





1234639

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
--	---

CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> Used							
Report all strings set-conductor, surface, intermediate, production, etc.							
Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

Did you perform a hydraulic fracturing treatment on this well?  Yes  No *(If No, skip questions 2 and 3)*  
 Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons?  Yes  No *(If No, skip question 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)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:      Size: \_\_\_\_\_ Set At: \_\_\_\_\_ Packer At: \_\_\_\_\_ Liner Run:  Yes  No

Date of First, Resumed Production, SWD or ENHR: \_\_\_\_\_ Producing Method:  
 Flowing  Pumping  Gas Lift  Other *(Explain)* \_\_\_\_\_

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____ <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Perth 3302 2-1H
Doc ID	1234639

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	4082-4084	Slickwater & HEFE HCL 15% Acid Frac	4082-8168
5	4279-4281		
5	4341-4343		
5	4734-4736		
5	4806-4808		
5	4867-4869		
5	4916-4918		
5	4964-4966		
5	5029-5031		
5	5101-5103		
5	5150-5152		
5	5221-5223		
5	5298-5300		
5	5358-5360		
5	5436-5438		
5	5508-5510		
5	5573-5575		
5	5652-5654		
5	5730-5732		
5	5778-5780		
5	5858-5860		
5	5933-5935		
5	6000-6002		

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Perth 3302 2-1H
Doc ID	1234639

#### Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	6061-6063		
5	6104-6106		
5	6236-6238		
5	6285-6287		
5	6349-6351		
5	6428-6430		
5	6495-6497		
5	6582-6584		
5	6647-6649		
5	6718-6720		
5	6811-6813		
5	6898-6900		
5	6942-6944		
5	7001-7003		
5	7087-7089		
5	7152-7154		
5	7224-7226		
5	7304-7306		
5	7372-7374		
5	7454-7456		
5	7522-7524		
5	7605-7607		
5	7670-7672		
5	7751-7753		

Form	ACO1 - Well Completion
Operator	SandRidge Exploration and Production LLC
Well Name	Perth 3302 2-1H
Doc ID	1234639

Perforations

Shots Per Foot	Perforation Record	Material Record	Depth
5	7821-7823		
5	7882-7884		
5	7948-7950		
5	8018-8020		
5	8098-8100		
5	8166-8168		



# Hydraulic Fracturing Fluid Product Component Information Disclosure

Job Start Date:	4/26/2014
Job End Date:	4/28/2014
State:	Kansas
County:	Sumner
API Number:	15-191-22718-01-00
Operator Name:	SandRidge Energy
Well Name and Number:	Perth 3302 #2-1H
Longitude:	-97.47702560
Latitude:	37.20148800
Datum:	NAD27
Federal/Tribal Well:	NO
True Vertical Depth:	3,966
Total Base Water Volume (gal):	2,462,446
Total Base Non Water Volume:	0



## Hydraulic Fracturing Fluid Composition:

Trade Name	Supplier	Purpose	Ingredients	Chemical Abstract Service Number (CAS #)	Maximum Ingredient Concentration in Additive (% by mass)**	Maximum Ingredient Concentration in HF Fluid (% by mass)**	Comments
Water	Well Operator	Carrier/Base Fluid	Water	7732-18-5	100.00000	95.63472	None
40/70 Premium Preferred Sand	Cimarron Acid	Proppant, Scouring, Fill	Crystalline Silica (quartz)	14808-60-7	100.00000	3.12746	None
15% Unihibited HCl Acid	Cimarron Acid	Etching, Dissolving, Cleaning	Water	7732-18-5	85.00000	0.63878	None
			Hydrochloric Acid	7647-01-0	15.00000	0.11273	None
			Water	7732-18-5	24.00000	0.00015	None
			Methanol	67-56-1	9.00000	0.00006	None
			Triethyl Phosphate	78-40-0	8.40000	0.00005	None
			Ethoxylated Nonylphenol	68412-54-4	8.40000	0.00005	None
			Isopropyl Alcohol	67-63-0	8.40000	0.00005	None
			2-Butoxyethanol	111-76-2	8.40000	0.00005	None
			Tar Bases-quinoline derivs-benzyl chloride/quaternized	72480-70-7	8.40000	0.00005	None
			Cinnamaldehyde	104-55-2	8.40000	0.00005	None
			N-Dimethylformamide	68-12-2	8.40000	0.00005	None
			Ethylene Glycol	107-21-1	8.40000	0.00005	None



40/70 Resin Coated Sand	Cimarron Acid	Proppant, Scouring, Fill					
			Crystalline Silica (quartz)	14808-60-7	97.00000	0.34751	None
Iron Control, Sodium Erythorbate	Cimarron Acid	Iron Control					
			Water	7732-18-5	55.50000	0.02530	None
			Methanol	67-56-1	12.70000	0.00581	None
			Dinanylphenyl Polyoxyethylene	201602-88-2	9.10000	0.00415	None
			Poly(ethylene Oxide)	25322-68-3	9.10000	0.00415	None
			Nonylphenal Polyethylene Glycol Ether	127087-87-0	9.10000	0.00415	None
			Isopropanol	67-63-0	4.60000	0.00208	None
			Sodium Erythorbate	6381-77-7	100.00000	0.00025	None
			Water	7732-18-5	54.50000	0.00018	None
			Polyglycol Ethers	52624-57-4	13.60000	0.00005	None
			Isopropanol	67-63-0	13.60000	0.00005	None
			Methanol	67-56-1	9.00000	0.00003	None
			Glycol Ether EB	111-76-2	9.00000	0.00003	None
FR-986, Cationic Friction Reducer	Cimarron Acid	Friction Reducer					
			Water	7732-18-5	50.00000	0.00492	None
			Petroleum Hydrotreated Light Distillate	64742-47-8	2.50000	0.00178	None
			Phosphoric Acid	7664-38-2	16.80000	0.00165	None
			Hydrochloric Acid	7647-01-0	16.80000	0.00165	None
			Ethylene Glycol	107-21-1	12.70000	0.00125	None
			Methanol	67-56-1	3.60000	0.00036	None

Ingredients shown above are subject to 29 CFR 1910.1200(i) and appear on Material Safety Data Sheets (MSDS). Ingredients shown below are Non-MSDS.

\* Total Water Volume sources may include fresh water, produced water, and/or recycled water

\*\* Information is based on the maximum potential for concentration and thus the total may be over 100%

Note: For Field Development Products (products that begin with FDP), MSDS level only information has been provided.

