RECEIVED

FORM OGC-3I

JUL 02 2014

Mo Oil & Gas Council

STATE OF MISSOURI
MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SURVEY PROGRAM

INJECTION WELL PERMIT APPLICATION
(TO DRILL, DEEPEN, PLUG BACK, OR CONVERT AN EXISTING WELL)

NOTE ▶ Permit approval **for drilling only, not injection**. Approval or denial for injection determined after Mechanical Integrity Test results reviewed and official notification given.

☑ APPLICATION TO DRILL ☐ DEEPEN ☐ PLUG BACK ☐ FOR AN OIL WELL ☐ OR GAS WELL

NAME OF COMPANY OR OPERATOR			DATE
Kansas Resource Exploration and Development, LLC			06/24/2014
ADDRESS	CITY	STATE	ZIP CODE
9393 West 110th St., Ste #500	Overland Park	KS	66210

DESCRIPTION OF WELL AND LEASE

NAME OF LEASE	WELL NUMBER	ELEVATION (GROUND
Belton Unit	RW-16	1079'

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)

1300 ft. from ☒ North ☐ South section line 1825 ft. from ☒ East ☐ West section line

WELL LOCATION	LATITUDE	LONGITUDE	COUNTY
Sec. 16 Township 46 North Range 33 ☐ East ☑ West	N38 48' 49.192"	W94 34' 23.641"	Cass

NEAREST DISTANCE FROM PROPOSED LOCATION TO PROPERTY OR LEASE LINE 1320 FEET

DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING, COMPLETED OR APPLIED – FOR WELL ON THE SAME LEASE 15 FEET

PROPOSED DEPTH	ROTARY OR CABLE TOOLS	DRILLING CONTRACTOR, NAME AND ADDRESS	APPROX. DATE WORK WILL START
700' 379el	Rotary	Evans Energy Development, Inc.	06/24/2014

NUMBER OF ACRES IN LEASE: 560

NUMBER OF WELLS ON LEASE INCLUDING THIS WELL, COMPLETED IN OR DRILLING TO THIS RESERVOIR 206

NUMBER OF ABANDONED WELLS ON LEASE 0

IF LEASE PURCHASED WITH ONE OR MORE WELLS DRILLED, FROM WHOM PURCHASED?

NAME DE Exploration, Inc.

ADDRESS 4595 Highway K33, Wellsville, KS 66092

NO. OF WELLS	
PRODUCING	70
INJECTION	136
INACTIVE	0
ABANDONED	0

STATUS OF BOND	☐ SINGLE WELL AMOUNT $ ____	☑ BLANKET BOND AMOUNT $ 280,000	☑ ON FILE ☐ ATTACHED

REMARKS: (IF THIS IS AN APPLICATION TO DEEPEN OR PLUG BACK, BRIEFLY DESCRIBE WORK TO BE DONE, GIVING PRESENT PRODUCING/INJECTION ZONE AND EXPECTED NEW INJECTION ZONE, USE BACK OF FORM IF NEEDED) This well has injected for years but never actually had a proper injection permit until now.

PROPOSED CASING PROGRAM				APPROVED CASING – TO BE FILLED IN BY STATE GEOLOGIST			
AMOUNT	SIZE	WT/FT	CEM.	AMOUNT	SIZE	WT/FT	CEM.
20'	8 5/8"	20	10 sks	20	8 5/8	20	Full length
700'	4 1/2"	9.5	100 sks	700	4 1/2	9.5	

I, the Undersigned, state that I am the Chief Operating Officer of the Kansas Resource Exploration + Development, LLC (Company), and that I am authorized by said company to make this report, and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct, and complete to the best of my knowledge.

SIGNATURE [signature] DATE 6/24/14

PERMIT NUMBER 20831

APPROVED DATE 7-29-14

APPROVED BY Joseph A. Gillman

☐ DRILLER'S LOG REQUIRED
☐ CORE ANALYSIS REQUIRED IF RUN
☐ SAMPLES REQUIRED
☒ SAMPLES NOT REQUIRED
☐ WATER SAMPLES REQUIRED AT ____
☐ E-LOGS REQUIRED IF RUN
☐ DRILL SYSTEM TEST INFO REQUIRED IF RUN

NOTE ▶ THIS PERMIT NOT TRANSFERABLE TO ANY OTHER PERSON OR TO ANY OTHER LOCATION. APPROVAL OF THIS PERMIT BY THE OIL AND GAS COUNCIL DOES NOT CONSTITUTE ENDORSEMENT OF THE GEOLOGIC MERITS OF THE PROPOSED WELL NOR ENDORSEMENT OF THE QUALIFICATIONS OF THE PERMITTEE

ONE (1) COPY WILL BE RETURNED.

I, Leech of the Utah (Company), confirm that an approved drilling permit has been obtained by the owner of this well. Council approval of this permit will be shown on this form by presence of a permit number and signature of authorized council representative.

DRILLER'S SIGNATURE M. Leech | DATE 6/24/14

PROPOSED OPERATIONS DATA

PROPOSED AVERAGE DAILY INJECTION,	PRESSURE 300 PSIG, RATE .035 BPD/GPM, VOLUME 50 BBL/GAL
APPROVED AVERAGE DAILY INJECTION, (TO BE FILLED IN BY STATE GEOLOGIST)	PRESSURE 300 PSIG, RATE .035 BPD/GPM, VOLUME 50 BBL/GAL
PROPOSED MAXIMUM DAILY INJECTION,	PRESSURE 300 PSIG, RATE .035 BPD/GPM, VOLUME 50 BBL/GAL
APPROVED MAXIMUM DAILY INJECTION, (TO BE FILLED IN BY STATE GEOLOGIST)	PRESSURE 300 PSIG, RATE .035 BPD/GPM, VOLUME 50 BBL/GAL

ESTIMATED FRACTURE PRESSURE GRADIENT OF INJECTION ZONE 0.4 PSI/FOOT

DESCRIBE THE SOURCE OF THE INJECTION FLUID Squirrel return water and rural water

NOTE ▶ SUBMIT AN APPROPRIATE ANALYSIS OF THE INJECTION FLUID. (SUBMIT ON SEPARATE SHEET)

DESCRIBE THE COMPATIBILITY OF THE PROPOSED INJECTION FLUID WITH THAT OF THE RECEIVING FORMATIONS, INCLUDIUNG TOTAL DISSOLVED SOLIDS COMPARISONS

There is currently an active squirrel sandstone water floods, using return water mixed with rural water. The current and past operator (s) has used these injection fluids since the water flood began with no problems.

GIVE AN ACCURATE DESCRIPTION OF THE INJECTION ZONE INCLUDING LITHOLOGIC DESCRIPTIONS, GEOLOGIC NAME, THICKNESS, DEPTH, POROSITY, AND PERMEABILITY.

The depth of the squirrel sandstone on the lease is approximately 550' to 600', with a thickness of approximately 50'. Based on the information received on the Belton Unit lease, the average porosity of the squirrel sandstone is 22% with an average permeability of 270.8 millidarcy.

Please see the attached documents containing information on the lithologic description and geologic name of the injection zone.

GIVE AN ACCURATE DESCRIPTION OF THE CONFINING ZONES INCLUDING LITHOLOGIC DESCRIPTION, GEOLOGIC NAME, THICKNESS, DEPTH, POROSITY, AND PERMEABILITY.

The confining layers of the Squirrel Sandstone consist of two prominent shales which are the Labette shale, ranging from 30-50 feet thick located approximately at 525' and the Lagonda shale which ranges from 20-40 feet thick, located approximately at 600'. These shales have less than 5% porosity and contain very little to no permeability. According to "The Geology of North America, Vol. O-2, Hydrogeology, The Geological Society of America, 1988" written by Stanley N. Davis, "the intergranular permeability of shale is very low, as reflected in values given for samples 10 and 17 in Table 2. Most reliable laboratory measurements of the permeability of shale range between 10 -1 and 10 -4 millidarcys." Please see the attached Table 2 for further description.

SUBMIT ALL AVAILABLE LOGGING AND TESTING DATA ON THE WELL

GIVE A DETAILED DESCRIPTION OF ANY WELL NEEDING CORRECTIVE ACTION THAT PENETRATES THE INJECTION ZONE IN THE AREA OF REVIEW (1/2 MILE RADIUS AROUND WELL). INCLUDE THE REASON FOR AND PROPOSED CORRECTIVE ACTION.

No corrective action needed.

TABLE 2. REPRESENTATIVE POROSITIES AND PERMEABILITIES OF SANDSTONE AND SHALE WITH VALUES FOR SALT AND COAL GIVEN FOR COMPARISON

Lithology	Formation or Geologic Age	Location	Porosity (%)	Permeability (md)	Field (F) or Laboratory (L)	Reference
1. Sandstone	Paskapoo	Alberta	—	4285	F	Garven (1982)
2. Sandstone	Paskapoo	Alberta	—	2640	F	Garven (1982)
3. Shale (fractured)	Paskapoo	Alberta	—	3230	F	Garven (1982)
4. Shale (fractured)	Paskapoo	Alberta	—	988	F	Garven (1982)
5. Mudstone	Cenozoic	North Dakota	—	4.6×10^{-2}	F	Rehm and others (1980)
6. Coal	Cenozoic	North Dakota	—	334	F	Rehm and others (1980)
7. Salt*	Permian	Texas	—	9.61×10^{-3} (horizontal)	—	INTERA (1986)
				9.61×10^{-4} (vertical)	—	
8. Shale*	Wolfcamp	Texas	—	9.61×10^{-5} (horizontal)	—	INTERA (1986)
				9.61×10^{-4} (vertical)	—	
9. Sandstone	—	—	—	0.15 (horizontal)	L	Young and others (1964)
				47.9 (vertical)	L	
10. Siltstone	—	—	—	2.4×10^{-7} (vertical)	L	Young and others (1964)
11. Sandstone	Wilcox	—	—	4740	F	Slaughter and others (1983)
12. Sandstone	Navajo	Utah	—	3.8	F	Woodward-Clyde (1984)
13. Sandstone	Dakota	Utah	—	10.9	F	Woodward-Clyde (1984)
14. Shale (fractured)†	Monterey	California	21	2690	L	Isherwood (1981)
15. Shale (fractured)	Green River	—	—	0.32	F	Isherwood (1981)
16. Shale (fractured, oil shale)	Green River	—	8	2.07	F	Isherwood (1981)
17. Shale	Graneros	Kansas	11.6	4.7×10^{-5}	L	Isherwood (1981)
18. Sandstone	Bradford	—	14.8	2.7	L	Davis and DeWiest (1966)
19. Sandstone	Berea	—	19	383	L	Davis and DeWiest (1966)
20. Sandstone	Repeto	—	19.1	36	L	Davis and DeWiest (1966)
21. Sandstone‡	Cambrian	—	11.2	—	L	Manger (1963)
22. Sandstone§	Pennsylvanian	—	17.4	—	L	Manger (1963)

*Values used in ground-water model.
†Average of 56 samples within an interval of 39 m. Porosity range 14% to 29%. Permeability range 89 md to 16,500 md.
‡Average of 16 samples.
§Average of 587 samples.

techniques may introduce large variations in the values reported in Table 2, these variations are still much smaller than the fundamental variations related to lithology and structure.

