### MID-CONTINENT ENERGY EXCHANGE

Oil & Gas Asset Auctions



# Lot 41 Data Packet Richard and Terri Terrel Lease

Operated Lease in Richardson County, NE

### In this Document:

Lot Summary
Income & Expenses
Production
Maps
Misc

**Geologist Reports** 

Well Logs



County/State: Richardson County, NE

Legal Description: Sec 9-1N-14E

Acres: 280

Lease Name: Richard and Terri Terrel Lease

Asset Type: Operated Lease

Gross Working Interest: 100%

Net Revenue Interest: 75%

Taxes: \$11.08

Lease: 91360

Oil Gravity and/or Gas BTU: 23 Hunton, 27 Viola.

Next MIT Due: 8/25/2022

Purchaser: Maclaskey Oilfield Services, Inc.

Operator: Kremeier Oil, LLC

Disclaimer: Bidders must conduct their own due diligence prior to bidding at the auction. Bidders shall rely upon their own evaluations of the properties and not upon any representation either oral or written provided here. This is a summary of information provided by the seller to Mid-Continent Energy Exchange.



### **Summary**

#### TERREL ANNUAL PRODUCTION

Year	Oil (BBLS)	Gas (MCF)	Water (BBLS)
2020	0	0	500
2019	86	0	10626
2018	3	0	250
2017	44	0	395
2016	4	0	4250
2014	0	0	321020
2013	1320	0	993780
2012	2299	0	515375



