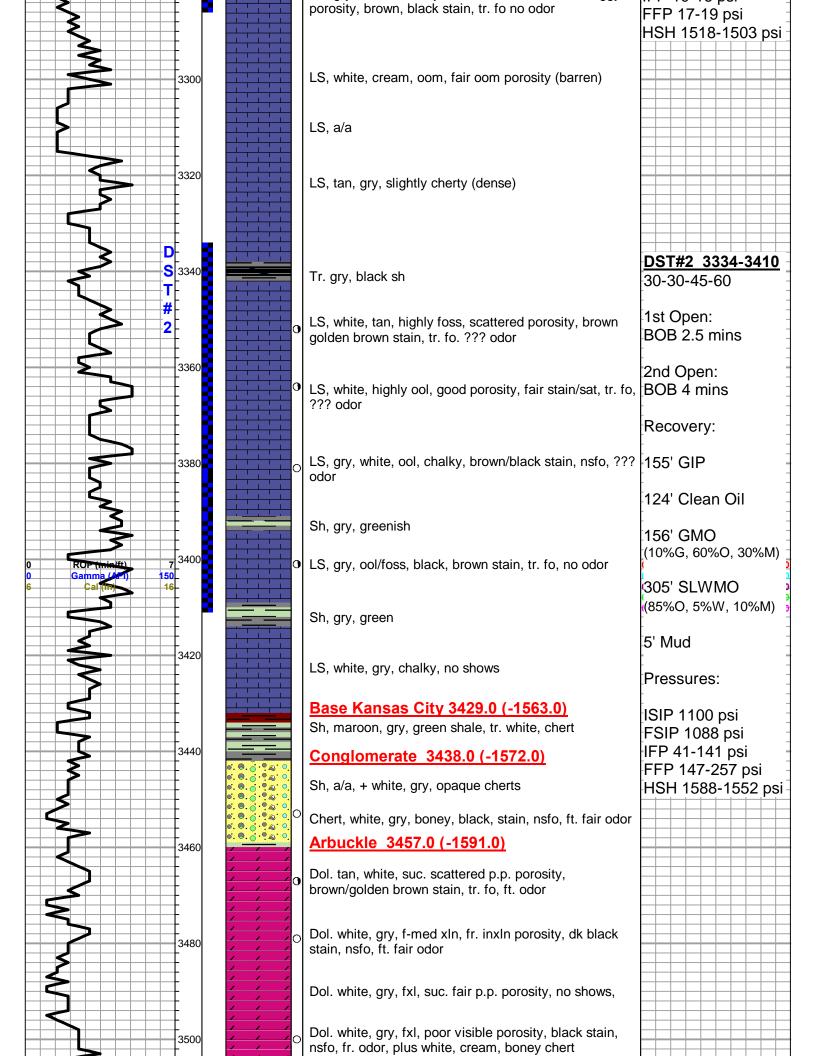
LS, tan, foss, scattered porosity, slightly cherty, dk brown stain, sfo, ft. odor

LS, white, gry, foss, poor/fair porosity, few chalky, dk
 brown stain, sfo. (Tr. gry ool, LS, fair porosity, dk
 brown black stain, sfo)