Studies of lightly cemented sandstones have shown that, like their nonindurated counterparts, grain size plays a dominant role in determining the permeability of the rock (Johnson and Greenkorn, 1963). Very roughly, the permeability increases as the square of the grain size. This simple relationship tends to break down as cementing and compaction decrease the pore size. For medium-grained sandstones with porosities between 0.15 and 0.25, a very rough correlation also exists between porosity and permeability. This correlation is actually quite good for some data sets, particularly if it is based on measurements of a single, poorly lithified sandstone unit that has a rather uniform grain size. An example of one of the numerous equations relating porosity to permeability is given below:

$$k = D^2\phi^{5.5/5.6C}$$

in which k is permeability, D is an effective grain size, ϕ is porosity, and C is a dimensionless constant. This equation was given by Dullien (1979). Most similar equations also show an exponential relation between porosity and permeability.

As the porosity of a sandstone decreases, particularly below 0.15, the permeability depends more on the presence of throughgoing secondary fractures rather than on the original porosity within the rock. As porosity decreases below 0.05, permeability is almost entirely dependent on the presence of fractures. Thus, in the case of a quartz sandstone with a brittle cement that is in a highly fractured zone, the present permeability may exceed the original permeability of the antecendent sand (Fig. 2). In general, the hydrogeology of all highly indurated sediments is profoundly affected by fractures, and the fractures account for very large local permeabilities (Huntoon, 1986; Huntoon and Lundy, 1979).

If a large number of permeability measurements are made of a single stratigraphic unit, the resulting values appear to have a log-normal statistical distribution (Fig. 3; Davis, 1969). The ex-

Re: Benjamin Lease Injection Well Applications

In reference to your concern about the confining layers of the Squirrel sandstone in the Belton area I wish to present the following information concerning the reservoir at Belton which has become known from our operations and as provided by our consulting engineer.

The reservoir(s) in the Belton are actually a stacked series of sand bodies, point bars, consisting of the Englevale sandstone in the Labette shale and three or more sand zones in the Squirrel section of the Cherokee Group. The Fort Scott section is missing, evidently removed by erosion during the time of the Englevale development. In some cases the Englevale is in contact with the Squirrel and may appear as one vertically continuous reservoir. Consequently, the upper boundary of the Englevale is the Labette shale – the upper confining layer.

The Squirrel sandstones exhibit lateral facies changes from sandstone to shaly sand to sandy shale to shale. Vertically, the change from sand to shale may be very abrupt, especially in the base of the paleo-channel. The confining layers below the Squirrel sandstone will be shale of the Lagonda formation of the Cherokee.

We are a little concerned about applying limitations to porosity values of the confining zones since shale is typically exhibits porosity of about 20%, but due to their sedimentary nature they are impervious, thus they provide an excellent seal. Our concern in developing an injection program is for proper casing and cementing design and wellbore stimulation within zone. At Belton, our experience is that fractures are not going "out of zone". This is because the boundary layers are impervious and fractures are created in sandstone at a lower pressure than in shale, thus staying within the stimulated zone. That is, the fracture treating pressures in the sandstone are not sufficient to fracture the overlying shale. Waterflood operations will never experience pressures utilized during hydraulic fracturing, thus we are highly confident of the geologic integrity.

Our consulting engineer reviewed the policy of several other oil producing states and could not find any concern about confining zones in their secondary recovery regulations. In addition, he reviewed several water flooding engineering texts and could find no mention of consideration of confining zones in any of the texts.

With the many years of successful operations in Western Missouri and adjacent areas of Kansas, where hundreds of water floods have been performed in the Squirrel sandstone, the confining shales have proven to be an adequate seal for waterflood operations. Thus, it is our request that this aspect of the approval process be accepted, based upon the above stated reasons and, especially, the history of successful operations within this scenario.

Very truly yours,

Bradley Kramer

minimum stress at the borehole, and must also overcome the tensile strength of the rock. This can be expressed as follows:

$$(P_i)_v = 3\,\bar{\sigma}_{h_2} - \bar{\sigma}_{h_1} + S_t + P \qquad (8)$$

where:

$(P_i)_v$ = borehole pressure required to initiate vertical fracture

$\bar{\sigma}_{h_1}$ = maximum principal horizontal matrix stress

$\bar{\sigma}_{h_2}$ = minimum principal horizontal matrix stress

S_t = horizontal tensile strength of rock

P = formation pore pressure

Penetrating Fluid Reduces Breakdown Pressure—A penetrating fluid increases the area over which pressurized fluid contacts the formation and can reduce the pressure necessary to initiate fracturing.

Laboratory and theoretical work by Fairhurst and Hairnson[21] provides a basis for estimation of the magnitude of reduction in openhole. Generally reduction may be on the order of 25 to 40% in openhole.

Perforation Density and Orientation—Recent laboratory work in cased hole shows that breakdown or frac initiation pressure is affected by the number and arrangement of perforations.[22]

The existence of casing and the arrangement of perforations have little effect on created fracture orientation, but breakdown pressure is reduced by increased number of perforations. The practice of perforating with all shots in a vertical line on one side of the casing, Figure 8-6 significantly increases

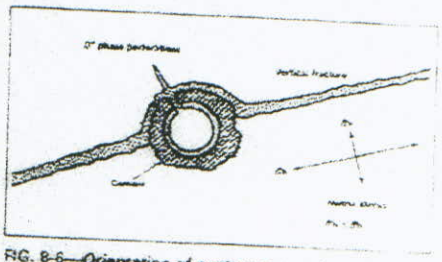


FIG. 8-6—*Orientation of perforation vs. least horizontal matrix stress. Condition resulting in highest break down pressure.*

breakdown pressure if the perforations happen to be oriented 90° to the azimuth of the vertical fracture plane. Orientation of perforations does not affect azimuth of the vertical fracture however.

Fracture Propagation

Once the fracture has been created and invaded by pressured fluid, the stress concentration near the wellbore is reduced, and the hydraulic pressure required to extend the fracture must merely overcome the component of the undisturbed stress field normal to the plane of the fracture.

Measuring Propagation Pressure and Frac Gradient—The fracture propagation pressure (and frac gradient) can be obtained during the fracing operation by recording the wellhead pressure immediately after the pumps are shut down following injection into the fracture (Figure 8-7). Since the frac gradient is increased by increased pore pressure, this measurement should be made before the pore pressure is significantly raised by the injected frac fluid.

Wellhead instantaneous shut-in pressure, corrected to the hole bottom by adding the hydrostatic pressure of the wellbore fluid column, is the *fracture propagation pressure*. *Fracture gradient* is the fracture propagation pressure divided by the formation depth.

Measuring Rock Matrix Stress—The minimum horizontal rock matrix stress is then:

$$\bar{\sigma}_{h_2} = \text{propagation pressure} - \text{pore pressure}$$

This stress is of particular interest because it is the stress which propping agents must withstand in order to hold the fracture open. In actual practice pore pressure can be equated to static reservoir pressure provided fracture propagation pressure is measured before significant frac fluid is injected to raise the pore pressure level near the wellbore.

It should be noted that proppant in the critical area near the wellbore is subjected to more stress than that further away due to lower pore pressure near the wellbore in the producing process, Figure 8-8. This effect may be significant at high drawdown pressures.

Fracture Orientation

Fracture Propagates Perpendicular to Smallest Stress—Rocks fracture in a plane perpendicular to

Proposed Injection Volumes

Injection volumes are determined by using analogy from previous and current squirrel sandstone water floods that contain similar reservoir characteristics. In the case of the Benjamin lease we plan to inject 1 barrel of water for every 1 net foot of oil bearing sandstone, assuming this rate does not exceed he maximum approved injection pressure. Depending on the duration and impact of the surrounding wells, some injection wells may ultimately inject up to 3 barrels of water for every 1 net foot of oil bearing sandstone.

Due to the permeability variance of the reservoir we typically will not exceed 15' of perforations per water injection well.

Example;

Year 1

15' of perforations x 1 bbl/ft = 15 BPD injection rate

Year 2

15' of perforations x 2 bbl/ft = 30 BPD injection rate

Year 3 through Year 20

15' of perforations x 3 bbl/ft = 45 BPD injection rate

We typically do not exceed 3 bbl/ft injection rate per day per well, which is why we are requesting 50 BPD rate.

Benjamin Lease, Cass County, Missouri

Re: Closure Pressure

Attached is a reproduction from *"Production Operations, Vol. 2"* by Allen and Roberts describing the fracturing pressures in a reservoir.

The fracture propagation pressure is approximately the same as the closure pressure, although slightly higher. This difference is less significant in low pressure reservoirs such as the ones in the Cherokee Basin, consequently, they are considered to be the same. The fracture propagation pressure is the same as the instantaneous shut-in pressure (ISIP) experienced upon cessation of a hydraulic fracture treatment. The ISIP from a fracture procedure is the surface pressure measurement. Bottom-hole ISIP must be calculated by adding the surface ISIP and the product of the depth to mid-perforations (feet) and the pressure gradient of the fluid in the wellbore (psi/foot). For fresh water the fluid gradient is 0.434 psi/foot. Since the fluid in fracture operations is more dense than fresh water most engineers estimate the bottom-hole ISIP with a higher gradient. The state of Oklahoma uses a gradient of 0.50 psi/foot.