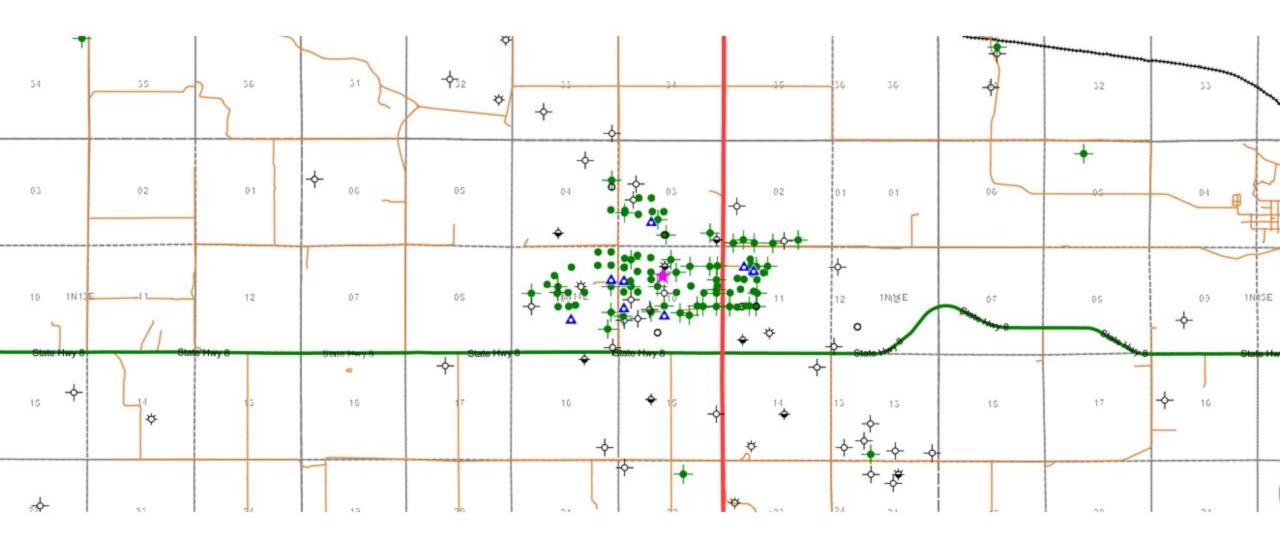
TERREL LEASE

Year Month	Oil (BBLS)	Gas (MCF)	Water (BBLS)
2020/03	011 (151525)	0	0
2020/02	0	0	0
2020/02	0	0	500
2019/12	0	0	3500
2019/11	0	0	3500
2019/10	0	0	1500
2019/09	0	0	500
2019/08	0	0	25
2019/08	0	0	25
2019/06	0	0	25
2019/00	0	0	500
2019/04	83	0	1000
2019/04	1	0	25
2019/03	1	0	25
2019/02	1	0	1
2019/01	1	0	25
2018/12	1	0	0
2018/11	0	0	25
2018/10	0	0	25
2018/09	0	0	25
2018/08	0	0	25
2018/07	1	0	0
2018/05	0	0	25
2018/03	0	0	25
2018/04	0	0	25
2018/03	0	0	25
2018/02	0	0	25
2018/01	0	0	50
2017/12	0	0	50
2017/11	0	0	50
2017/10	0	0	25
2017/03	0	0	10
2017/03	0	0	10
2017/07	44	0	200
2017/05	0	0	0
2017/03	0	0	0
2017/04	0	0	0
2017/03	0	0	0
2017/02	0	0	0
2017/01	1	0	500
2016/12	1	0	500
2016/11	1	0	250
2016/10	1	0	3000
2010/03		U	3000

TERREL LEASE

Year Month	Oil (BBLS)	Gas (MCF)	Water (BBLS)
2016/08	0	0	0
2014/12	0	0	0
2014/11	0	0	20000
2014/10	0	0	22000
2014/09	0	0	25000
2014/08	0	0	25000
2014/07	0	0	35000
2014/06	0	0	5000
2014/05	0	0	20
2014/04	0	0	25000
2014/03	0	0	40000
2014/02	0	0	58000
2014/01	0	0	66000
2013/12	0	0	30000
2013/11	0	0	61000
2013/10	71	0	82200
2013/09	104	0	85400
2013/08	117	0	90500
2013/07	128	0	90380
2013/06	82	0	90400
2013/05	93	0	89100
2013/04	162	0	91800
2013/03	139	0	93700
2013/02	154	0	94500
2013/01	270	0	94800
2012/12	164	0	94200
2012/11	220	0	94500
2012/10	231	0	96000
2012/09	162	0	96750
2012/08	223	0	96750
2012/07	321	0	32000
2012/06	462	0	1550
2012/05	298	0	1425
2012/04	218	0	2200







## GEOLOGISTS REPORT For BRANCH PRODUCTION COMPANY

TERREL #2 API #26-147-21,194-00-00

C W ½, NW¾, NW¼, SE ¼, 2310' FSL, 2450' FEL Sec 9, T1N, R14E

Richardson County, Nebraska
Drilling completed April 18, 2012

The formation tops and intervals for this report were taken from the drilling time log, the Compensated Density Log and sample returns and are based on a ground level elevation of 962' which was established by Jorgensen Surveying from Tecumseh, Nebraska.

Terrel #2

<b>FORMATION</b>	LOG DEPTH	DATUM	THICKNES	1W Terrel	Terrel #3	
Lansing	784	+178		+173	+171	
B K/C	1130	-168	346′	-123	-157	
Cherokee	1276	-304	746′	-305	-319	
Mississippian	2012	-1050	3'	-1048	-1045	
Kinderhook	2015	-1053	173′	-1050	-1050	
Hunton	2192	-1230	662'	-1235	-1228	
Maquoketa	2852	-1890	<i>60'</i>	-1901	-1902	
Viola	2912	-1950		-1962	-1963	
RTD 3336 & LTD 3337						

Sample returns were examined microscopically and under a black light for evidence of the presence of hydrocarbons from 2100' to TD. Samples were caught at 10' intervals. There has been no evidence of the presence of oil in any of the geologic intervals above the Hunton in this part of the Forest City Basin, and therefore the upper units are not discussed in this report.

#### **HUNTON:**

The Hunton was reached at a log depth of 2192' (-1230). The structural comparison of the various geologic tops in this well with the 1W Terrel and Terrel #3 is shown on page one of this report. The Hunton came in 5 foot higher than in the 1W Terrel and some 8 feet higher than in the Terrel #3.