Ingredient information for chemicals subject to 29 CFR 1910.1200(i) and Appendix D are obtained from suppliers Material Safety Data Sheets (MSDS)

## Summary of Changes

Lease Name and Number: Perth 3302 2-1H

API/Permit #: 15-191-22718-01-00

Doc ID: 1234639

Correction Number: 1

Approved By: NAOMI JAMES

Field Name	Previous Value	New Value
Approved Date	06/04/2014	12/10/2014
Date of First or Resumed Production or SWD or Enhr		07/27/2014
Disposition Of Gas - Vented	No	Yes
Fracturing Question 2	No	Yes
Fracturing Question 3		Yes
Method Of Completion - Perf	No	Yes
Producing Method Other	No	Yes
Producing Method Other Detail		ESP
Producing Method Pumping	No	Yes
Production - Barrels Oil		41

Summary of changes for correction 1 continued

Field Name	Previous Value	New Value
Production - Barrels of Water		4232
Production - MCF Gas		260
Production Interval #1		4082-8168
Purchaser's Name		Oil = CVR Gas = Flare
Save Link	../../../../kcc/detail/operatorEditDetail.cfm?docID=1207910	../../../../kcc/detail/operatorEditDetail.cfm?docID=1234639
Total Depth	8262	4620
Well Type	SIGW	OIL

## Summary of Attachments

Lease Name and Number: Perth 3302 2-1H

API: 15-191-22718-01-00

Doc ID: 1234639

Correction Number: 1

Attachment Name



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1207910  
OIL & GAS CONSERVATION DIVISION

Form ACO-1  
August 2013

Form must be Typed  
Form must be Signed  
All blanks must be Filled

**CONFIDENTIAL** WELL COMPLETION FORM  
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

Designate Type of Completion:

- New Well       Re-Entry       Workover
- Oil       WSW       SWD       SIOW
- Gas       D&A       ENHR       SIGW
- OG       GSW       Temp. Abd.
- 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 ENHR       Conv. to SWD
- Plug Back       Conv. to GSW       Conv. to Producer
- Commingled      Permit #: \_\_\_\_\_
- Dual Completion      Permit #: \_\_\_\_\_
- SWD      Permit #: \_\_\_\_\_
- ENHR      Permit #: \_\_\_\_\_
- GSW      Permit #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

GPS Location: Lat: \_\_\_\_\_, Long: \_\_\_\_\_  
(e.g. xx.xxxxx) (e.g. -xxx.xxxxx)

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

**Drilling Fluid Management Plan**

*(Data must be collected from the Reserve Pit)*

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

Location of fluid disposal if hauled offsite:

Operator Name: \_\_\_\_\_

Lease Name: \_\_\_\_\_ License #: \_\_\_\_\_

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

County: \_\_\_\_\_ Permit #: \_\_\_\_\_

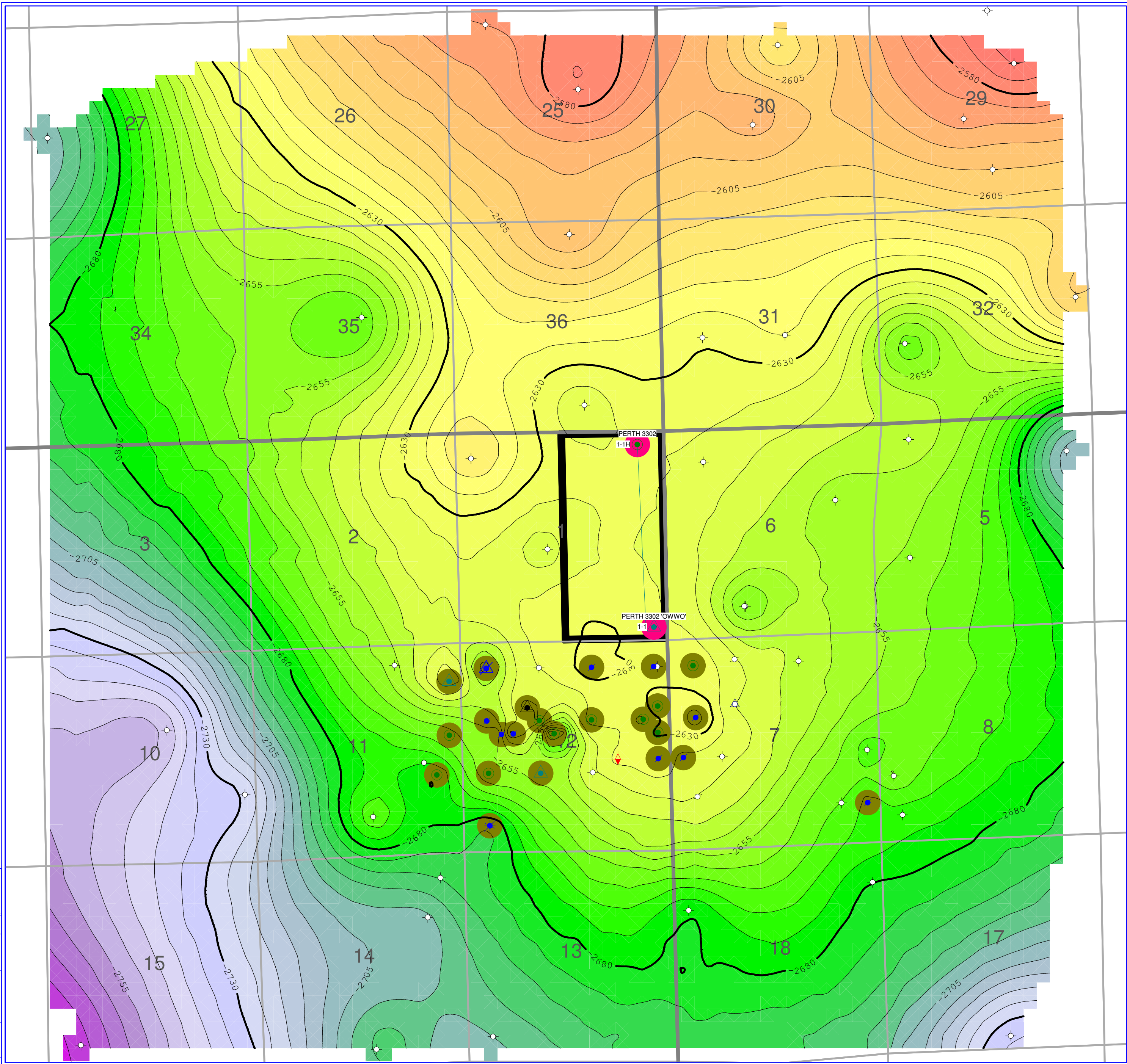
**AFFIDAVIT**

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
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



