### KOLAR Document ID: 1722485

For KCC Use:

Effective	Date

District	#	
----------	---	--

SGA? Yes No

# KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

Form C-1 March 2010 Form must be Typed Form must be Signed All blanks must be Filled

# NOTICE OF INTENT TO DRILL

Expected Spud Date:	Spot Description:
month day year	Sec Twp S. R E 🗌 W
OPERATOR: License#	(Q/Q/Q/Q) feet from N / S Line of Section
Name:	feet from E / W Line of Section
Address 1:	Is SECTION: Regular Irregular?
Address 2:	(Note: Locate well on the Section Plat on reverse side)
City: State: Zip: +	County:
Contact Person:	Lease Name: Well #:
Phone:	Field Name:
CONTRACTOR: License#	Is this a Prorated / Spaced Field?
Name:	Target Formation(s):
Well Drilled For: Well Class: Type Equipment:	Nearest Lease or unit boundary line (in footage):
	Ground Surface Elevation:feet MSL
Oil Enh Rec Infield Mud Rotary	Water well within one-quarter mile:
Gas Storage Pool Ext. Air Rotary	Public water supply well within one mile:
Seismic : # of Holes Other	Depth to bottom of fresh water:
	Depth to bottom of usable water:
	Surface Pipe by Alternate:
If OWWO: old well information as follows:	Length of Surface Pipe Planned to be set:
Operator:	Length of Conductor Pipe (if any):
Well Name:	Projected Total Depth:
Original Completion Date: Original Total Depth:	Formation at Total Depth:
	Water Source for Drilling Operations:
Directional, Deviated or Horizontal wellbore?	Well Farm Pond Other:
If Yes, true vertical depth:	DWR Permit #:
Bottom Hole Location:	(Note: Apply for Permit with DWR )
KCC DKT #:	Will Cores be taken? Yes
	If Yes, proposed zone:

#### AFFIDAVIT

The undersigned hereby affirms that the drilling, completion and eventual plugging of this well will comply with K.S.A. 55 et. seq.

It is agreed that the following minimum requirements will be met:

- 1. Notify the appropriate district office *prior* to spudding of well;
- 2. A copy of the approved notice of intent to drill shall be posted on each drilling rig;
- 3. The minimum amount of surface pipe as specified below **shall be set** by circulating cement to the top; in all cases surface pipe **shall be set** through all unconsolidated materials plus a minimum of 20 feet into the underlying formation.
- 4. If the well is dry hole, an agreement between the operator and the district office on plug length and placement is necessary prior to plugging;
- 5. The appropriate district office will be notified before well is either plugged or production casing is cemented in;
- 6. If an ALTERNATE II COMPLETION, production pipe shall be cemented from below any usable water to surface within 120 DAYS of spud date. Or pursuant to Appendix "B" - Eastern Kansas surface casing order #133,891-C, which applies to the KCC District 3 area, alternate II cementing must be completed within 30 days of the spud date or the well shall be plugged. In all cases, NOTIFY district office prior to any cementing.

Submitted E	Electronically
-------------	----------------

For KCC Use ONLY	
API # 15	
Conductor pipe required	feet
Minimum surface pipe required	feet per ALT. I III
Approved by:	
This authorization expires:	t started within 12 months of approval date.)
Spud date:	Agent:

#### Remember to:

- File Certification of Compliance with the Kansas Surface Owner Notification Act (KSONA-1) with Intent to Drill;
- File Drill Pit Application (form CDP-1) with Intent to Drill;
- File Completion Form ACO-1 within 120 days of spud date;
- File acreage attribution plat according to field proration orders;
- Notify appropriate district office 48 hours prior to workover or re-entry;
- Submit plugging report (CP-4) after plugging is completed (within 60 days);
- Obtain written approval before disposing or injecting salt water.
- If well will not be drilled or permit has expired (See: authorized expiration date) please check the box below and return to the address below.