Listed below is a group of wells ISIP (Initial Shut In Pressure) that were recently stimulated on the Benjamin Lease in Section 9, Township 46N, Range 33 West, Cass County, Missouri. Please see the attached "fracture treatment reports" for verification of ISIP in the following wells.

Lease	Well	ISIP (Surface)
Benjamin	KR-10	575#
Benjamin	KR-14	500#
Benjamin	KR-15	525#
Benjamin	KR-20	500#
Benjamin	KR-26	450#
Benjamin	KR-27	550#
Benjamin	KR-29	475#
Benjamin	KR-31	450#
Benjamin	KR-33	550#

The fracture propagation pressure is the pressure in which the aperture of the existing fractures can begin to be opened. An increase in injection rate is noted at this point on injection step-rate tests. At injection pressures at, or slightly above, the ISIP, the fractures in the immediate vicinity of the wellbore (inches) may be affected but not into the reservoir significantly. In actual injection operations of a waterflood at ISIP, fractures wouldn't be created beyond the region adjacent to the wellbore because of; 1) fluid leak-off into the formation, 2) the injection of a low viscosity fluid, and 3) the extremely low injection rates - far less than what is necessary to create a fracture.

CONSOLIDATED
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

TICKET NUMBER 54764
FIELD TICKET REF # 92125
LOCATION Thayer
FOREMAN Brad Buckley

TREATMENT REPORT
FRAC & ACID

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-27-12		Bengston R[illegible]	9	16	33W	Cass

CUSTOMER: S & B Operating

MAILING ADDRESS:

CITY | STATE | ZIP CODE

TRUCK #	DRIVER	TRUCK #	DRIVER
524	Travis	680T221	Stan
542	Tex	989119	Dwayne
[illegible]	Donald		
[illegible]	[illegible]		
[illegible]	[illegible]		

WELL DATA

CASING SIZE	TOTAL DEPTH
CASING WEIGHT	PLUG DEPTH
TUBING SIZE 2 7/8 EUE	PACKER DEPTH
TUBING WEIGHT	OPEN HOLE
PERFS & FORMATION	
555-68-521-91	(49) Squeezed

TYPE OF TREATMENT: Acidize + Frac

CHEMICALS

Acid Breaker	Breaker
Acid inhibitor	Stim Oil

STAGE	BBL'S PUMPED	INJ RATE	PROPPANT PPG	SAND / STAGE	PSI
PAD	20	12-16			
16-30		16		2,000#	
12-20		16			
12-20		16			
12-20 (8) + (7)	balls			1,000#	
12-20					
12-20					
12-20 (5) + (5)	balls			1,500#	
12-20	(2)				
12-20					
FLUSH CASING	5			1,000#	
Release balls to T.D					
OVERFLUSH	10	16	Total	4,000#	
TOTAL BBLS	130		2.5		

BREAKDOWN	1000
START PRESSURE	
END PRESSURE	
BALL OFF PRESS	
~~ROCK SALT PRESS~~	
ISIP	575
~~5 MIN~~	
10 MIN	
15 MIN	
MIN RATE	
MAX RATE	
DISPLACEMENT	3.5

REMARKS: * held safety meeting before frac
Spotted 100 gal 15% HCL pre / load 55 balls

location 10:00 AM – 1:45 PM 120 ± miles

AUTHORIZATION _____ TITLE _____ DATE 12-27-12

Terms and Conditions are printed on reverse side.

CONSOLIDATED
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

TICKET NUMBER 54765
FIELD TICKET REF # 48125
LOCATION Thayer
FOREMAN Brett Busby

TREATMENT REPORT
FRAC & ACID

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-27-12		Benjamin KK 14	9	46N	33W	Cass

CUSTOMER: S+B Operating

MAILING ADDRESS:

CITY	STATE	ZIP CODE

TRUCK #	DRIVER	TRUCK #	DRIVER
[illegible]	[illegible]		
[illegible]	[illegible]		
[illegible]	Daniel		
[illegible]	Jay		

WELL DATA

CASING SIZE	TOTAL DEPTH
CASING WEIGHT	PLUG DEPTH
TUBING SIZE 2 7/8 8EUE	PACKER DEPTH
TUBING WEIGHT	OPEN HOLE
PERFS & FORMATION	
564-74	Squirrel(S)
580-88 (38)	

TYPE OF TREATMENT

[illegible] + frac

CHEMICALS

KCLSUB - Biocide	Breaker
Acid - Inhibitor	Stim Oil

STAGE	BBL'S PUMPED	INJ RATE	PROPPANT PPG	SAND / STAGE	PSI	
PAD	20	15.5			1100	BREAKDOWN 1100
16-30		15.5		500#		START PRESSURE
12-20				1000#		END PRESSURE
12-20 (5) + (5)						BALL OFF PRESS
12-20						ROCK SALT PRESS
12-20						ISIP 500
12-20 (3) = (13) balls				1000#		5 MIN
12-20					1700	10 MIN
12-20						15 MIN
FLUSH CASING	5			1,000#		MIN RATE
Release balls to T.D.						MAX RATE
OVERFLUSH	10	15.5	TOTAL SAND	3,500#		DISPLACEMENT 3.4
TOTAL BBLS	13.5				1100	

REMARKS:

Spotted 100 gal - 15% HCL [illegible] perfs

Location 10:45AM - 11:30AM

120 miles

AUTHORIZATION _____ TITLE _____ DATE 12-27-12

Terms and Conditions are printed on reverse side.

CONSOLIDATED
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

TICKET NUMBER 54766
FIELD TICKET REF # 48125
LOCATION Thayer
FOREMAN Brad Butler

TREATMENT REPORT
FRAC & ACID

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-27-12		Benjamin #1		26N	33W	Cass

CUSTOMER: S+B Operating

MAILING ADDRESS:

CITY: | STATE: | ZIP CODE:

TRUCK #	DRIVER	TRUCK #	DRIVER
29	Tommy		
42	Jim		
22	Daniel		
1991	George		

WELL DATA

CASING SIZE	TOTAL DEPTH
CASING WEIGHT	PLUG DEPTH
TUBING SIZE 2 7/8 EUE	PACKER DEPTH
TUBING WEIGHT	OPEN HOLE
PERFS & FORMATION	
591-601 (21)	Squeezed

TYPE OF TREATMENT: Acid + frac

CHEMICALS

Kcl/Br Brade	Breaker
Acid inhibitor	Stim Oil

STAGE	BBL'S PUMPED	INJ RATE	PROPPANT PPG	SAND / STAGE	PSI
PAD	20	15.5			
16-30		15.5		500#	
12-20		15.5			
12-20		15.5		1000#	
12-20 (4) + (3)					
12-20					
12-20				500#	
12-20 + (3) = 101 balls					
12-20					
12-20				1000#	
FLUSH CASING	5				
Release balls + T.D.				3000#	
OVERFLUSH	10	15.5			
TOTAL BBLS					

BREAKDOWN	1100
START PRESSURE	
END PRESSURE	
BALL OFF PRESS	
ROCK SALT PRESS	
ISIP	525
5 MIN	
10 MIN	
15 MIN	
MIN RATE	
MAX RATE	
DISPLACEMENT	3.5

REMARKS:

Spotted 100 gal - 15% HCL and 10 perfs

Location 11:30 AM - 12:00 PM

120 miles

AUTHORIZATION _____ TITLE _____ DATE 12-27-12

Terms and Conditions are printed on reverse side.

CONSOLIDATED
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

TICKET NUMBER 54767
FIELD TICKET REF # 48125
LOCATION Thayer
FOREMAN Scott Ludy

TREATMENT REPORT
FRAC & ACID

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-27-12		Benjamin KK-20	7	4S	33W	Cass

CUSTOMER: S+B Operating

MAILING ADDRESS:

CITY: | STATE: | ZIP CODE:

TRUCK #	DRIVER	TRUCK #	DRIVER
521	Tompkins		
526	Turner		
548	Daniel		
521-22	Stein		

WELL DATA

CASING SIZE	TOTAL DEPTH
CASING WEIGHT	PLUG DEPTH
TUBING SIZE 2 7/8 EUE	PACKER DEPTH
TUBING WEIGHT	OPEN HOLE
PERFS & FORMATION	
611-15 (30)	Squirrel

TYPE OF TREATMENT: Acid + frac

CHEMICALS

KCL-Biocide	Breaker
Acid-inhibitor	Stim oil

STAGE	BBL'S PUMPED	INJ RATE	PROPPANT PPG	SAND / STAGE	PSI	
PAD	20	15.5			1150	BREAKDOWN 1200
16-30		15		2000#		START PRESSURE
12-20		15			1200	END PRESSURE
12-20				1,000#	1150	BALL OFF PRESS
12-20 (5) + (5) balls						ROCK ~~SALT PRESS~~
12-20						ISIP 500
12-20 (3) + (2)				1,000#		5 MIN
12-20	575				1700	10 MIN
12-20						15 MIN
FLUSH CASING	5			1,000#		MIN RATE
Release balls to T.D.			T.D.			MAX RATE
OVERFLUSH	10	15		3500#		DISPLACEMENT 3.5
TOTAL BBLS	138				1200	

REMARKS:

Spotted 100 gal 15% HCL across perfs

Location 12:00PM - 12:45PM

126 miles

AUTHORIZATION _____ TITLE _____ DATE 12-27-12

Terms and Conditions are printed on reverse side.