This interval had a mixture of limestone, and dolomite with some scattered green and black shale. Sample returns from 2192-2230 had shows of oil in fracture porosity, vugular porosity, and inter crystalline porosity. There was a petroleum odor present and a slight show of oil on the pit. Samples treated with a solvent yielded bright streaming cuts under black light. The samples from this interval had a good oil show. Decreasing amounts of oil show were logged to a depth of 2230. Log results would suggest that this well will be very similar to those already completed on this lease. When the samples were lagged and compared with a Compensated Neutron log, there is sufficient evidence to perforate from 2194-2206.

#### **MAQUOKETA:**

The top of the Maqouketa consists of a bed of red oolitic hematite ore in the top. When this portion of the unit is penetrated, the mud weight increases and the drilling mud takes on a sticky texture and allows for a thick wall cake build up. The iron content probably affects the log results but at present there is no apparent method to factor this effect into the log calculations. The remainder of the section consists of dark gray to black shale.

There was no visible oil detected in the samples from this interval. There are areas where the Maquoketa has produced oil and this interval should be carefully examined in each succeeding well.

#### VIOLA:

The log top of the Viola was reached at a depth of 2912' (-1950). There was a show of oil from the upper Viola between 2912 & 2950. There was a show of oil on the pits and a petroleum odor. There was good fluorescence and streaming cuts when a solvent was applied to the samples. There was good inter-crystalline and vugular porosity observed in the samples.

Based on the quality of the samples, and the log results, perforating the interval from 2912-28 should yield favorable amounts of oil. It is important to note that this Viola top is 12 feet higher than the 1W Terrel and 13 feet higher than Terrel #3. If the present trend continues to the south, the Terrel #5 should also be a productive location.

#### **CONCLUSIONS and RECOMMENDATIONS:**

As production is established from the lower zones, water samples should be taken to allow more accurate Sw values to be determined.

The upper Viola appears to have good resistivity and porosity as indicated on the DIL and CND logs.

The upper Hunton appears to be very similar to the 1W Terrel; however, it appears to be 12 feet higher structurally than the 1W well.

To date all cement jobs have had good bonds and there appears to be no reason to alter the present methods and volumes.

The mud weight was controlled much better on this well and there were no lost circulation problems encountered.

Samples were much improved in this well and more accurately reflect what is actually being encountered at depth.

#### **DISCLAIMER:**

The author of this report has no working or overriding royalty interest in this well. This report is based on the opinions and observations of the author based on training, experience gained from other wells in the Forest City Basin, and information gained from the samples and logs from this well.

Should additional information be required, please contact me.

Respectfully submitted:

George E. Petersen, Geologist, C.P.G.
DEACON GEOLOGY INC

## GEOLOGISTS REPORT For BRANCH PRODUCTION COMPANY

TERREL #3 API #26-147-21,184-00-00

NE¼, NE¼, SW ¼, 2320' FWL, 2320' FSL Sec 9, T1N, R14E

Richardson County, Nebraska

Drilling completed April 6, 2012

The formation tops and intervals for this report were taken from the drilling time log, the Compensated Density Log and sample returns and are based on a ground level elevation of 953' which was established by Jorgensen Surveying from Tecumseh, Nebraska.

Terrel #3

<b>FORMATION</b>	LOG DEPTH	DATUM	THICKNESS	1W Terrel	
Lansing	782	+171		+173	
B K/C	1110	-157	<i>328′</i>		
Cherokee	1272	-319		-305	
Mississippian	1998	-1045	<i>3'</i>	-1048	
Kinderhook	2010	-1051	165 <b>'</b>	-1054	
Hunton	2188	-1235	<i>696'</i>	-1228	
Maquoketa	2854	-1901	<i>61</i> ′	-1902	
Viola	2915	-196 <b>2</b>	232′	-1964	
Simpson Dol	3147	-2194		-2202	
Simpson Sd	3274	-2321	12'		
Regan Sd ?	3310	-2350			

RTD 3330 & LTD 3334

Sample returns were examined microscopically and under a black light for evidence of the presence of hydrocarbons from 2100' to TD. Samples were caught at 10' intervals There has been no evidence of the presence of oil in any of the geologic intervals above the Hunton

2 Terrel 3

in this part of the Forest City Basin, and therefore the upper units are not discussed in this report.