ш

\_ Well will not be drilled or Permit Expired Date: \_ Signature of Operator or Agent: For KCC Use ONLY

API # 15 - \_\_\_

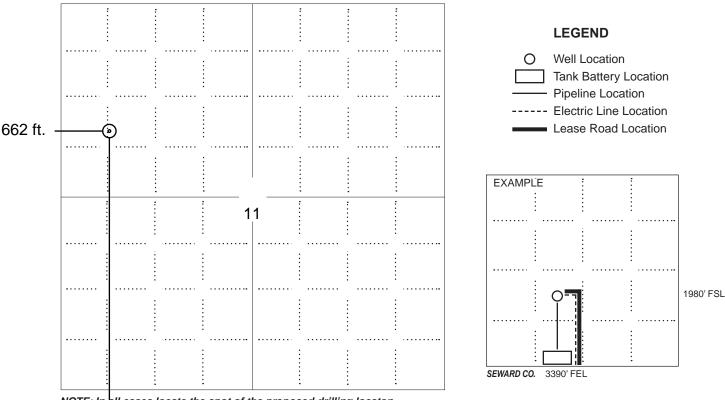
### IN ALL CASES PLOT THE INTENDED WELL ON THE PLAT BELOW

In all cases, please fully complete this side of the form. Include items 1 through 5 at the bottom of this page.

Operator:	Location of Well: County:
Lease:	feet from N / S Line of Section
Well Number:	feet from E / W Line of Section
Field:	Sec Twp S. R E 🗌 W
Number of Acres attributable to well: QTR/QTR/QTR/QTR of acreage:	Is Section: Regular or Irregular
	If Section is Irregular, locate well from nearest corner boundary.
	Section corner used: NE NW SE SW

PLAT

Show location of the well. Show footage to the nearest lease or unit boundary line. Show the predicted locations of lease roads, tank batteries, pipelines and electrical lines, as required by the Kansas Surface Owner Notice Act (House Bill 2032). You may attach a separate plat if desired.



NOTE: In all cases locate the spot of the proposed drilling locaton.

#### 3536 ft.

#### In plotting the proposed location of the well, you must show:

- 1. The manner in which you are using the depicted plat by identifying section lines, i.e. 1 section, 1 section with 8 surrounding sections, 4 sections, etc.
- 2. The distance of the proposed drilling location from the south / north and east / west outside section lines.
- 3. The distance to the nearest lease or unit boundary line (in footage).
- 4. If proposed location is located within a prorated or spaced field a certificate of acreage attribution plat must be attached: (C0-7 for oil wells; CG-8 for gas wells).
- 5. The predicted locations of lease roads, tank batteries, pipelines, and electrical lines.

Side Two

### KOLAR Document ID: 1722485

# KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

Form CDP-1 May 2010 Form must be Typed

# **APPLICATION FOR SURFACE PIT**

	Su	bmit in Duplicat	e
Operator Name:			License Number:
Operator Address:			
Contact Person:			Phone Number:
Lease Name & Well No.:			Pit Location (QQQQ):
Type of Pit:	Pit is:		·
Emergency Pit Burn Pit	Proposed	Existing	SecTwpR East West
Settling Pit Drilling Pit	If Existing, date co	nstructed:	Feet from North / South Line of Section
Workover Pit Haul-Off Pit (If WP Supply API No. or Year Drilled)	Pit capacity:		Feet from East / West Line of Section
		(bbls)	County
Is the pit located in a Sensitive Ground Water A	rea? Yes	No	Chloride concentration: mg/l (For Emergency Pits and Settling Pits only)
Is the bottom below ground level?	Artificial Liner?	10	How is the pit lined if a plastic liner is not used?
Pit dimensions (all but working pits):	m ground level to dee	,	Width (feet)N/A: Steel Pits
If the pit is lined give a brief description of the line material, thickness and installation procedure.	ner		dures for periodic maintenance and determining ncluding any special monitoring.
Distance to nearest water well within one-mile of	of pit:	Depth to shallo Source of infor	west fresh water feet.
feet Depth of water well	feet	measured	well owner electric log KDWR
Emergency, Settling and Burn Pits ONLY:		Drilling, Worko	over and Haul-Off Pits ONLY:
Producing Formation:		Type of materia	al utilized in drilling/workover:
Number of producing wells on lease:		Number of wor	king pits to be utilized:
Barrels of fluid produced daily:		Abandonment	procedure:
Does the slope from the tank battery allow all s flow into the pit?Yes No	pilled fluids to	Drill pits must b	be closed within 365 days of spud date.
Submitted Electronically			
	KCC	OFFICE USE O	NLY
Date Received: Permit Numl	oer:	Permi	