CONSOLIDATED
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

TICKET NUMBER 54768
FIELD TICKET REF # 48125
LOCATION Thayer
FOREMAN Scott Busby

TREATMENT REPORT
FRAC & ACID

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-27-12		Benjamin K-36	7	41N	33W	Cass

CUSTOMER: S+P Operating

MAILING ADDRESS:

CITY: | STATE: | ZIP CODE:

TRUCK #	DRIVER	TRUCK #	DRIVER
524	Travis		
522	Jim		
22	Daniel		
2021	Stan		

WELL DATA

CASING SIZE	TOTAL DEPTH
CASING WEIGHT	PLUG DEPTH
TUBING SIZE 2 7/8 EUE	PACKER DEPTH
TUBING WEIGHT	OPEN HOLE
PERFS & FORMATION	
545-53	Squeeze
573-89 (51)	

TYPE OF TREATMENT: Acid pad + Frac

CHEMICALS

KCL B. Biocide	Breaker
Acid inhibitor	Stim Oil

STAGE	BBL'S PUMPED	INJ RATE	PROPPANT PPG	SAND / STAGE	PSI	
PAD	20	15.2			700	BREAKDOWN 1200
16-30		15.2		700#		START PRESSURE
12-20						END PRESSURE
12-20						BALL OFF PRESS
12-20 (10) + (5)				1,000#	700	ROCK SALT PRESS
12-20					1000	ISIP 450
12-20						~~5 MIN~~
12-20 (5) + (5)				1000#		10 MIN
12-20 + (3)	22			700#		15 MIN
12-20					1800	MIN RATE
FLUSH CASING	5			1,000#		MAX RATE
Release balls to ft					1500	DISPLACEMENT 3,4
OVERFLUSH	10	15.2		4,000#		
TOTAL BBLS	145				700	

REMARKS:

Spotted 100 gal. 15% HCL acid on perfs

location 3:00 PM - 4:

120: miles

AUTHORIZATION _____ TITLE _____ DATE 12-27-12

Terms and Conditions are printed on reverse side.

CONSOLIDATED
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

TICKET NUMBER 54769
FIELD TICKET REF # 48125
LOCATION Thayer
FOREMAN Brett Busby

TREATMENT REPORT
FRAC & ACID

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-27-12		Benjamin R[illegible]	7	46N	33W	Cass

CUSTOMER: S+B Operating

MAILING ADDRESS:

CITY: | STATE: | ZIP CODE:

TRUCK #	DRIVER	TRUCK #	DRIVER
524	Trampus		
482	Mark		
5[illegible]	Daniel		

WELL DATA

CASING SIZE	TOTAL DEPTH
CASING WEIGHT	PLUG DEPTH
TUBING SIZE 27/8 EUE	PACKER DEPTH
TUBING WEIGHT	OPEN HOLE
PERFS & FORMATION	
585-605 (42)	Squirrel

TYPE OF TREATMENT

Acid spot + frac

CHEMICALS

Kcl sub - Biocide - Breaker	
Acid - inhibitor - Stimoil	

STAGE	BBL'S PUMPED	INJ RATE	PROPPANT PPG	SAND / STAGE	PSI
PAD	20	15.5			250
16-30		15.5		500#	
12-20		15.5			
12-20				1,000#	
12-20 (2) + (7)					
12-20					
12-20				1,000#	
12-20 (5) + (5)					
12-20 + (5)	(30)			500#	1400
12-20					
FLUSH CASING	5			1,000#	
Release balls to T.D.			TOTAL	4,000#	
OVERFLUSH	10	15.5	SAND		900
TOTAL BBLS	140				

BREAKDOWN	1100
START PRESSURE	
END PRESSURE	
BALL OFF PRESS	
ROCK SALT PRESS	
ISIP	475
5 MIN	
10 MIN	
15 MIN	
MIN RATE	
MAX RATE	
DISPLACEMENT	3.5

REMARKS:

Spotted 100 gal - 15% HCL acid on perfs

location 1:00PM - 1:30PM

120 ? miles

AUTHORIZATION _____ TITLE _____ DATE 12-27-12

Terms and Conditions are printed on reverse side.

CONSOLIDATED
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

TICKET NUMBER 54770
FIELD TICKET REF # 48125
LOCATION Thayer
FOREMAN Brett Busby

TREATMENT REPORT
FRAC & ACID

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-27-12		Benjamin KR-33				Cass

CUSTOMER: S+B Operating

MAILING ADDRESS:

CITY	STATE	ZIP CODE

TRUCK #	DRIVER	TRUCK #	DRIVER
524	Trampis		
452	Tim		
522	Daniel		
61793	Jay		

WELL DATA

CASING SIZE	TOTAL DEPTH
CASING WEIGHT	PLUG DEPTH
TUBING SIZE	PACKER DEPTH
TUBING WEIGHT	OPEN HOLE
PERFS & FORMATION	
575-95 (42)	Squirrel

TYPE OF TREATMENT
Acid-pot + Frac

CHEMICALS
KCLSUB-Biocide-

STAGE	BBL'S PUMPED	INJ RATE	PROPPANT PPG	SAND / STAGE	PSI
PAD	20	15.5			
16-30		15.5			
12-20				500#	
12-20					
12-20 (8)+(7)				1,000#	
12-20					
12-20					
12-20					
12-20 (5)+(5)				1,000#	
12-20 +(5)	+(3)			500#	
FLUSH CASING	5			1,000#	
Release balls to T.D.					
OVERFLUSH	10	15.5	TOTAL SAND	4,000#	
TOTAL BBLS					

BREAKDOWN	1000
START PRESSURE	
END PRESSURE	
BALL OFF PRESS	
ROCK SALT PRESS	
ISIP	550
~~5 MIN~~	
10 MIN	
15 MIN	
MIN RATE	
MAX RATE	
DISPLACEMENT	3.5

REMARKS:

Spotted 100 gal -15% HCL acid on perfs

Location 1:40PM - 2:00PM

120 miles

AUTHORIZATION _____ TITLE _____ DATE 12-27-12

Terms and Conditions are printed on reverse side.

CONSOLIDATED
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

7th well

TICKET NUMBER 54771
FIELD TICKET REF # 48125
LOCATION Thayer
FOREMAN Brett Busby

TREATMENT REPORT
FRAC & ACID

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-27-12		Benjamin RR-27	9	46N	33W	Cass

CUSTOMER: S&B Operating

MAILING ADDRESS:

CITY	STATE	ZIP CODE

TRUCK #	DRIVER	TRUCK #	DRIVER
524	Trumps		
482	Mark		
582	Daniel		
619T91	George		

WELL DATA

CASING SIZE	TOTAL DEPTH
CASING WEIGHT	PLUG DEPTH
TUBING SIZE 2 7/8 8EUE	PACKER DEPTH
TUBING WEIGHT	OPEN HOLE
PERFS & FORMATION	
578-85 (24)	Squirrel
601-05	

TYPE OF TREATMENT

Acid spot + Frac

CHEMICALS

KCL SUB - Biocide	- Breaker
Acid - inhibitor	- Stim Oil

STAGE	BBL'S PUMPED	INJ RATE	PROPPANT PPG	SAND / STAGE	PSI
PAD	20	15.5			
16-30		15.5			
12-20				500#	
12-20					
12-20 (4) + (4)				1,000#	
12-20					
12-20					
12-20 + (2)				500#	
12-20					
12-20					
FLUSH CASING	5			1,000#	
Release balls to T.D.					
OVERFLUSH	10	15.5	TOTAL SAND	3,000#	
TOTAL BBLS	135				

BREAKDOWN	1200
START PRESSURE	
END PRESSURE	
BALL OFF PRESS	
ROCK SALT PRESS	
ISIP	550
5 MIN	
10 MIN	
15 MIN	
MIN RATE	
MAX RATE	
DISPLACEMENT	3.5

REMARKS:

Spotted 100 gal - 15% HCL acid on perfs

Location 2:15PM - 3:10PM

120 miles

AUTHORIZATION _____ TITLE _____ DATE 12-27-12

Terms and Conditions are printed on reverse side.

CONSOLIDATED
Oil Well Services, LLC

PO Box 884, Chanute, KS 66720
620-431-9210 or 800-467-8676

TICKET NUMBER 54772
FIELD TICKET REF # 48125
LOCATION Thayer
FOREMAN Brett Busby

TREATMENT REPORT
FRAC & ACID

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
12-27-12		Benjamin KR 3T	9	46N	33W	Cass

CUSTOMER: S&B Operating

MAILING ADDRESS:

CITY: | STATE: | ZIP CODE:

TRUCK #	DRIVER	TRUCK #	DRIVER
524	Trumpis		
422	Mark		
522	Daniel		
675T02	Junior		

WELL DATA

CASING SIZE	TOTAL DEPTH
CASING WEIGHT	PLUG DEPTH
TUBING SIZE 2 7/8 DEUE	PACKER DEPTH
TUBING WEIGHT	OPEN HOLE
PERFS & FORMATION	
552-62	
581-97 (55)	Squirrels

TYPE OF TREATMENT: Acidspot + Frac

CHEMICALS

KCLSUB - Biocide	- Breaker
Acid - Inhibitor	- Stim Oil

STAGE	BBL'S PUMPED	INJ RATE	PROPPANT PPG	SAND / STAGE	PSI
PAD	20	15.2			
16-30		15.2	15-10	500#	
12-20 Balls ↓		15.2	1		
12-20			2	1000#	
12-20 (10) + (5) + (5)			2-15		
12-20			1		
12-20			2	1500#	
12-20 (5) + (3) + (2)			1		
12-20			2		
12-20			2-15	1500#	
FLUSH CASING	5				
Release balls to T.D.			TOTAL SAND	4,500#	
OVERFLUSH	10				
TOTAL BBLS	165				

BREAKDOWN	900
START PRESSURE	
END PRESSURE	
BALL OFF PRESS	
ROCK SALT PRESS	
ISIP	450
~~5 MIN~~	
10 MIN	
15 MIN	
MIN RATE	
MAX RATE	
DISPLACEMENT	3.5

REMARKS:

Spotted 100 gal-15% HCl acid on perfs

Location 4:00PM – 5:00PM

120: miles

AUTHORIZATION _____ TITLE _____ DATE 12-27-12

Terms and Conditions are printed on reverse side.