SUMNER COUNTY, KS  
 PERTH 3302 LEASE  
 33S-32W

SYMBOL HIGHLIGHT  
 ● MISS PRODUCERS  
 ● SPSP PRODUCERS

REMARKS  
 MISSISSIPPIAN STRUCTURE MAP

By: Derek Patterson

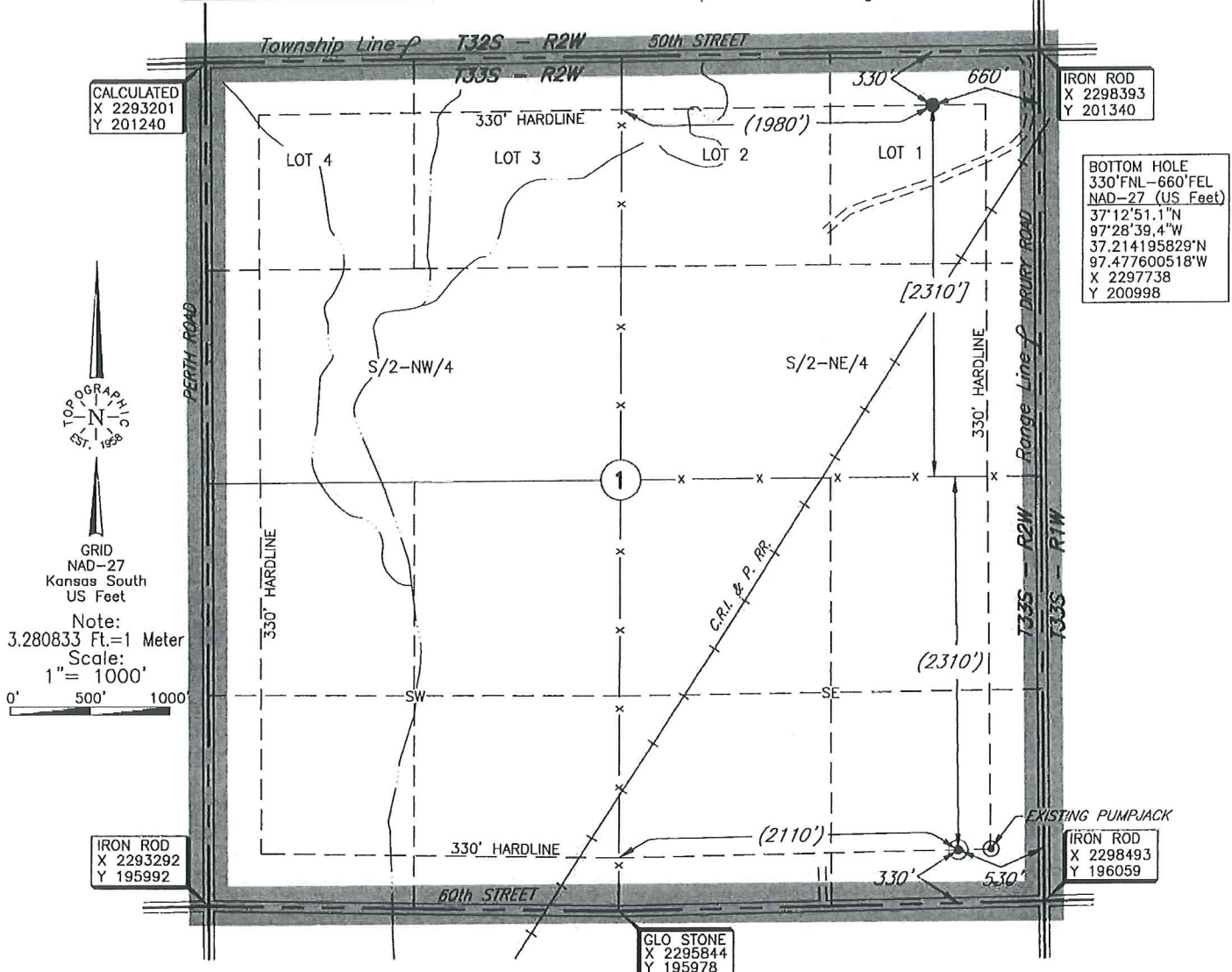
PETRA 6/23/2017 4:33:10 PM

**TOPOGRAPHIC LAND SURVEYORS**

6709 NORTH CLASSEN BLVD., OKLA. CITY, OKLA. 73116 \* LOCAL (405) 843-4847 \* OUT OF STATE (800) 654-3219  
 Certificate of Authorization No. LS-99, Exp. Dec. 31, 2013

SUMNER County, Kansas

330'FSL - 530'FEL Section 1 Township 33S Range 2W P.M.



CALCULATED  
 X 2293201  
 Y 201240

IRON ROD  
 X 2298393  
 Y 201340

BOTTOM HOLE  
 330' FNL - 660' FEL  
 NAD-27 (US Feet)  
 37°12'51.1"N  
 97°28'39.4"W  
 37.214195829°N  
 97.477600518°W  
 X 2297738  
 Y 200998

IRON ROD  
 X 2293292  
 Y 195992

IRON ROD  
 X 2298493  
 Y 196059

GLO STONE  
 X 2295844  
 Y 195978

Bottom Hole information provided by operator listed, NOT Surveyed; and Corner Coordinates are taken from points surveyed in the field.

A boundary survey of the said section(s) shown hereon was not performed per the request of the operator shown hereon.

Distances shown in (parenthesis) are calculated based upon the Quarter Section being 2640 feet, those shown in [brackets] are based on GLO (General Land Office) distances and have NOT been measured on the ground.

Operator: SANDRIDGE EXPLORATION & PRODUCTION, LLC

Lease Name: PERTH 3302

Well No.: 1-1H

**ELEVATION:**  
 1234' Gr. at Stake

Topography & Vegetation Location fell in sloped wheat field, ±204' West of existing pumpjack.

Good Drill Site? Yes Reference Stakes or Alternate Location Stakes Set None

Best Accessibility to Location From South of county road.