# KOLAR Document ID: 1722485

# KANSAS CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION

# CERTIFICATION OF COMPLIANCE WITH THE KANSAS SURFACE OWNER NOTIFICATION ACT

Form KSONA-
July 202
Form Must Be Typed
Form must be Signed
All blanks must be Filled

This form must be submitted with all Forms C-1 (Notice of Intent to Drill); CB-1 (Cathodic Protection Borehole Intent); T-1 (Request for Change of Operator Transfer of Injection or Surface Pit Permit); and CP-1 (Well Plugging Application). Any such form submitted without an accompanying Form KSONA-1 will be returned.

Select the corresponding form being filed: C-1 (Intent) CB-1 (Cathodic Protection Borehole Intent) T-1 (Transfer) CP-1 (Plugging Application)

OPERATOR: License #	Well Location:
Name:	
Address 1:	County:
Address 2:	Lease Name: Well #:
City: State: Zip:+	If filing a Form T-1 for multiple wells on a lease, enter the legal description of
Contact Person:	the lease below:
Phone: ( ) Fax: ( )	
Email Address:	
Surface Owner Information:	
Name:	When filing a Form T-1 involving multiple surface owners, attach an additional
Address 1:	sheet listing all of the information to the left for each surface owner. Surface owner information can be found in the records of the register of deeds for the
Address 2:	county, and in the real estate property tax records of the county treasurer.
City: State: Zip:+	

If this form is being submitted with a Form C-1 (Intent) or CB-1 (Cathodic Protection Borehole Intent), you must supply the surface owners and the KCC with a plat showing the predicted locations of lease roads, tank batteries, pipelines, and electrical lines. The locations shown on the plat are preliminary non-binding estimates. The locations may be entered on the Form C-1 plat, Form CB-1 plat, or a separate plat may be submitted.

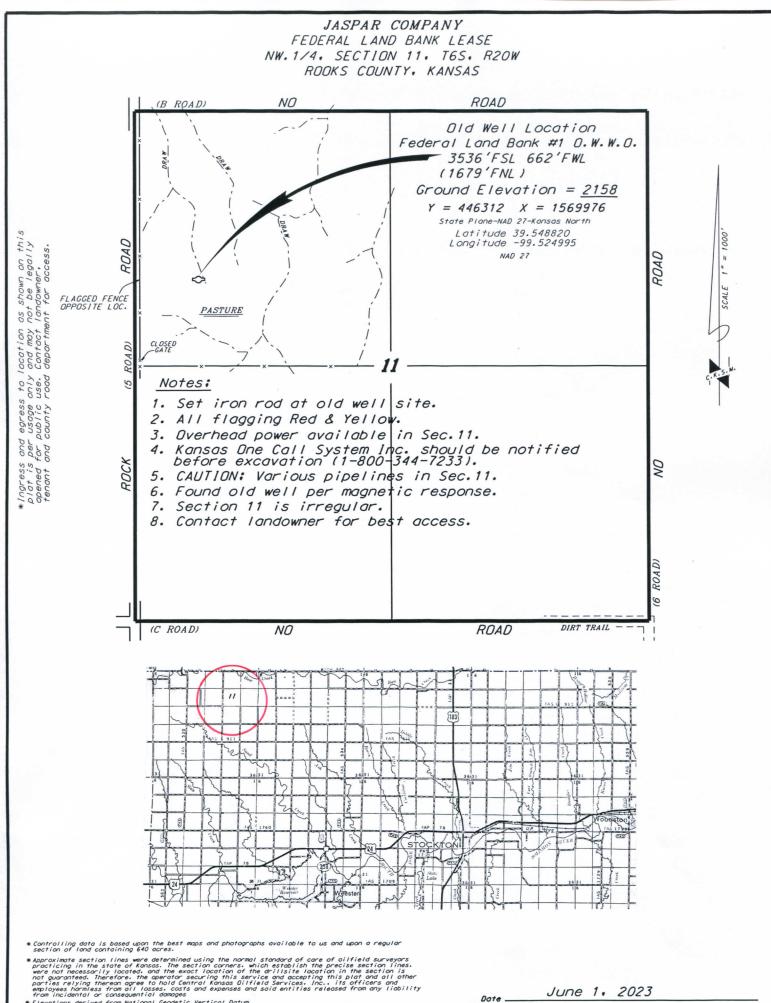
#### Select one of the following:

□ I certify that, pursuant to the Kansas Surface Owner Notice Act (see Chapter 55 of the Kansas Statutes Annotated), I have provided the following to the surface owner(s) of the land upon which the subject well is or will be located: 1) a copy of the Form C-1, Form CB-1, Form T-1, or Form CP-1 that I am filing in connection with this form; 2) if the form being filed is a Form C-1 or Form CB-1, the plat(s) required by this form; and 3) my operator name, address, phone number, fax, and email address.

□ I have not provided this information to the surface owner(s). I acknowledge that, because I have not provided this information, the KCC will be required to send this information to the surface owner(s). To mitigate the additional cost of the KCC performing this task, I acknowledge that I must provide the name and address of the surface owner by filling out the top section of this form and that I am being charged a \$30.00 handling fee, payable to the KCC, which is enclosed with this form.

If choosing the second option, submit payment of the \$30.00 handling fee with this form. If the fee is not received with this form, the KSONA-1 form and the associated Form C-1, Form CB-1, Form T-1, or Form CP-1 will be returned.

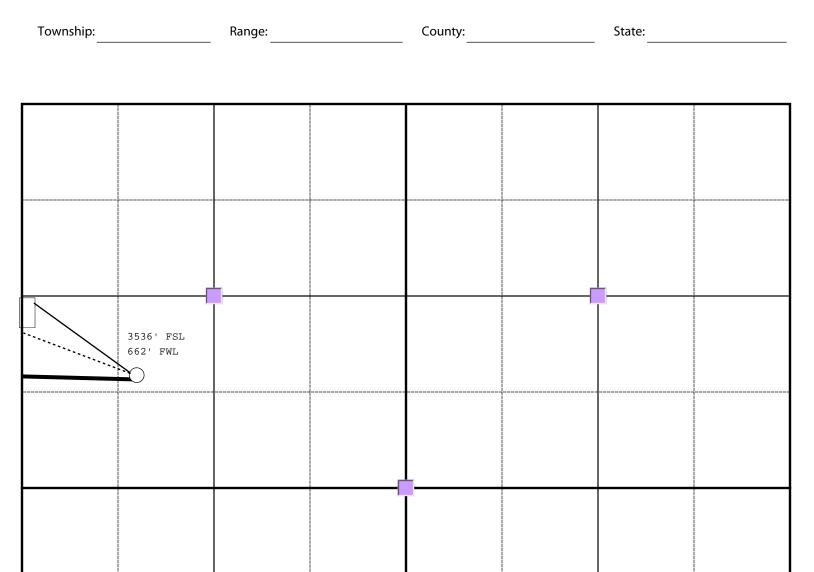
#### Submitted Electronically



\* Elevations derived from National Geodetic Vertical Datum.