STATE OF MISSOURI
MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SURVEY PROGRAM

FORM OGC-4

WELL LOCATION PLAT

OWNER'S NAME
Kansas Resource Exploration and Development, LLC

LEASE NAME
Belton Unit RW-16

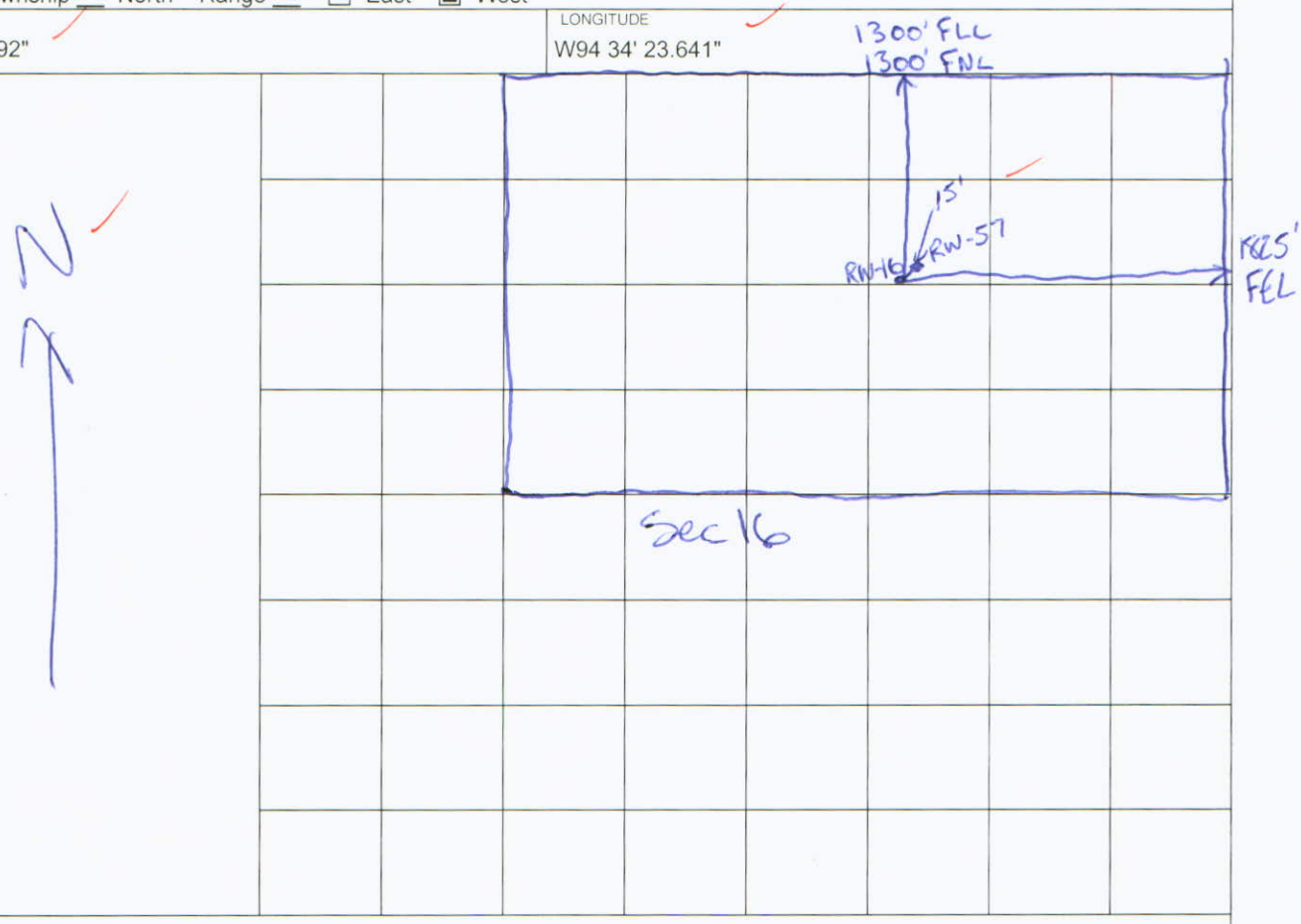
COUNTY
Cass

WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES)
1300 ft. from ■ North ☐ South from section line 1825 ft. from ■ East ☐ West from section line

WELL LOCATION
Sec. 16 Township 46 North Range 33 ☐ East ■ West

LATITUDE
N38 48' 49.192"

LONGITUDE
W94 34' 23.641"



REMARKS

Plat Map Scale - 1 Square = 660 feet

INSTRUCTIONS

On the above plat, show distance of the proposed well from the two nearest section lines, the nearest lease line, and from the nearest well on the same lease completed in or drilling to the same reservoir. Do not confuse survey lines with lease lines. See rule 10 CSR 50-2.030 for survey requirements. Lease lines must be marked.

This is to certify that I have executed a survey to accurately locate oil and gas wells in accordance with 10 CSR 50-2.030 and that the results are correctly shown on the above plat.

REMIT TWO (2) COPIES TO:
GEOLOGICAL SURVEY PROGRAM
PO BOX 250, ROLLA, MO 65402-0250 (573) 368-2143
ONE (1) COPY WILL BE RETURNED

REGISTERED LAND SURVEYOR

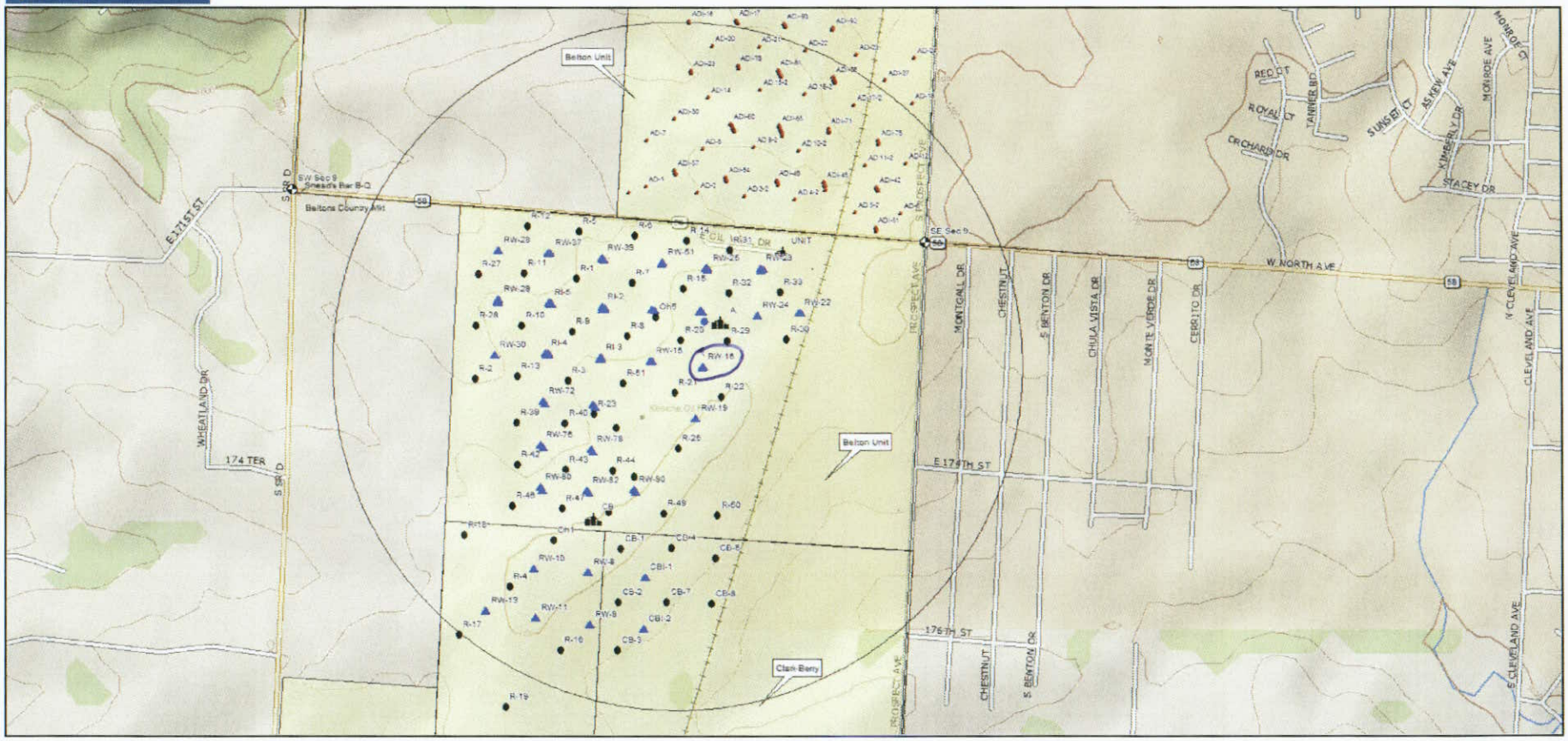
NUMBER

MO 780-0213 (6-06)

DELORME

1/2 mile radius

XMap® 7



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MN (1.9° E)

0 600 1200 1800 2400 3000 ft

Data Zoom 14-1

AREA OF REVIEW WELLS (1/2 MILE RADIUS AROUND WELL) THAT PENETRATE THE INJECTION INTERVAL

INSTRUCTIONS

In the grid below, place the descriptions of area of review wells (1/2 mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other - specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion of information, detailing the cement, casing, and subsurface casing information.

LEASE	WELL NO.	LOCATION	OWNER	DEPTH	TYPE	DATE SPUDDED	DATE COMPLETED	CONSTRUCTION
Belton Unit	R-1	569 FROM (N)(S) SEC LINE 2412 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D.	619'	O	04/08/1999	04/13/1999	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-2	1484 FROM (N)(S) SEC LINE 1624 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	600'	O	06/04/1999	06/10/1999	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-3	1436 FROM (N)(S) SEC LINE 2423 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	665'	O	02/29/2000	03/02/0200	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-4	3232 FROM (N)(S) SEC LINE 2073 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	680'	O	03/02/2000	03/07/2000	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-5	168 FROM (N)(S) SEC LINE 2406 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	639'	O	04/23/2000	04/25/2000	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-6	171 FROM (N)(S) SEC LINE 2890 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	608'	O	04/27/2000	04/28/2000	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-7	571 FROM (N)(S) SEC LINE 2901 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	646'	O	05/01/2000	05/02/2000	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-8	1023 FROM (N)(S) SEC LINE 2894 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	655'	O	05/05/2000	05/08/2000	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-9	1008 FROM (N)(S) SEC LINE 2418 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	651'	O	05/03/2000	05/05/2000	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump

WD 780-1136 (02-11)

AREA OF REVIEW WELLS (1/2 MILE RADIUS AROUND WELL) THAT PENETRATE THE INJECTION INTERVAL

INSTRUCTIONS

In the grid below, place the descriptions of area of review wells (1/2 mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other - specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion of information, detailing the cement, casing, and subsurface casing information.