Distance & Direction from Hwy Jct or Town From Wellington, KS., go ±4.5 miles South on U.S. Hwy. 81, then ±4 miles West to the SE corner of Section 1, T33S - R2W.

Date of Drawing: Dec. 16, 2013

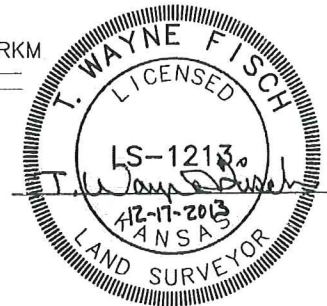
Invoice # 213099 Date Staked: Dec. 13, 2013

RKM

This information was gathered with a GPS receiver with ±1 foot Horiz./Vert. accuracy.  
 DATUM: NAD-27  
 LAT: 37°12'05.4"N  
 LONG: 97°28'37.3"W  
 LONG: 37.201488036°N  
 LONG: 97.477025603°W  
 STATE PLANE COORDINATES: (US Feet)  
 ZONE: KS SOUTH  
 X: 2297956  
 Y: 196373

**CERTIFICATE:**

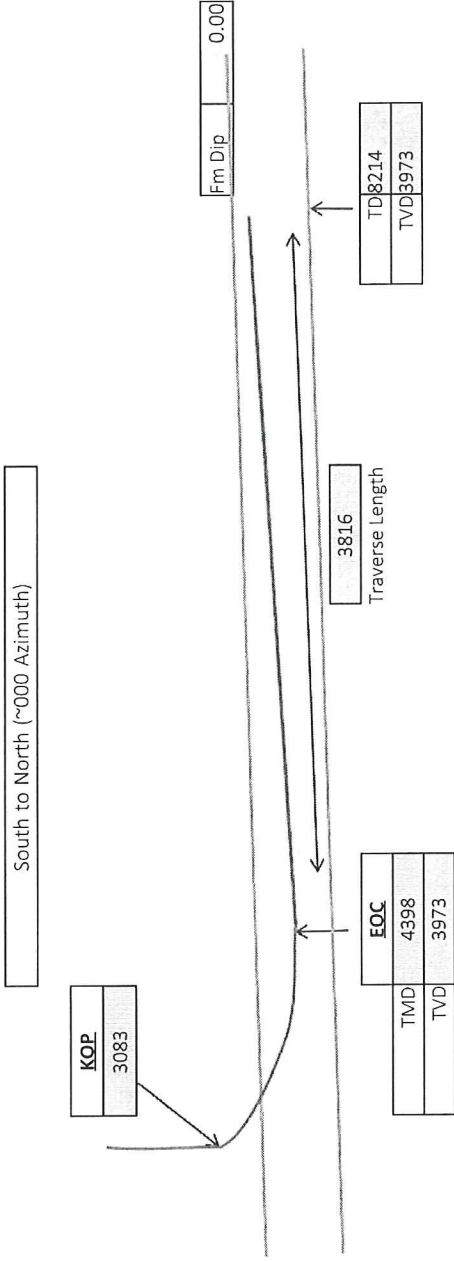
I, T. Wayne Fisch a Kansas Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors, do hereby certify that the above described well location was surveyed and staked on the ground as shown herein.



Target Line	
TVD @ 0' VS	3,973
INC	90.00

	SHL	BHL
X NAD 27	2,297,956	2,297,738
Y NAD 27	196,373	200,998

Total VS	4,630.13
EOC (MD)	4,397.67
EOC (TVD)	3,973.00
KOP	3,083.38
Azimuth	357.30
Traverse Length	3,816.25
TD (MD)	8,213.92
TVD @ TD	3,973.00
TVD displacement f/ EOC to TD	0.00