#### **HUNTON:**

The Hunton was reached at a log depth of 2188' (-1235). The structural comparison of the various geologic tops in this well with the 1W Terrel well is shown on page one of this report.

This interval had a mixture of limestone, and dolomite with some scattered green and black shale. Sample returns from 2188-2230 had shows of oil in fracture porosity, vugular porosity, and inter crystalline porosity. There was a petroleum odor present and a slight show of oil on the pit. Samples treated with a solvent yielded bright streaming cuts under black light. The samples from this interval had a slight oil show. Decreasing amounts of oil show were logged to a depth of 2230. Log results would suggest that this well will be very similar to those already completed on this lease. When the samples were lagged and compared with a Compensated Neutron log, there is sufficient evidence to perforate from 1992-2110.

#### MAQUOKETA:

The top of the Maqouketa consists of a bed of red oolitic hematite ore in the top. When this portion of the unit is penetrated, the mud weight increases and the drilling mud takes on a sticky texture and allows for a thick wall cake build up. The iron content probably affects the log results but at present there is no apparent method to factor this effect into the log calculations. The remainder of the section consists of dark gray to black shale.

There was no visible oil detected in the samples from this interval. There are areas where the Maquoketa has produced oil and this interval should be carefully examined in each succeeding well.

#### **VIOLA:**

The log top of the Viola was reached at a depth of 2915' (-1962). There was a show of oil from the upper Viola between 2915 & 2950. There was a show of oil on the pits and a petroleum odor. There was good fluorescence and streaming cuts when a solvent was applied to the samples. There was good inter-crystalline and vugular porosity observed in the samples. Cross sections are being prepared as time permits to try to explain this difference in tops. There are indications that there may be several small faults present.

This interval has the potential to produce commercial quantities of oil and appears very similar to the Terrel 1W. Based on the log responses perforating from 2914-32 appears to be the optimum interval.

#### SIMPSON:

For correlation purposes within this field, the top of the Simpson Group was called at a log depth of 3147 (-2194). The dolomite was dark brown, very coarsely crystalline to sandy in some areas. There were no visible shows of oil in the upper dolomitic section; however, the sample returns from this interval were very poor. There were ongoing efforts to correct the problems in the sample catching operations through this interval.

There was some evidence of small rainbows from the interval 3262-72. There was a slight odor, slight cut and fluorescence from what samples were caught during this time. The computer processed log suggests that there are movable hydrocarbons between 3562-72. If any attempt to complete is to be attempted in the Simpson, this appears to be the most favorable interval.

The Simpson sand is found between 3272-88. This is a medium to coarse grained, friable sand with the sand grains having a frosted appearance. There was no visible show, odor or fluorescence thru this interval.

#### **CONCLUSIONS and RECOMMENDATIONS:**

As production is established from the lower zones, water samples should be taken to allow more accurate Sw values to be determined.

If an attempt Is to made on the Simpson, the interval from 3562-72 is the only apparent interval that has any chance to produce in this well based on the sample evidence and log responses.

The upper Viola appears to have good resistivity and porosity as indicated on the DIL and CND logs.

The upper Hunton appears to be very similar to the 1W Terrel; however, it appears to be seven feet lower structurally than the 1W well.

To date all cement jobs have had good bonds and there appears to be no reason to alter the present methods and volumes.

The mud weight was controlled much better on this well and there were no lost circulation problems encountered. The mud weight is being monitored much closer now and few problems are anticipated.