LEASE	WELL NO.	LOCATION	OWNER	DEPTH	TYPE	DATE SPUDDED	DATE COMPLETED	CONSTRUCTION
Belton Unit	R-10	1005 FROM (N)(S) SEC LINE 1980 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D.	627'	O	05/15/2000	05/16/2000	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-11	567 FROM (N)(S) SEC LINE 1968 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	626'	O	05/10/2000	05/12/2000	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-12	162 FROM (N)(S) SEC LINE 1957 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	642'	O	05/16/2000	05/18/2000	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-13	1444 FROM (N)(S) SEC LINE 1983 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	620'	O	05/22/2000	05/24/2000	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-14	174 FROM (N)(S) SEC LINE 3330 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	637'	O	09/17/2001	09/19/2001	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-15	573 FROM (N)(S) SEC LINE 3335 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	621'	O	12/15/2000	12/20/2000	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-16	3730 FROM (N)(S) SEC LINE 2548 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	652.5'	O	10/13/2003	10/15/2003	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-17	3070 FROM (N)(S) SEC LINE 1671 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	686'	O	01/29/2004	01/30/2004	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-18	2810 FROM (N)(S) SEC LINE 1637 FROM (E)(W) SEC LINE SEC 16 T 46 N R 33W	K.R.E.D	914.5'	O	01/07/2004	01/09/2004	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump

MO 780-1136 (02-11)

AREA OF REVIEW WELLS (1/2 MILE RADIUS AROUND WELL) THAT PENETRATE THE INJECTION INTERVAL

INSTRUCTIONS

In the grid below, place the descriptions of area of review wells (1/2 mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other - specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion of information, detailing the cement, casing, and subsurface casing information.

LEASE	WELL NO.	LOCATION	OWNER	DEPTH	TYPE	DATE SPUDDED	DATE COMPLETED	CONSTRUCTION
Belton Unit	R-19	4132 FROM (N)(S) SEC LINE 2070 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D.	621.5'	O	02/12/2004	02/13/2004	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-20	4280 FROM (N)(S) SEC LINE 2045 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	661'	O	01/18/2008	01/22/2008	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-21	3160 FROM (N)(S) SEC LINE 2045 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	635'	O	01/14/2008	01/16/2008	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-22	3160 FROM (N)(S) SEC LINE 1605 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	660'	O	12/04/2008	N/A	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-23	3320 FROM (N)(S) SEC LINE 2425 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	660'	O	U	N/A	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-24	3320 FROM (N)(S) SEC LINE 2485 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	658'	O	01/25/2008	N/A	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	R-25	3320 FROM (N)(S) SEC LINE 2045 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	660'	O	U	N/A	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	RI-1	368 FROM (N)(S) SEC LINE 2164 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	623'	Plugged	07/26/2000	08/31/2000	4 1/2" casing cemented to surface Plugged 6/27/18 - squeezed cement 623 to surface
Belton Unit	RI-2	795 FROM (N)(S) SEC LINE 2053 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	627'	I	U	U	4 1/2" casing cemented to surface

MO 780-1136 (02-11)

AREA OF REVIEW WELLS (1/2 MILE RADIUS AROUND WELL) THAT PENETRATE THE INJECTION INTERVAL

INSTRUCTIONS

In the grid below, place the descriptions of area of review wells (1/2 mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other - specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion of information, detailing the cement, casing, and subsurface casing information.

LEASE	WELL NO.	LOCATION	OWNER	DEPTH	TYPE	DATE SPUDDED	DATE COMPLETED	CONSTRUCTION
Belton Unit	RI-3	1217 FROM (N)(S) SEC LINE 2675 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D.	635'	I	U	U	4 1/2" casing cemented to surface
Belton Unit	RI-4	1277 FROM (N)(S) SEC LINE 2202 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	641'	I	08/25/2000	08/29/2000	4 1/2" casing cemented to surface
Belton Unit	RI-5	790 FROM (N)(S) SEC LINE 2196 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	637'	I	U	U	4 1/2" casing cemented to surface
Belton Unit	RI-6	367 FROM (N)(S) SEC LINE 2187 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	644'	Plugged	U	U	4 1/2" casing cemented to surface Plugged 6/27/12 - Squeezed cement 644' to surface
Belton Unit	WSW-1	843 FROM (N)(S) SEC LINE 3529 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	891'	W	04/16/2001	04/14/2001	
Belton Unit	C-18	110 FROM (N)(S) SEC LINE 4241 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	571'	Plugged	U	U	Squeezed
Belton Unit	RW-7	374 FROM (N)(S) SEC LINE 3115 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	638'	Plugged I	02/10/2004	02/11/2004	4 1/2" casing cemented to surface Plugged 6/27/12 - Squeezed cement 638' to surface
Belton Unit	RW-8	3048 FROM (N)(S) SEC LINE 2714 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	641.5'	I	02/12/2004	02/13/2004	4 1/2" casing cemented to surface
Belton Unit	RW-9	3505 FROM (N)(S) SEC LINE 2770 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	647.5'	I	01/13/2004	01/15/2004	4 1/2" casing cemented to surface

MO 780-1136 (02-11)

AREA OF REVIEW WELLS (1/2 MILE RADIUS AROUND WELL) THAT PENETRATE THE INJECTION INTERVAL

INSTRUCTIONS

In the grid below, place the descriptions of area of review wells (1/2 mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other - specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion of information, detailing the cement, casing, and subsurface casing information.

LEASE	WELL NO.	LOCATION	OWNER	DEPTH	TYPE	DATE SPUDDED	DATE COMPLETED	CONSTRUCTION
Belton Unit	RW-10	3055 FROM (N)(S) SEC LINE 2255 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D.	678'	I	02/02/2004	02/03/2004	4 1/2" casing cemented to surface
Belton Unit	RW-11	3474 FROM (N)(S) SEC LINE 2363 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	652'	I	02/04/2004	02/06/2004	4 1/2" casing cemented to surface
Belton Unit	RW-13	3453 FROM (N)(S) SEC LINE 1872 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	697'	I	02/06/2004	02/09/2004	4 1/2" casing cemented to surface
Belton Unit	RW-15	3980 FROM (N)(S) SEC LINE 2265 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	660'	I	11/26/2008	N/A	4 1/2" casing cemented to surface
Belton Unit	RW-16	3980 FROM (N)(S) SEC LINE 1825 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	660'	I	12/02/2008	N/A	4 1/2" casing cemented to surface
Belton Unit	RW-19	3540 FROM (N)(S) SEC LINE 1825 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	661'	I	12/08/2008	N/A	4 1/2" casing cemented to surface
Belton Unit	AD-1	220 FROM (N)(S) SEC LINE 2420 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	615'	O	12/03/2007	01/04/2008	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-2	220 FROM (N)(S) SEC LINE 2000 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	657'	O	12/06/2007	12/10/2007	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-3	212 FROM (N)(S) SEC LINE 3806 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	637'	O	08/31/1987	U	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump

MO 780-1136 (02-11)

AREA OF REVIEW WELLS (1/2 MILE RADIUS AROUND WELL) THAT PENETRATE THE INJECTION INTERVAL

INSTRUCTIONS

In the grid below, place the descriptions of area of review wells (1/2 mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other - specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion of information, detailing the cement, casing, and subsurface casing information.

LEASE	WELL NO.	LOCATION	OWNER	DEPTH	TYPE	DATE SPUDDED	DATE COMPLETED	CONSTRUCTION
Belton Unit	AD-4	220 FROM (N)(S) SEC LINE 4255 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D.	666'	O	07/14/1987	07/16/1987	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-5	220 FROM (N)(S) SEC LINE 4716 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	679'	O	06/21/1987	06/25/1987	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-6	204 FROM (N)(S) SEC LINE 5186 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	708'	O	01/31/2008	02/19/2008	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-7	654 FROM (N)(S) SEC LINE 2984 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	630'	O	12/12/2007	12/14/2007	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-8	630 FROM (N)(S) SEC LINE 3401 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	622'	O	05/14/1999	05/27/1999	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-9	644 FROM (N)(S) SEC LINE 3835 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	662'	Plugged	08/25/1987	U 1987	4 1/2" casing cemented to surface Squeezed cement into formation to surface on 04/04/2012
Belton Unit	AD-10	662 FROM (N)(S) SEC LINE 4239 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	659'	O	05/25/1987	07/21/1987	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-11	621 FROM (N)(S) SEC LINE 4785 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	665'	Plugged	U 1987	U 1987	4 1/2" casing cemented to surface Squeezed cement into formation to surface on 03/19/2012
Belton Unit	AD-12	1210 FROM (N)(S) SEC LINE 3807 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	710'	O	01/23/2008	02/26/2008	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump

MO 780-1136 (02-11)

AREA OF REVIEW WELLS (1/2 MILE RADIUS AROUND WELL) THAT PENETRATE THE INJECTION INTERVAL

INSTRUCTIONS

In the grid below, place the descriptions of area of review wells (1/2 mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other - specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion of information, detailing the cement, casing, and subsurface casing information.