**Operator**

SandRidge Energy

**Well Name and Number**

Perth 3302 1-1H

**Well Surface Location**

1-33S-2W; 330' FSL & 530' FEL

**Well Bottom Hole Location**

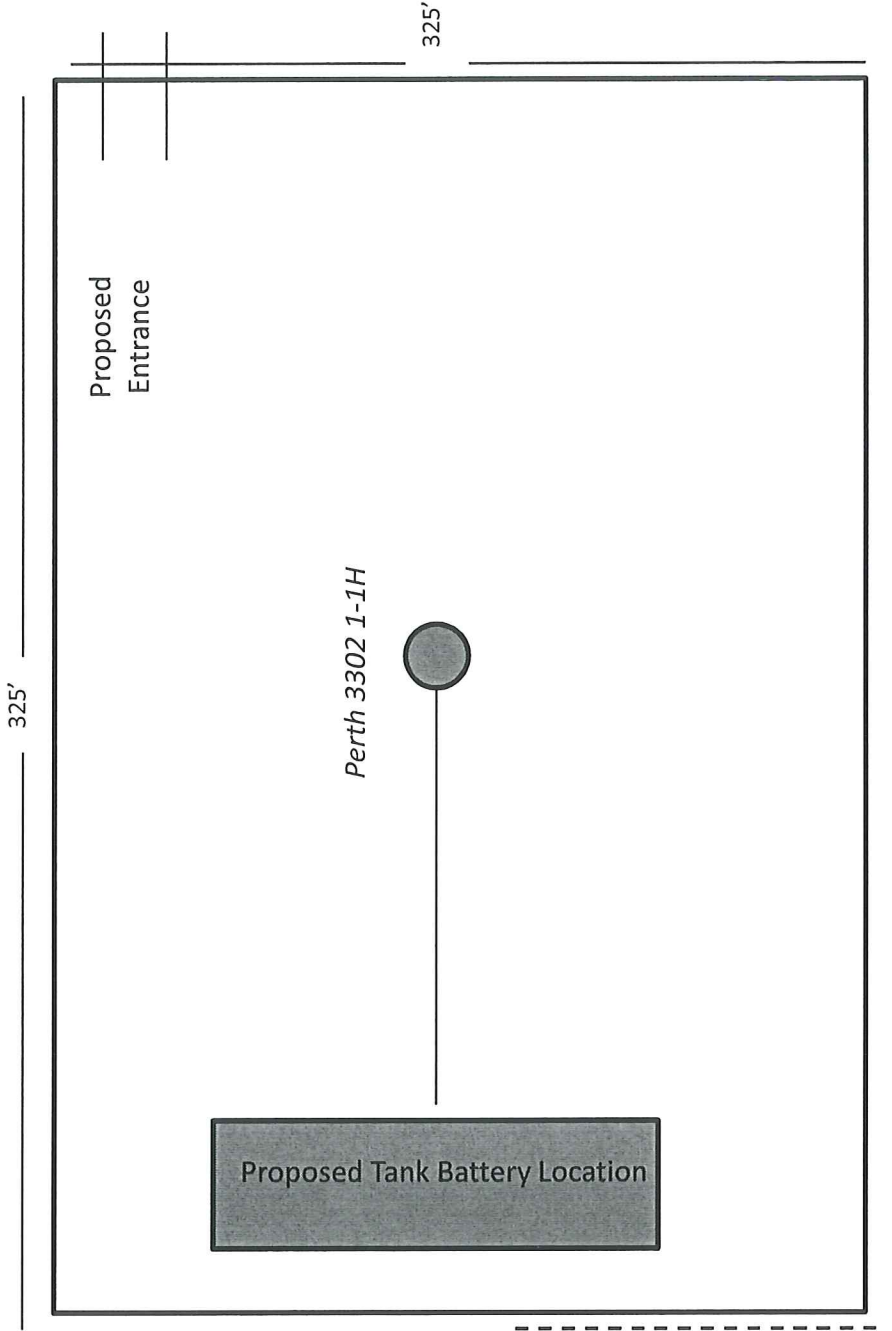
1-33S-2W; 330' FNL & 660' FEL

**County and State**

Sumner County, Kansas



Perth 3302 1-1H



Proposed Electric Line

**Perth 3302 1-1H**  
**Lease Information Sheet**

**Unit Description:**

S2 S2 SE/4 Section 01-33S-02W  
Sumner County

**Surface Owner:**

Surface owners (undivided interest):

33.33%

Albert A. Heckes, Trustee –

of the Albert A. Heckes and Marian L. Heckes Revocable Trust – Trust H,  
dated September 29, 1979

3616 Mary Ellen N.E.

Albuquerque, NM 67226

33.33%

Shirley A. Gasper and Donald D. Gasper, Co-Trustees

of the Shirley A. Gasper Revocable Trust dated May 10, 2001

710 North Kansas

Anthony, KS 67003

316-842-5701

16.67%

Westana Leah Heckes

627 Jayhawk

Cheney, KS 67025

**Perth 3302 1-1H**  
**Lease Information Sheet, continued**

**Surface Owner, continued:**

16.67%

Travis Dean Heckes

3101 North Rock Road, Suite 125

Wichita, KS 6726 – OR –

1437 W. Mulberry St.

Olathe, KS 66061

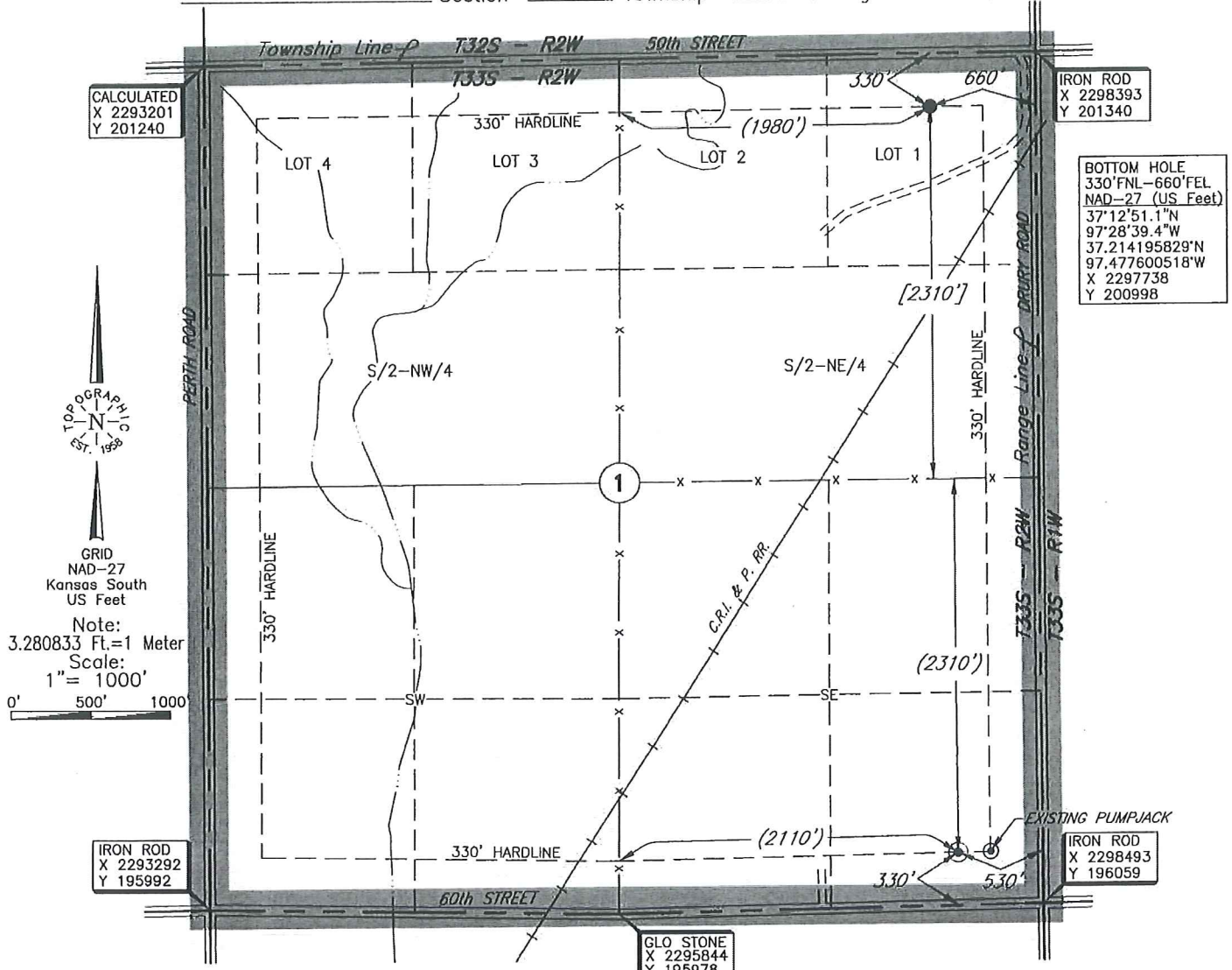
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 Certificate of Authorization No. LS-99, Exp. Dec. 31, 2013

SUMNER

County, Kansas

330'FSL - 530'FEL Section 1 Township 33S Range 2W P.M.