The problem of poor samples through the one interval remains under study as there has been no changes to what has been done on other wells. Several changes were made during the time when the poor samples were taken trying to correct the lack of samples in the catch apparatus. Hopefully this will not be a problem on the next well.

#### **DISCLAIMER:**

The author of this report has no working or overriding royalty interest in this well. This report is based on the opinions and observations of the author based on training, experience gained from other wells in the Forest City Basin, and information gained from the samples and logs from this well.

Should additional information be required, please contact me.

Respectfully submitted:

George E. Petersen, Geologist, C.P.G.
DEACON GEOLOGY INC

## GEOLOGISTS REPORT For BRANCH PRODUCTION COMPANY

TERREL #3 API #26-147-21,184-00-00

NE¼, NE¼, SW ¼, 2320' FWL, 2320' FSL Sec 9, T1N, R14E

Richardson County, Nebraska

Drilling completed April 6, 2012

The formation tops and intervals for this report were taken from the drilling time log, the Compensated Density Log and sample returns and are based on a ground level elevation of 953' which was established by Jorgensen Surveying from Tecumseh, Nebraska.

Terrel #3

<b>FORMATION</b>	LOG DEPTH	DATUM	THICKNESS	1W Terrel	
Lansing	782	+171		+173	
B K/C	1110	-157	<i>328′</i>		
Cherokee	1272	-319		-305	
Mississippian	1998	-1045	<i>3'</i>	-1048	
Kinderhook	2010	-1051	165 <b>'</b>	-1054	
Hunton	2188	-1235	<i>696'</i>	-1228	
Maquoketa	2854	-1901	<i>61</i> ′	-1902	
Viola	2915	-196 <b>2</b>	232'	-1964	
Simpson Dol	3147	-2194		-2202	
Simpson Sd	3274	-2321	12'		
Regan Sd ?	3310	-2350			

RTD 3330 & LTD 3334

Sample returns were examined microscopically and under a black light for evidence of the presence of hydrocarbons from 2100' to TD. Samples were caught at 10' intervals There has been no evidence of the presence of oil in any of the geologic intervals above the Hunton

2 Terrel 3

in this part of the Forest City Basin, and therefore the upper units are not discussed in this report.

#### **HUNTON:**

The Hunton was reached at a log depth of 2188' (-1235). The structural comparison of the various geologic tops in this well with the 1W Terrel well is shown on page one of this report.

This interval had a mixture of limestone, and dolomite with some scattered green and black shale. Sample returns from 2188-2230 had shows of oil in fracture porosity, vugular porosity, and inter crystalline porosity. There was a petroleum odor present and a slight show of oil on the pit. Samples treated with a solvent yielded bright streaming cuts under black light. The samples from this interval had a slight oil show. Decreasing amounts of oil show were logged to a depth of 2230. Log results would suggest that this well will be very similar to those already completed on this lease. When the samples were lagged and compared with a Compensated Neutron log, there is sufficient evidence to perforate from 1992-2110.

#### MAQUOKETA:

The top of the Maqouketa consists of a bed of red oolitic hematite ore in the top. When this portion of the unit is penetrated, the mud weight increases and the drilling mud takes on a sticky texture and allows for a thick wall cake build up. The iron content probably affects the log results but at present there is no apparent method to factor this effect into the log calculations. The remainder of the section consists of dark gray to black shale.

There was no visible oil detected in the samples from this interval. There are areas where the Maquoketa has produced oil and this interval should be carefully examined in each succeeding well.

#### **VIOLA:**

The log top of the Viola was reached at a depth of 2915' (-1962). There was a show of oil from the upper Viola between 2915 & 2950. There was a show of oil on the pits and a petroleum odor. There was good fluorescence and streaming cuts when a solvent was applied to the samples. There was good inter-crystalline and vugular porosity observed in the samples. Cross sections are being prepared as time permits to try to explain this difference in tops. There are indications that there may be several small faults present.