LEASE	WELL NO.	LOCATION	OWNER	DEPTH	TYPE	DATE SPUDDED	DATE COMPLETED	CONSTRUCTION
Belton Unit	AD-13	1100 FROM (N)(S) SEC LINE 2420 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D.	700'	Plugged	12/21/2007	N/A	Cemented from bottom to top on 12/27/2007
Belton Unit	AD-14	1067 FROM (N)(S) SEC LINE 3405 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	609'	O	04/21/1999	05/13/1999	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-15	1210 FROM (N)(S) SEC LINE 3807 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	617'	O	11/13/1989	11/14/1989	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-16	1100 FROM (N)(S) SEC LINE 4225 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	666'	Plugged	07/23/1987	U-1987	4 1/2" casing cemented to surface Squeezed cement into formation to surface on 04/04/2012
Belton Unit	AD-17	1105 FROM (N)(S) SEC LINE 4057 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	647'	O	U	U	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-18	1100 FROM (N)(S) SEC LINE 300 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	676.5'	O	01/02/2008	02/26/2008	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-21	1535 FROM (N)(S) SEC LINE 3809 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	656'	O	09/11/2003	09/12/2003	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-22	1539 FROM (N)(S) SEC LINE 4212 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	650'	O	06/13/1999	06/18/1999	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-23	1541 FROM (N)(S) SEC LINE 4044 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	644'	O	09/09/2003	09/11/2003	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump

MO 780-1136 (02-11)

AREA OF REVIEW WELLS (1/2 MILE RADIUS AROUND WELL) THAT PENETRATE THE INJECTION INTERVAL

INSTRUCTIONS

In the grid below, place the descriptions of area of review wells (1/2 mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other - specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion of information, detailing the cement, casing, and subsurface casing information.

LEASE	WELL NO.	LOCATION	OWNER	DEPTH	TYPE	DATE SPUDDED	DATE COMPLETED	CONSTRUCTION
Belton Unit	AD-24	1540 FROM (N)(S) SEC LINE 300 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D.	672.5	O	12/27/2007	02/06/2008	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-28	1979 FROM (N)(S) SEC LINE 4193 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	629'	O	07/08/1999	07/14/1999	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	AD-29	1912 FROM (N)(S) SEC LINE 4627 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	625'	O	06/18/1999	07/07/1999	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	ADI-18	1751 FROM (N)(S) SEC LINE 4003 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	651.5'	I	10/09/2003	10/10/2003	4 1/2" casing cemented to surface
Belton Unit	ADI-19	1754 FROM (N)(S) SEC LINE 4421 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	654.5'	I	10/07/2003	10/08/2003	4 1/2" casing cemented to surface
Belton Unit	ADI-24	1354 FROM (N)(S) SEC LINE 3631 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	662'	I	09/16/2003	09/17/2003	4 1/2" casing cemented to surface
Belton Unit	ADI-25	1352 FROM (N)(S) SEC LINE 3985 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	651.5'	I	09/12/2003	09/15/2003	4 1/2" casing cemented to surface
Belton Unit	ADI-26	1357 FROM (N)(S) SEC LINE 4453 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	650.5'	I	09/17/2003	09/19/2003	4 1/2" casing cemented to surface
Belton Unit	ADI-27	1320 FROM (N)(S) SEC LINE 520 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	674.1'	I	01/04/2008	04/16/2008	4 1/2" casing cemented to surface

MO 780-1136 (02-11)

AREA OF REVIEW WELLS (1/2 MILE RADIUS AROUND WELL) THAT PENETRATE THE INJECTION INTERVAL

INSTRUCTIONS

In the grid below, place the descriptions of area of review wells (1/2 mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other - specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion of information, detailing the cement, casing, and subsurface casing information.

LEASE	WELL NO.	LOCATION	OWNER	DEPTH	TYPE	DATE SPUDDED	DATE COMPLETED	CONSTRUCTION
Belton Unit	ADI-30	880 FROM (N)(S) SEC LINE 2200 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D.	627.7'	I	12/19/2007	04/16/2008	4 1/2" casing cemented to surface
Belton Unit	ADI-31	860 FROM (N)(S) SEC LINE 3613 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	633'	I	05/27/1999	06/04/1999	4 1/2" casing cemented to surface
Belton Unit	ADI-32	871 FROM (N)(S) SEC LINE 4034 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	649'	I	U	U	4 1/2" casing cemented to surface
Belton Unit	ADI-33	881 FROM (N)(S) SEC LINE 4454 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	642'	I	U	U	4 1/2" casing cemented to surface
Belton Unit	ADI-34	879 FROM (N)(S) SEC LINE 4896 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	663	I	U	U	4 1/2" casing cemented to surface
Belton Unit	ADI-37	440 FROM (N)(S) SEC LINE 2200 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	618.2	I	12/13/2007	04/16/2008	4 1/2" casing cemented to surface
Belton Unit	ADI-38	440 FROM (N)(S) SEC LINE 1760 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	668.9'	I	12/17/2007	04/16/2008	4 1/2" casing cemented to surface
Belton Unit	ADI-39	441 FROM (N)(S) SEC LINE 4055 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	631'	I	U	U	4 1/2" casing cemented to surface
Belton Unit	ADI-40	441 FROM (N)(S) SEC LINE 4465 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D	664'	I	U	U	4 1/2" casing cemented to surface

MO 780-1136 (02-11)

AREA OF REVIEW WELLS (1/2 MILE RADIUS AROUND WELL) THAT PENETRATE THE INJECTION INTERVAL

INSTRUCTIONS

In the grid below, place the descriptions of area of review wells (1/2 mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other - specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion of information, detailing the cement, casing, and subsurface casing information.

LEASE	WELL NO.	LOCATION	OWNER	DEPTH	TYPE	DATE SPUDDED	DATE COMPLETED	CONSTRUCTION
Belton Unit	ADI-41	442 FROM (N)(S) SEC LINE 4909 FROM (E)(W) SEC LINE SEC. 9 T. 46 N.R. 33W	K.R.E.D.	600' est	I	U	U	4 1/2" casing cemented to surface
Belton Unit	OH-1	2815 FROM (N)(S) SEC LINE 2406 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	600' est	O	U	U	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	OH-2	2204 FROM (N)(S) SEC LINE 3051 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	600' est	O	U	U	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	OH-3	1937 FROM (N)(S) SEC LINE 3408 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	600' est	O	U	U	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	OH-4	1340 FROM (N)(S) SEC LINE 2878 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	600' est	O	U	U	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	OH-5	833 FROM (N)(S) SEC LINE 3124 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	600' est	O	U	U	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Belton Unit	OH-6	919 FROM (N)(S) SEC LINE 5716 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	600' est	Plugged	U	U	Squeezed cement into formation to surface
Belton Unit	OH-7	753 FROM (N)(S) SEC LINE 3666 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	600' est	Plugged	U	U	Squeezed cement into formation to surface
Belton Unit	OH-8	138 FROM (N)(S) SEC LINE 3971 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	600 est	Plugged	U	U	Squeezed cement into formation to surface

MO 780-1136 (02-11)

AREA OF REVIEW WELLS (1/2 MILE RADIUS AROUND WELL) THAT PENETRATE THE INJECTION INTERVAL

INSTRUCTIONS

In the grid below, place the descriptions of area of review wells (1/2 mile radius around well) of public record that penetrate the proposed injection zone. Complete the following: lease name, well number, location, owner, depth in feet, type of well (Oil = O, Gas = G, Water = W, Injection = I, Strat Test = S, Unknown = U, Other - specify), date spudded, date completed, and construction of the well. Give a brief but accurate description of the well's construction including all plugging and/or completion of information, detailing the cement, casing, and subsurface casing information.

LEASE	WELL NO.	LOCATION	OWNER	DEPTH	TYPE	DATE SPUDDED	DATE COMPLETED	CONSTRUCTION
Belton Unit	OH-9	604 FROM (N)(S) SEC LINE 5229 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D.	600' est	Plugged	U	U	Squeezed cement into formation to surface
Belton Unit	UK-1	15280 FROM (N)(S) SEC LINE 1300 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	U	Plugged	U	U	4 1/2" casing cemented to surface Squeezed cement into formation to surface on 04/17/2012
Belton Unit	UK-2	4279 FROM (N)(S) SEC LINE 1976 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	U	Plugged	U	U	4 1/2" casing cemented to surface Squeezed cement into formation to surface on 04/17/2012
Belton Unit	UK-3	5353 FROM (N)(S) SEC LINE 1396 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	U	O	U	U	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Clark-Berry	CB-1	2580 FROM (N)(S) SEC LINE 2989 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	625'	O	03/22/1999	U	2 7/8" with 1" tubing and insert pump
Clark-Berry	CB-2	3276 FROM (N)(S) SEC LINE 3006 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	625'	O	U	U	2 7/8" with 1" tubing and insert pump
Clark-Berry	CB-3	3210 FROM (N)(S) SEC LINE 3022 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	625'	O	03/25/1999	03/30/1999	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Clark-Berry	CB-4	2818 FROM (N)(S) SEC LINE 3424 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	619'	O	03/30/1999	04/02/1999	4 1/2" casing cemented to surface 2 3/8" tubing 3/4" rods and insert pump
Clark-Berry	CBI-1	2050 FROM (N)(S) SEC LINE 3211 FROM (E)(W) SEC LINE SEC. 16 T. 46 N.R. 33W	K.R.E.D	629'	I	03/22/1999	03/25/1999	4 1/2" casing cemented to surface