Bottom Hole information provided by operator listed, NOT Surveyed; and Corner Coordinates are taken from points surveyed in the field.

A boundary survey of the said section(s) shown hereon was not performed per the request of the operator shown hereon.

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Operator: SANDRIDGE EXPLORATION & PRODUCTION, LLC

Lease Name: PERTH 3302

Well No.: 2-1H

**ELEVATION:**

1234' Gr. at Stake

Topography & Vegetation Location fell in sloped wheat field, ±204' West of existing pumpjack.

Good Drill Site? Yes Reference Stakes or Alternate Location Stakes Set None

Best Accessibility to Location From South of county road.

Distance & Direction from Hwy Jct or Town From Wellington, KS., go ±4.5 miles South on U.S. Hwy. 81, then ±4 miles West to the SE corner of Section 1, T33S - R2W.

Revision  A Date of Drawing: Jan. 8, 2014  
 Invoice # 213099 Date Staked: Dec. 13, 2013

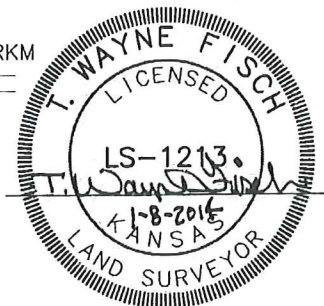
RKM

This information was gathered with a GPS receiver with ±1 foot Horiz./Vert. accuracy.

DATUM: NAD-27  
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 LONG: 97°28'37.3"W  
 LAT: 37.201488036°N  
 LONG: 97.477025603°W  
 STATE PLANE  
 COORDINATES: (US Feet)  
 ZONE: KS SOUTH  
 X: 2297956  
 Y: 196373

**CERTIFICATE:**

I, T. Wayne Fisch a Kansas Licensed Land Surveyor and an authorized agent of Topographic Land Surveyors, do hereby certify that the above described well location was surveyed and staked on the ground as shown herein.



# Perth 3302 2-1H

## Sumner County

### Unit Description:

S2 S2 SE/4 of 1-33S-2W

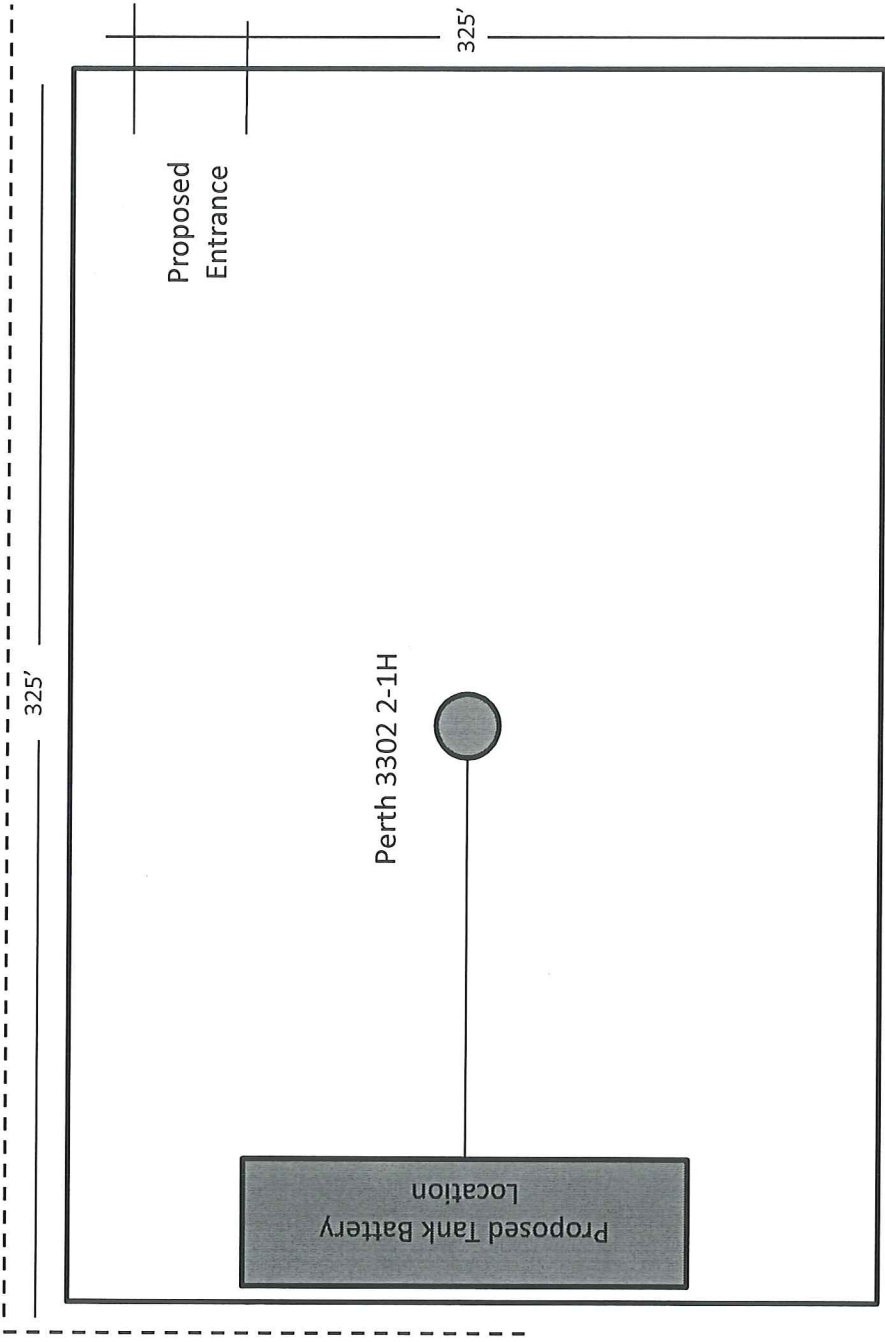
### Surface Owners:

Albert A. Heckes, Trustee of the Albert A. Heckes and Marian L. Heckes Revocable Trust – Trust  
H, under agreement dated September 29, 1979  
3616 Mary Ellen N.E.  
Albuquerque, NM 67226