CENTRAL KANSAS OILFIELD SERVICES, INC. (620)792-1977





Tank Battery

Pipeline

Road

----- Electric Line

Conservation Division 266 N. Main St., Ste. 220 Wichita, KS 67202-1513

Susan K. Duffy, Chair Dwight D. Keen, Commissioner Andrew J. French, Commissioner Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Laura Kelly, Governor

August 1, 2023

Jaspar Co. PO Box 1120 Hays, Kansas 67601

RE: Surface Casing Exception Federal Land Bank 1-OWWO, Sec. 11-T6S-R20W API: 15-163-00069-00-01 Rooks County, Kansas

Dear Mr. Vehige:

The Kansas Corporation Commission (KCC) has received your request for an exception to the Table 1 minimum surface pipe requirement of 200 feet for the proposed washdown of this well. From your request, the KCC understands that Jaspar Co. is requesting to utilize the existing 182 feet of surface casing, and cement in long string casing from a depth of at least 1,110 feet to surface.

After review of this matter by technical staff it was determined that:

- 1. The base of the Dakota is at a depth of approximately 1,060 feet.
- 2. The depth of the nearest water well of record within one mile of the proposed location is 32 feet.

Based on this information, an exception is granted for the Table 1 Minimum Surface Casing Requirements with the following stipulations:

- 1. The KCC District #4 office must be notified prior to spudding the well.
- 2. Upon **reaching total depth** of the well, the production or long string casing nearest the formation wall shall be **immediately** cemented from a depth of at least 1,110 feet to surface.
- The KCC District #4 office must be notified one day before cementing the production or long string casing so staff can be onsite to witness the cementing <u>from at least 1,110 feet to surface</u>. Cementing must be witnessed during business hours of 8am to 5pm, Monday through Friday.
- 4. In the event the well is dry, plugging will be performed according to KCC rules and KCC District #4 requirements.

Sincerely,

Ryan A. Hoffman - Director

cc: Todd Bryant – Production Dept. Supervisor ✓ (via e-mail 8/1/2023) Case Morris – Dist. #4 Supervisor ✓ (via e-mail 7/31/2023)