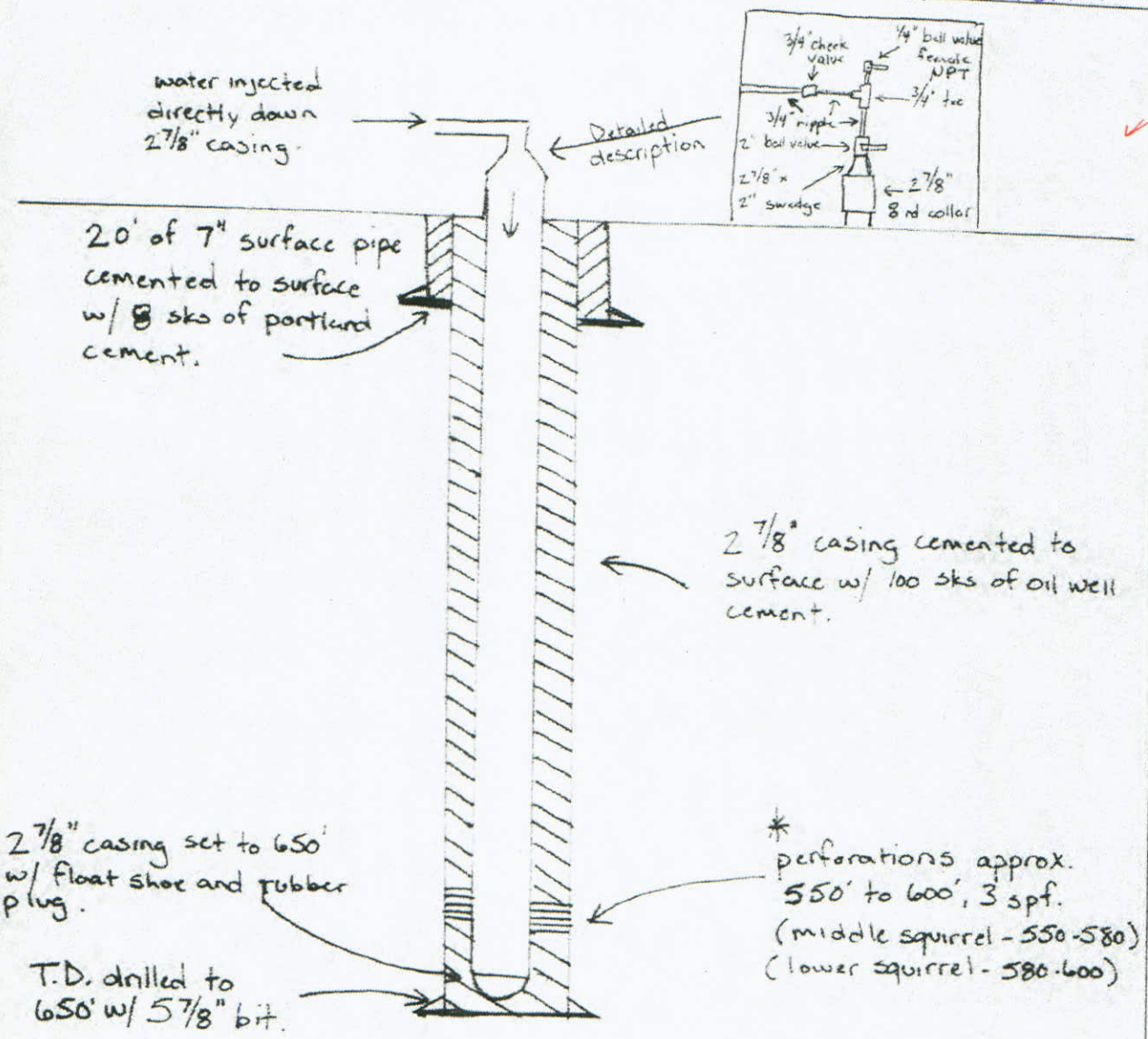
MO 780-1136 (02-11)

STATE OF MISSOURI
MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SURVEY PROGRAM

INJECTION WELL SCHEMATIC

OGC-11

COUNTY	PERMIT NUMBER	OPERATOR	
Cass	20831	Kansas Resource Exploration & Development LLC	Belton Unit RW-16



* Middle and lower squirrel sections confined by shale & limestone

INSTRUCTIONS ON THE ABOVE SPACE DRAW A NEAT, ACCURATE SCHEMATIC DIAGRAM OF THE APPLICANT INJECTION WELL, INCLUDING THE FOLLOWING: CONFIGURATION OF WELLHEAD, TOTAL DEPTH OR PLUG BACK TOTAL DEPTH, DEPTH OF ALL INJECTION OR DISPOSAL INTERVALS, AND THEIR FORMATION NAMES, LITHOLOGY OF ALL FORMATIONS PENETRATED, DEPTHS OF THE TOPS AND BOTTOMS OF ALL CASING AND TUBING, SIZE AND GRADE OF ALL CASING AND TUBING, AND THE TYPE AND DEPTH OF PACKER, DEPTH, LOCATION, AND TYPE OF ALL CEMENT, DEPTH OF ALL PERFORATIONS AND SQUEEZE JOBS, AND GEOLOGIC NAME AND DEPTH TO BOTTOM OF ALL UNDERGROUND SOURCES OF DRINKING WATER WHICH MAY BE AFFECTED BY THE INJECTION. USE BACK IF ADDITIONAL SPACE IS NEEDED, OR ATTACH SHEET

REMIT TWO (2) COPIES TO: GEOLOGICAL SURVEY PROGRAM, PO BOX 250, ROLLA, MO 65402 (573) 368-2143
ONE (1) COPY WILL BE RETURNED

Well Schematic, Continued

The surface casing is 7" in diameter and is new, limited service grade pipe. The 7" is drifted and tested to 7,000 lbs. and weighs 17 lbs. per foot. The surface casing will be set to a minimum depth of 20 feet and extend 6 inches above the surface. Approximately 6 sacks of Portland cement will be circulated to surface and will secure the well and ensure the contents of the well bore is sealed off from sources of drinking water. The production casing is used 2 7/8" EUE upset, drifted and tested to 7,000 lbs. No tubing will be ran in the injection wells, the injection fluid will be injected directly down the 2 7/8" casing. The total depth of the well will be approximately 700 feet drilled with a 5 7/8" bit. A 2 7/8" flapper type float shoe will be set at the base of the 2 7/8" casing pipe (695 feet) with centralizers installed to center the casing inside the well bore for better cement bonding. The 2 7/8" casing will be cemented from 700 feet to surface using a 2 7/8" rubber plug for displacing the cement. Approximately 125 sacks of high-grade Oil Well cement will be used to cement all wells. This cement will ensure that no contents of the pipe will leave the well bore. The top of the 2 7/8" casing will extend approximately one foot above ground level. After the cement has cured and effectively bonded to the 2 7/8" casing, perforations will be made in the Squirrel Sandstone formation from approximately 550-600 feet, depending on where the oil sand is present at this particular location. Wells will be shot with 3 perforations per foot where the squirrel sandstone oil reservoir is present and capable of water injection. No water sources are present at this depth and will not be affected by these perforations or the injection. The relevant sources of drinking water are located less than 20 feet below surface. The 7" surface pipe and durable Portland cement ensures these water sources will remain free from contamination from drilling and injection activity. Other sources of potential usable water may be present, however not always potable, in the Pennsylvanian and Mississippian formations located approximately 150 feet or deeper below the base of the Squirrel Sandstone.

The lithology of all formations penetrated by the wellbore are as follows:

Formation	Total Depth (feet)
Soil	0 – 2
Clay	2 – 4
Lime	4 – 16
Shale	16 – 42
Lime	42 – 54
Shale	54 – 64
Lime	64 – 83
Shale	83 – 113

Lime	113 – 116
Shale	116 – 142
Lime	142 – 173
Shale	173 – 183 (Slate 180 - 182)
Lime	183 – 203
Shale	203 - 205 (Slate 203 - 205)
Lime	205 - 208
Shale	208 – 211
Lime	211 – 217 (Top Pawnee Limestone)
Shale	217 - 399
Lime	399 – 403 (Base Pawnee Limestone)
Shale	403 - 419 (Labette Shale)
Lime	419 - 421
Shale	421 - 438 (Top Fort Scott)
Lime	438 - 442 (Blackjack Creek Limestone)
Shale	442 - 556 (Summit Coal) (Base Fort Scott)
Lime	556 - 557
Shale	557 - 562
Oil Sand	562 - 592 (Squirrel Sandstone)
Shale	592 - 593 (Top Verdigris)
Lime	593 - 594 (Ardmore Limestone)
Shale	594 - 700 (Oakley Shale)

AFFIDAVIT OF PUBLICATION

(Space above for recording information)

STATE OF MISSOURI
COUNTY OF CASS ss.

I, Janis Anslinger, being duly sworn according to law, state that I am the Classified Ad Manager of the Cass County Democrat-Missourian, a weekly newspaper of general circulation in the County of Cass, State of Missouri, where located; which newspaper has been admitted to the Post Office as periodical class matter in the City of Harrisonville, Missouri, the city of publication; which newspaper has been published regularly and consecutively for a period of three years and has a list of bonafide subscribers, voluntarily engaged as such who have paid or agreed to pay a stated price for a subscription for a definite period of time, and that such newspaper has complied with the provisions of Section 493.050, Revised Statutes of Missouri 2000, and Section 59.310, Revised Statutes of Missouri 2000. The affixed notice appeared in said newspaper in the following consecutive issues:

1st Insertion: Vol. 134 No. 39, 11 day of July 20 14.

2nd Insertion: Vol. _____ No. _____, _____ day of _____ 20____.

3rd Insertion: Vol. _____ No. _____, _____ day of _____ 20____.

4th Insertion: Vol. _____ No. _____, _____ day of _____ 20____.

5th Insertion: Vol. _____ No. _____, _____ day of _____ 20____.

Janis Anslinger
Janis Anslinger, Classified Ad Manager

Subscribed and sworn to before me on this 11 day of July, 2014

Julie M Hicks

NOTARY PUBLIC STATE OF MISSOURI NOTARY SEAL

JULIE M. HICKS
My Commission Expires
June 12, 2017
Cass County
Commission #13727108

PUBLIC NOTICE

Kansas Resource Exploration & Development, LLC, 9393 W 110th St., Ste. 500, Overland Park, KS, 66210, has applied for 4 injection well permits to be drilled to an approximate depth of 650 feet. Saltwater will be injected into the Squirrel Sandstone formation for an Enhanced Oil Recovery Project at the following locations.

#RW-15 1,300' from N line/2,265' from E line, Section 16, Township 46N, Range 33W

#RW-16 1,300' from N line/1,825' from E line, Section 16, Township 46N, Range 33W

#CBI-1 2,255' from S line/2,255' from E line, Section 16, Township 46N, Range 33W

#CBI-2 1,815' from S line/2,255' from E line, Section 16, Township 46N, Range 33W

Written comments or requests for additional information regarding such wells should be directed within fifteen (15) days of this notice to the address below.

State Geologist Missouri
Oil & Gas Council
P.O. Box 250
Rolla, MO 65401

39-1tc