Shirley A. Gasper and Donald D. Gasper, Co-Trustees of the Shirley A. Gasper Revocable Trust  
dated May 10, 2001  
710 North Kansas  
Anthony, KS 67003

Westana Leah Heckes  
627 Jayhawk  
Cheney, KS 67025

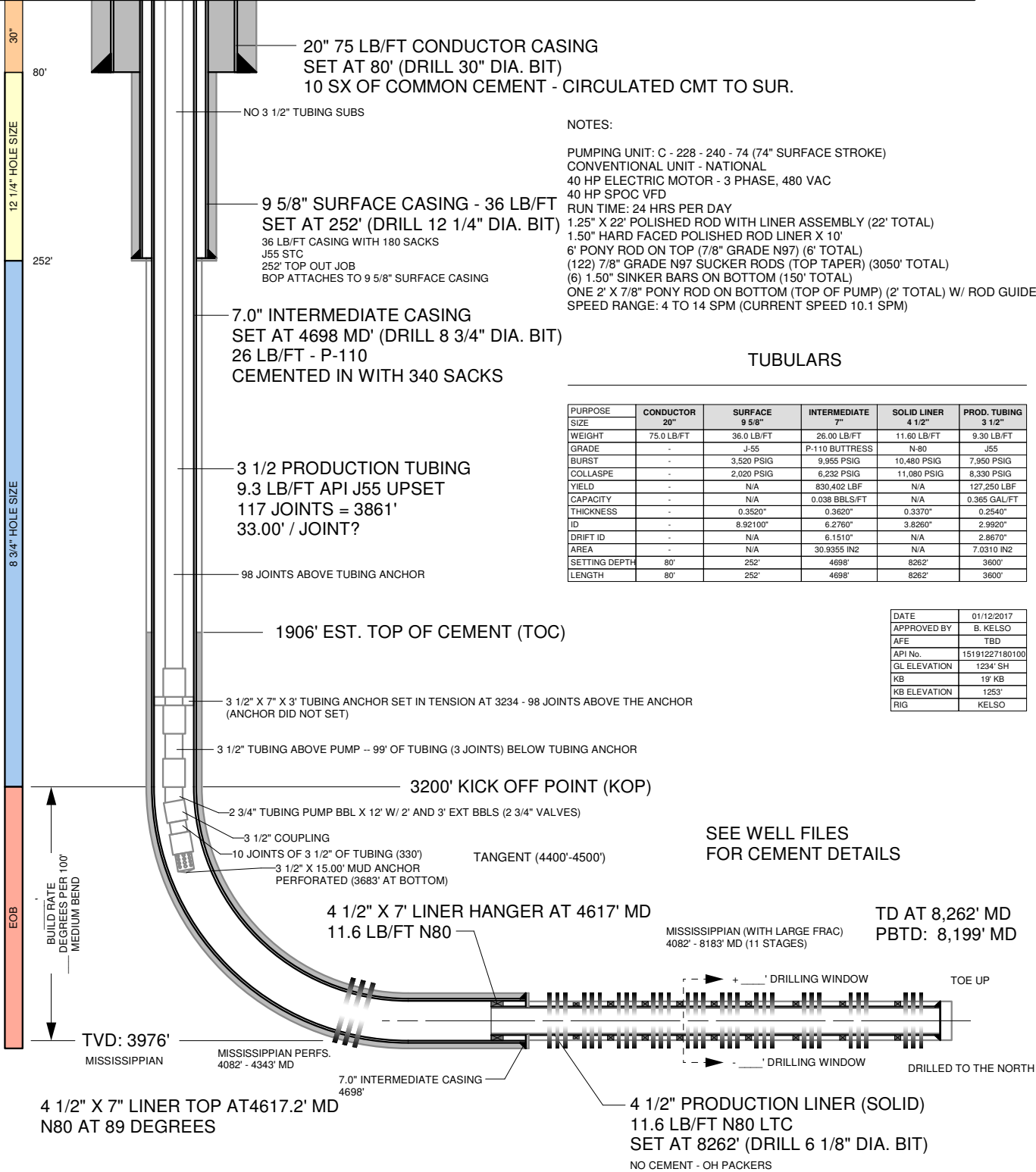
Travis Dean Heckes  
3101 North Rock Road, Suite 125  
Wichita, KS 6726 – OR –  
1437 W. Mulberry St.  
Olathe, KS 66061



Proposed Electric Line

AS RUN IN 07/11/2017

SURFACE TEMP: 85 DEG F  
7" X 3 1/2" TUBING HEAD  
SET TOP CLPG 12" AGL  
G.L. ELEVATION 1234' (SHL)  
KB: 19' -- KB ELEVATION: 1253'



NOTES:

PUMPING UNIT: C - 228 - 240 - 74 (74" SURFACE STROKE)  
CONVENTIONAL UNIT - NATIONAL  
40 HP ELECTRIC MOTOR - 3 PHASE, 480 VAC  
40 HP SPOC VFD  
RUN TIME: 24 HRS PER DAY  
1.25" X 22' POLISHED ROD WITH LINER ASSEMBLY (22' TOTAL)  
1.50" HARD FACED POLISHED ROD LINER X 10'  
6' PONY ROD ON TOP (7/8" GRADE N97) (6' TOTAL)  
(122) 7/8" GRADE N97 SUCKER RODS (TOP TAPER) (3050' TOTAL)  
(6) 1.50" SINKER BARS ON BOTTOM (150' TOTAL)  
ONE 2" X 7/8" PONY ROD ON BOTTOM (TOP OF PUMP) (2' TOTAL) W/ ROD GUIDE  
SPEED RANGE: 4 TO 14 SPM (CURRENT SPEED 10.1 SPM)

TUBULARS

PURPOSE SIZE	CONDUCTOR 20"	SURFACE 9 5/8"	INTERMEDIATE 7"	SOLID LINER 4 1/2"	PROD. TUBING 3 1/2"
WEIGHT	75.0 LB/FT	36.0 LB/FT	26.00 LB/FT	11.60 LB/FT	9.30 LB/FT
GRADE	-	J-55	P-110 BUTTRESS	N-80	J55
BURST	-	3,520 PSIG	9,955 PSIG	10,480 PSIG	7,950 PSIG
COLLAPSE	-	2,020 PSIG	6,232 PSIG	11,080 PSIG	8,330 PSIG
YIELD	-	N/A	830,402 LBF	N/A	127,250 LBF
CAPACITY	-	N/A	0.038 BBLs/FT	N/A	0.385 GAL/FT
THICKNESS	-	0.3520"	0.3620"	0.3370"	0.2540"
ID	-	8.92100"	6.2760"	3.8260"	2.9920"
DRIFT ID	-	N/A	6.1510"	N/A	2.8670"
AREA	-	N/A	30.9355 IN2	N/A	7.0310 IN2
SETTING DEPTH	80'	252'	4698'	8262'	3600'
LENGTH	80'	252'	4698'	8262'	3600'