STATE OF KANSAS TATE CORPORATION COMMISSIO	ON	15-1( WI	63-000 ELL PLU	GGING R	ECORD	
ve All Information Completely .ke Required Affidavit .ll or Deliver Report to :		FORM	ATION P	or LUGGING	RECOR	D Strike out upper line when reporting plug- ging off formations
Conservation Division State Corporation Commission 800 Bitting Building				۰. 		
Wichita, Kansas						Rge
NORTH						- 18 
		Federal I				Well No
	9					.Wichita, Kan
Ø						
	Application for	or plugging filed	August 2	21	······	19.42 19.42
						19 42
		,		101111110111	/	×
Locate well correctly on above						fore plugging was com-
Section Plat ne of Conservation Agent who	supervised plugging of	this well C	T. Alexa	nder		· · · · · · · · · · · · · · · · · · ·
lucing formation						
w depth and thickness of all wa		ions.				
IL, GAS OR WATER RECO	DRDS	·····			1	CASING RECORD
Formation	Content	From	To	Size	Put In	Pulled Out
Shale & Shells	water	135	182	10"	182	4889
			,			
				7		
			-			
		·	·			
Drove a wood	ment or other plugs we plug set.	re used, state the o	the surf	ne and depth p	laced, from	eet. put in
Describe in detail the manner oducing it into the hold. If cer feet for each p Drove a wood 5 sacks of cement rom 160 feet to 2 ement to within L f surface pipe,	ment or other plugs we olug set. plug to the which plugg 9 feet, put 4 feet of top	re used, state the o bottom of ged back to in another o of surface	the surf the surf 160 fee plug ar ce, welde	ne and depth p face pipe et, pumpe nd filled ed steel	laced, from	eet. out in
Drove a wood 5 sacks of cement com 160 feet to 2 ament to within L	ment or other plugs we olug set. plug to the which plugg 29 feet, put feet of top	re used, state the o bottom of ged back to in another o of surface	the surf the surf 160 fee plug ar ce, welde	ne and depth p face pipe at, pumpe nd filled ad steel	laced, from <b>a</b> , 182 for ad shale ad shale about the with the second cap on the second s	eet. out in
Drove a wood 5 sacks of cement com 160 feet to 2 ament to within L	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top	re used, state the o bottom of ged back to in another of surfac	the surf the surf 160 fee plug ar ee, welde	ne and depth p face pipe at, pumpe nd filled ad steel	laced, from <b>a</b> , <b>18</b> 2 for ad shale hole with cap on cap on	eet. out in
Drove a wood Sacks of cement com 160 feet to 2 Sament to within L	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top	re used, state the o bottom of ged back to in another o of surfac	the surf the surf 160 fee plug ar ee, welde	ne and depth p face pipe at, pumpe nd filled ad steel	laced, from <b>a</b> , <b>18</b> 2 for ad shale hole with cap on cap on	eet. out in
Drove a wood Sacks of cement com 160 feet to 2 Sament to within L	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top	re used, state the o bottom of ged back to in another o of surfac	the surf the surf 160 fee plug ar ee, welde	ne and depth p face pipe at, pumpe nd filled ad steel	laced, from <b>a</b> , <b>18</b> 2 for ad shale hole with cap on cap on	eet. out in
Drove a wood Sacks of cement com 160 feet to 2 Sament to within L	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top	re used, state the o bottom of ged back to in another o of surfac	the surf the surf 160 fee plug ar ee, welde	ne and depth p face pipe at, pumpe nd filled ad steel	laced, from <b>a</b> , <b>18</b> 2 for ad shale hole with cap on cap on	eet. out in
Drove a wood sacks of cement com 160 feet to 2 pment to within L	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top	re used, state the o bottom of ged back to in another of surfac	the surf the surf 160 fee plug ar ee, welde	ne and depth p face pipe at, pumpe nd filled ad steel	laced, from <b>a</b> , <b>18</b> 2 for ad shale hole with cap on cap on	eet. out in
Drove a wood sacks of cement com 160 feet to 2 ment to within L	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top	re used, state the o bottom of ged back to in another o of surfac	the surf the surf 160 fee plug ar ee, welde	ne and depth p face pipe at, pumpe nd filled ad steel	laced, from <b>a</b> , <b>18</b> 2 for ad shale hole with cap on cap on	feet to eet, put in into hole ith top STATE CONVERSION
Drove a wood 5 sacks of cement com 160 feet to 2 ament to within L	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top	re used, state the o bottom of ged back to in another o of surfac	the surf the surf 160 fee plug ar ee, welde	ne and depth p face pipe at, pumpe nd filled ad steel	laced, from <b>a</b> , <b>18</b> 2 for ad shale hole with cap on cap on	feet to eet, put in into hole ith top STATE CONVERSION
oducing it into the hold. If cer feet for each p Drove a wood 5 sacks of cement rom 160 feet to 2 ement to within 1 f surface pipe.	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top	re used, state the o bottom of sed back to in another of surfac	the surf o 160 fee o plug an oe, welde welde 160 fee of plug an oe, welde 47.INE 47.INE	ne and depth p	laced, from	feet to eet, put in into hole ith top STATE CORPORATION STATE CORPORATION STATE CORPORATION STATE CORPORATION STATE CORPORATION STATE CORPORATION COMMISSION SEP 1 7 1942