This interval has the potential to produce commercial quantities of oil and appears very similar to the Terrel 1W. Based on the log responses perforating from 2914-32 appears to be the optimum interval.

#### SIMPSON:

For correlation purposes within this field, the top of the Simpson Group was called at a log depth of 3147 (-2194). The dolomite was dark brown, very coarsely crystalline to sandy in some areas. There were no visible shows of oil in the upper dolomitic section; however, the sample returns from this interval were very poor. There were ongoing efforts to correct the problems in the sample catching operations through this interval.

There was some evidence of small rainbows from the interval 3262-72. There was a slight odor, slight cut and fluorescence from what samples were caught during this time. The computer processed log suggests that there are movable hydrocarbons between 3562-72. If any attempt to complete is to be attempted in the Simpson, this appears to be the most favorable interval.

The Simpson sand is found between 3272-88. This is a medium to coarse grained, friable sand with the sand grains having a frosted appearance. There was no visible show, odor or fluorescence thru this interval.

#### **CONCLUSIONS and RECOMMENDATIONS:**

As production is established from the lower zones, water samples should be taken to allow more accurate Sw values to be determined.

If an attempt Is to made on the Simpson, the interval from 3562-72 is the only apparent interval that has any chance to produce in this well based on the sample evidence and log responses.

The upper Viola appears to have good resistivity and porosity as indicated on the DIL and CND logs.

The upper Hunton appears to be very similar to the 1W Terrel; however, it appears to be seven feet lower structurally than the 1W well.

To date all cement jobs have had good bonds and there appears to be no reason to alter the present methods and volumes.

The mud weight was controlled much better on this well and there were no lost circulation problems encountered. The mud weight is being monitored much closer now and few problems are anticipated.

The problem of poor samples through the one interval remains under study as there has been no changes to what has been done on other wells. Several changes were made during the time when the poor samples were taken trying to correct the lack of samples in the catch apparatus. Hopefully this will not be a problem on the next well.

#### **DISCLAIMER:**

The author of this report has no working or overriding royalty interest in this well. This report is based on the opinions and observations of the author based on training, experience gained from other wells in the Forest City Basin, and information gained from the samples and logs from this well.

Should additional information be required, please contact me.

Respectfully submitted:

George E. Petersen, Geologist, C.P.G.
DEACON GEOLOGY INC

EMERGENCY RESPONSE NUMBER (316) 321-9011			
UN1267 - PETROLEUM CRUDE OIL -	CLASS 3 PG III Cargo Tank(s)		
UN1203 - NATURAL GASOLINE - C	./		
OPERATOR/SCENEICC Oil	DATE_ 4 ,20 ,20		
LEASE NAME JOURN	SECTWPRGE		
LEASE # 475541	LICENSE #		
414627	414627-2		
15412 TANK SIZE 200-1.68	TANK# TANK SIZE		
OBSERVED GRAVITY GROSS BARRELS 21.42	OBSERVED GRAVITY GROSS BARRELS		
OBSERVED TEMPERATURE	OBSERVED TEMPERATURE		
BS&W	BS&W		
STARTING GAUGE FEET INCHES FRACTION TRUE TEMP  ENDING GAUGE FEET INCHES FRACTION TRUE TEMP	STARTING GAUGE FEET INCHES FRACTION TRUE TEMP  ENDING GAUGE		
BS&W LEVEL 69.72	BS&W LEVEL TRUE TEMP		
FEET INCHES	FEET INCHES		
GROSS OIL RUN NET BBLS TRUE GRAVITY	GROSS OIL RUN NET BBLS TRUE GRAVITY		
GRIND OUTS	GRIND OUTS		
	DESCRIPTION NAMED DATE OF THE PARTY OF THE P		
REMARKS The K You			
GAUGER LOAD TIME THIS TICKET COVERS ALL CLAIMS FOR ALLOWANCE THE OIL REPRESENTED BY THIS TICKET WAS RECEIVED AND RUN AS THE STREET BY THIS TICKET WAS RECEIVED			