LS, gry, tan, fxl, finely ool, few foss, scattered vuggy

	-						-		
<u> </u>									
	<u> </u>								
	<u> </u>								
	<u> </u>						<u> </u>		
	<u> </u>						<u> </u>		
	<u> </u>						<u> </u>		
	-					-	-		
	-								
	-								
	-								
	<u> </u>								
	<u> </u>								
						_	_		
							<u> </u>		
	<u> </u>				-	-			
0			C	1 (u	nit	<b>s)</b>			100
0			C	1 (u	nit	<b>s)</b>			100 )
0 D		<b>[</b> #'	<u>с</u> 1	<mark>1 (1</mark> 32	200	<b>s)</b>			100
0 D	<u>S1</u>	<b>[</b> #'	<u>с</u> 1	<mark>1 (1</mark> 32	200	<b>s)</b>			100 )
0 D		<b>[</b> #'	<u>с</u> 1	<mark>1 (1</mark> 32	200	<b>s)</b>			100 )
<mark>ם</mark> 45	5-3	<b>7#</b> 30-	<mark></mark> -4	<b>32</b> 5-6	200	<b>s)</b>			100 )
<mark>ם</mark> 45	5-3	<b>7#</b> 30-	<mark></mark> -4	<b>32</b> 5-6	200	<b>s)</b>			100 0
<mark>ם</mark> 45	5-3 st (	50- 0p	<u>1</u> -4	1 (1 32 5-6 n:	200 200	) 6-(	32	85	100 9 9 9
<mark>ם</mark> 45	5-3	50- 0p	<u>1</u> -4	1 (1 32 5-6 n:	200 200	) 6-(	32	85	100 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
<mark>ם</mark> 45	5-3 st (	50- 0p	<u>1</u> -4	1 (1 32 5-6 n:	200 200	) 6-(	32	85	100 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
<u>ם</u> 4 1 W	5-3 st ( /ea	7 <u>#</u> 30- 30- 30-	-4 -4 su	n:	200 60	) 6-(	32	85	100 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
<u>ם</u> 4 1 W	5-3 st ( /ea	7 <u>#</u> 30- 30- 30-	-4 -4 su	n:	200 60	) 6-(	32	85	
<mark>ם</mark> 4 1 W	5-3 st ( /ea	0p ak	<u>1</u> -4∜ su	n: 22	200 200 200	<mark>6-:</mark>	3 <u>2</u>	85 0W	
<mark>ם</mark> 4 1 W	5-3 st ( /ea	0p ak	<u>1</u> -4∜ su	n: 22	200 200 200	<mark>6-:</mark>	3 <u>2</u>	85 0W	
<mark>ם</mark> 4 1 W	5-3 st ( /ea	0p ak	<u>1</u> -4∜ su	n: 22	200 200 200	<mark>6-:</mark>	3 <u>2</u>	85 0W	
<mark>ם</mark> 4 1 W	5-3 st ( /ea	0p ak	<u>1</u> -4∜ su	n: 22	200 200 200	<mark>6-:</mark>	3 <u>2</u>	85 0W	
0 45 19 2r W	5-3 st ( /ea	Op ak O	2-4 -4 su su su	<b>32</b> 5-( n: urf wn:	200 200 200	<mark>6-:</mark>	3 <u>2</u>	85 0W	
0 <u>D</u> 4է 1 Տ 2r W	5-3 st ( /ea	Op ak O	2-4 -4 su su su	<b>32</b> 5-( n: urf wn:	200 200 200	<mark>6-:</mark>	3 <u>2</u>	85 0W	
0 45 19 2r W	5-3 st ( /ea	Op ak O	2-4 -4 su su su	<b>32</b> 5-( n: urf wn:	200 200 200	<mark>6-:</mark>	3 <u>2</u>	85 0W	
0 45 19 2r W	5-3 st ( /ea	Op ak O	2-4 -4 su su su	<b>32</b> 5-( n: urf wn:	200 200 200	<mark>6-:</mark>	3 <u>2</u>	85 0W	
2r R	5-3 st ( /ea nd /ea	□ T <u>#</u> 30· Op ak Op ak Ov	L_q 1 su pe su ver	22 32 5-0 n: urf wn: urf	200 200 200	<mark>6-:</mark>	3 <u>2</u>	85 0W	
2r R	5-3 st ( /ea	□ T <u>#</u> 30· Op ak Op ak Ov	L_q 1 su pe su ver	22 32 5-0 n: urf wn: urf	200 200 200	<mark>6-:</mark>	3 <u>2</u>	85 0W	
2r R	5-3 st ( /ea nd /ea	□ T <u>#</u> 30· Op ak Op ak Ov	L_q 1 su pe su ver	22 32 5-0 n: urf wn: urf	200 200 200	<mark>6-:</mark>	3 <u>2</u>	85 0W	
2r R 222	5-3 st ( /ea nd /ea 20	<b>7#</b> 30- Op ak Op ak	ם -4 יפו פו אור	<u>32</u> 5-6 n: urf wn: urf	200 200 200	<mark>6-:</mark>	3 <u>2</u>	85 0W	
2r R 222	5-3 st ( /ea nd /ea 20	<b>7#</b> 30- Op ak Op ak	ם -4 יפו פו אור	<u>32</u> 5-6 n: urf wn: urf	200 200 200	<mark>6-:</mark>	3 <u>2</u>	85 0W	
2r 2r 22 22	5-3 st ( /ea nd /ea ec 20	<b>#</b> 30 Op ak Op ak Op ak	1 -4: per su pe su rer	1 32 5-0 n: urf vr: vr: vr: vr: vr: vr: vr: vr:	ac	<u>6-;</u> е	32 bl	85 0W	
2r 2r 22 22	5-3 st ( /ea nd /ea ec 20	<b>#</b> 30 Op ak Op ak Op ak	1 -4: per su pe su rer	1 32 5-0 n: urf vr: vr: vr: vr: vr: vr: vr: vr:	ac	<u>6-;</u> е	32 bl	85 0W	
2r 2r 22 22	5-3 st ( /ea nd /ea 20	<b>#</b> 30 Op ak Op ak Op ak	1 -4: per su pe su rer	1 32 5-0 n: urf vr: vr: vr: vr: vr: vr: vr: vr:	ac	<u>6-;</u> е	32 bl	85 0W	
2r 2r 22 22	5-3 st ( /ea nd /ea ec 20	<b>#</b> 30 Op ak Op ak Op ak	1 -4: per su pe su rer	<b>32</b> 5-0 n: urf wn: urf	ac	<u>6-;</u> е	32 bl	85 0W	200 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
22 21 21 21 21 22 21 (1	5-3 st ( /ea nd /ea ec 20	0 <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b>	J -4 sei si pe si ver SIF CN D,	<b>32</b> 5-6 n: urf yn: yr: y: 85	ac	<u>6-;</u> е	32 bl	85 0W	

ISIP 54 psi FSIP 81 psi IFP 10-16 psi



	RTD 3505.0 (-1639.0)		
	LTD 3506.0 (-1640.0)		
3520			
3540			