DATE	01/12/2017
APPROVED BY	B. KELSO
AFE	TBD
API No.	15191227180100
GL ELEVATION	1234' SH
KB	19' KB
KB ELEVATION	1253'
RIG	KELSO

SEE WELL FILES FOR CEMENT DETAILS

DOWN HOLE SUCKER ROD PUMP:

2.7500" TUBING PUMP (2.75 X 12) 3 X 2 3/4" X 12 X 14 X 17  
PUMP LENGTH: 12' (NICARD AND SS)  
2" X 7/8" (D) PONY ROD ON TOP OF PUMP WITH ROD GUIDE  
PUMP INTAKE DEPTH: 3353' MD

**PERTH 3302 #2-1H**

SUMNER COUNTY, KANSAS  
01-T33S-R02W - PERTH FIELD  
E2 - 320 GROSS ACRES  
SHL: 321 FSL, 531 FEL (IN SEC 01)  
BHL: 340 FNL, 673 FEL (IN SEC 01)  
API NO.: 15-191-22718-0100

2 7/8" PRODUCTION TUBING  
6.4 LB/FT API J55 UPSET  
4400' TO 4600' TOP ESP SET AT 89 DEGREES  
SEE WELL FILE

CASING PRESSURE: 622 PSIG  
STATIC F.L.: 4416'  
03/31/2017



BEFORE THE STATE CORPORATION  
COMMISSION OF THE STATE OF KANSAS

**NOTICE OF FILING**  
**APPLICATION**

- RE:** MIKE KELSO OIL INC – Application for a permit (ACO18) to authorize the flaring of natural gas from the PERTH 3302 #2-1H WELL, located in SUMNER COUNTY, KANSAS.
- TO:** All Oil and Gas Producers, Operators, Unleased Mineral Interest Owners, Landowners, and all persons whoever concerned.

You, and each of you, are hereby notified that Mike Kelso Oil Inc has filed an Application to Flare natural gas at the PERTH 3302 #2-1H WELL, located in the SE/4 of Section 01, Township 33 South, Range 02 West, Sumner County, Kansas, with a maximum flow rate of 350 MCFD for the entire duration of production from the subject well.

Any persons who object to or protest this application shall be required to file their objections or protest with the Conservation Division of the State Corporation Commission of the State of Kansas within thirty (30) days from the date of this publication. These protests shall be filed pursuant to Commission regulations and must state specific reasons why granting the application may cause harm, violate correlative rights and or pollute the natural resources of the State of Kansas.

All persons interested or concerned shall take notice of the foregoing and shall govern themselves accordingly.

Bruce D. Kelso  
Mike Kelso Oil Inc  
P.O. Box 467 – 1125 South Main  
Chase, Kansas 67524-0467  
620-938-2943 Phone  
620-938-2945 Fax



(FIRST PUBLISHED in The Wellington Daily News, Wednesday, August 2, 2017) x1

BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS NOTICE OF FILING APPLICATION

RE: MIKE KELSO OIL INC - Application for a permit (ACO18) to authorize the flaring of natural gas from the PERTH 3302 #2-1H WELL, located in SUMNER COUNTY, KANSAS.

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Bruce D. Kelso, Mike Kelso Oil Inc, P.O. Box 467 - 1125 South Main Chase, Kansas 67524-0467, 620-938-2943 Phone, 620-938-2945 Fax

Affidavit of Publication

State of Kansas, Sumner County, ss.

Will Ravenstein, of lawful age, being duly sworn, says that he is the Managing Editor of GATEHOUSE MEDIA, Inc. dba The Wellington Daily News, a weekly newspaper, printed in the State of Kansas, and published in Sumner County, Kansas, with a general paid circulation on a monthly basis in Sumner County, Kansas, and that said newspaper is not a trade, religious or fraternal publication.

Said newspaper is a daily published at least weekly 50 times a year; has been so published continuously and uninterruptedly in said county and state for a period of five years prior to the first publication of said notice; and has been admitted at the post office of Wellington, Kansas in said County as second class matter.

That the attached notice is a true copy thereof and was published in the regular and entire issue of said newspaper for 1 week(s), the first publication there of being made as aforesaid on the 2nd day of Aug, 2017 and 2 days subsequent publications being made on the following dates:

And

Will Ravenstein, Editor

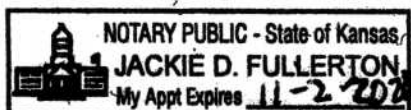
Subscribed and sworn to before me, this 2 day of Aug, 2017.

Jackie D Fullerton, Notary, State of Kansas

My commission expires: Nov 2, 2020

Publication cost: 108.75

ACCOUNT# 151076





# MIKE KELSO OIL INC

P.O. Box 467 · 1119 South Main · Chase, Kansas 67524-0467  
Telephone: 1-620-938-2943  
KCC# 34320

Bruce D. Kelso  
Email: bkelso@lassoenergy.com

**SENT VIA KOLAR**

September 11, 2017

Kansas Corporation Commission  
Attn: Jeff Klock  
3450 N. Rock Road  
Building 600, Suite 601  
Wichita, KS 67226

RE: Perth 3302 #2-1H Lease  
API NO.: 15-191-22718-0100  
01-T33S-R02W (ENTIRE SECTION)  
Sumner County, Kansas  
Perth Field

Dear Mr. Klock,

Mike Kelso Oil Inc is requesting approval of a flare permit for the subject well. This well will be produced in accordance to the rules and regulations set forth by the Kansas Corporation Commission.

All gas produced from the subject well will be metered through a gas meter on the lease and monitored daily. The gas will be analyzed for composition. The daily production rates will be kept in file at Mike Kelso Oil Inc.

If you have any questions please give Mike Kelso a call at 620-562-8088. Thank you.

Sincerely,



Bruce D. Kelso

cc: Kelso Perth 3302 #2-1H Land File