oducing it into the hold. If cer feet for each p Drove a wood 5 sacks of cement rom 160 feet to 2 ament to within L f surface pipe.	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top	re used, state the o bottom of sed back to in another of surfac	the surf o 160 fee o plug an oe, welde welde 160 fee of plug an oe, welde 47.INE 47.INE	ne and depth p	laced, from	feet to eet, put in into hole ith top STATE CORPORATION STATE CORPORATION STATE CORPORATION STATE CORPORATION STATE CORPORATION STATE CORPORATION COMMISSION SEP 1 7 1942
oducing it into the hold. If cer feet for each p Drove a wood 5 sacks of cement rom 160 feet to 2 ament to within L f surface pipe.	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top (If additional s well should be address i onal Bank Bi	re used, state the o bottom of ged back to in another of surface fill BOOK (Autor description is necessar ed to Black-J uilding , J	the surf o 160 fee plug ar ce, welde welde y, use BACK of thi Marshall Nichita,	ne and depth p face pipe et, pumpe hd filled ed steel face face d filled ed steel face	laced, from	feet to eet, put in into hole ith top STATE COMPENSION STATE COMPENSION SEP 1 7 1942 COMPENSION SEP 1 7 1942
Correspondence regarding this ress 405 Union Nati	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top (If additional s well should be address i onal Bank Bank Bank Bank Bank Bank Bank Bank	re used, state the o bottom of ged back to in another of surface filt BOCK ANAR I description is necessar ed to Black-I uilding , M TY OF Sedgw: (em	the surf o 160 fee plug ar ce, welde welde ue, welde ue,	ne and depth p Cace pipe et, pumpe nd filled ed steel filled ed steel filled filled ed steel filled filled ed steel filled fil	laced, from a 182 for a shale hole w cap on cap on pany pany pany	feet to eet, put in into hole ith top SHATE COMPANY SHATE COMPANY SEP 1 7 1942 COMMISSION SEP 1 7 1942 SEP 1 7 194
Correspondence regarding this ress. 405. Union Nati	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top (If additional s well should be address i onal Bank Bank Bank Bank Bank Bank Bank Bank	re used, state the o bottom of ged back to in another of surface Fit BOCK ANAR I description is necessar ed to Black-I uilding , I TY OF Sedgw: (em cdge of the facts, s rect. So help me o	the surf o 160 fee plug ar ce, welde welde up of the surf of the s	ne and depth p Cace pipe et, pumpe nd filled ed steel filled ed steel filled filled ed steel filled filled ed steel filled fil	laced, from a 182 for a shale hole w cap on cap on pany pany pany	feet to eet, put in into hole ith top SHATE COMPANY SHATE COMPANY SEP 1 7 1942 COMMISSION SEP 1 7 1942 SEP 1 7 194
Correspondence regarding this ress. 405. Union Nati	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top (If additional s well should be address i onal Bank Bank Bank Bank Bank Bank Bank Bank	re used, state the o bottom of sed back to in another of surface Filt BOCK (Aux) I description is necessar ed to Black-I uilding , TY OF. Sedgw: (em odge of the facts, s rect. So help me o (Signature)	the surf o 160 fee plug ar ce, welde welde uppe, welde uppe uppe y, use BACK of this Marshall Nichita, ick ployee of owner tatements, and God.	ne and depth p Cace pipe et, pumpe hd filled ed steel	laced, from a 182 fe a shale hole w cap on cap on pany pany pany pany	feet to eet, put in into hole ith top STATE COMPANY STATE COMPANY COMPANY STATE COMPANY COMPANY STATE COMPANY COMPANY STATE COMPANY COMPANY STATE COMPANY COMPANY STATE COMPANY COMPANY STATE COMPANY COMPANY COMPANY STATE COMPANY COMPANY STATE COMPANY
Correspondence regarding this ress. 405 Union Nati	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top (If additional s well should be address Lonal Bank Bank Bank Bank Bank Bank Bank Bank	re used, state the o bottom of sed back to in another of surface Filt BOOK (Association I description is necessar ed to Black-I ailding , TY OF Sedgw: (em cdge of the facts, s rect. So help me o (Signature)	the surf o 160 fee o plug ar oe, welde welde uppe, welde uppe uppe v, use BACK of thi Marshall Nichita, ick ployee of owner tatements, and God.	ne and depth p Cace pipe et, pumpe nd filled ed steel filled ed steel filled filled ed steel filled filled ed steel filled f	laced, from a 182 for a shale hole w cap on cap on pany pany pany bicerater) of the contained and hank be ddress)	feet to eet, put in into hole ith top SAR COMPANY SEP 171942 COMMISSIN SEP 171942 STATE COMMISSIN SEP 171942 STATE COMMISSIN STATE C
Correspondence regarding this ress. 405. Union Nati	ment or other plugs we plug set. plug to the which plugg 29 feet, put feet of top (If additional s well should be address Lonal Bank Bank Bank Bank Bank Bank Bank Bank	re used, state the o bottom of sed back to in another of surface fill BOOK (Association is necessar ed to Black-I uilding , TY OF Sedgw: (em cdge of the facts, s rect. So help me o (Signature) 	the surf o 160 fee o plug ar oe, welde welde uppe, welde uppe uppe v, use BACK of thi Marshall Nichita, ick ployee of owner tatements, and God.	ne and depth p Cace pipe et, pumpe nd filled ed steel filled ed steel filled filled ed steel filled filled ed steel filled f	laced, from a 182 for a shale hole w cap on cap on pany pany pany bicerater) of the contained and hank be ddress)	feet to eet, put in into hole ith top SAR SEP 171942 COMMISSION SEP 171942 SEP 171

WELL LOG BUREAU - KANSAS GEOLOGICAL SOCIETY 412 Union National Bk Bldg., Wichita, Kansas 15-163-00069-0000 BLACK-MARSHALL OIL CO. SEC.11 **T**, 6 R. 20 W Federal Land Bank No. 1. CNL SW NW Total Depth. 3641늘 County. Rooks Comm. 8-3-42 Comp. 8-20-42 Shot or Treated. Contractor. 8-29-42 Issued. CASING: 10" 1821 Elevation. Production. Dry Figures Indicate Bottom of Formations.

shale & shells 135 no log 182 Sample Record from Lerke & Whortan: shale 590 shale 1170 Top Anhydrite 1765 shale & sand 1534 Top Ft.Riley 2350 shale & red rock 1765 Top Neva 2680 anhydrite 1795 Top Topoka 3165 shale & red rock 2130 soft zone, dry, no sh oil 3322-3327 shale & shells soft zone, just trace saturation 2820 3339-3345 shale & lime 3035 soft zone, porous fossiliferous lime, 3387-3390 **li**me 3095 fair saturation brkn lime & shale 3155 Top Kansas City 3399 shale & lime 3165 soft zone, porous fossiliferous lime, 1ime 3210 3439-3443 fair saturation soft zone, sh oil, probably one thin lime hd 3264 lime sdy 3273 streak saturation 3481-3482 lime brkn & shale 3306 soft zone, light saturation 3491-3493 lime 3328 3528-3530 soft zone, trace oil stain lime & chert 3338 medium soft zone, few thin strks well lime 3360 saturated lime 3544-3547 lime & shale 3415 medium soft zone, possible thin strks lime 3460 3559-3563 of light saturation lime brkn 3503 medium soft zone, some saturation, thin lime hd 3510 strks 3574-3576 limø 3540 medium soft zone, no saturation Base Kansas City 3599 3579-3582 lime hd 3601 shale red & lime 3629 various colored shale, some conglomerate shale-various colors 3641 3599-3641 sand granite hd pink 3641글 conglomerate soft, drilling 3 to 4 Total Depth. 3599-3621 minutes per foot conglomerate hrd 3621-3641 granite hd pink 

ENG Л 6.0201 ŕ. BOUK 47 LINE 4