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 CHAUTAUQUA County, Kansas 85'FNL-1920'FWL Section _ 18 Township 34S Range 9E P.M. X 2597011 Y 163956 Y 163909 X 2597073 161318 1958 GRID Scale: = 1000' 1000' 500' 2591866 158613 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. Corner Coordinates are Taken from Points Surveyed in the Field. Operator: NEMAHA OIL AND GAS **ELEVATION:** Lease Name: MASSEY SWD Well No.: 1A-18-34-9 946' Gr. at Stake Topography & Vegetation <u>Loc. fell in pasture</u> Reference Stakes or Alternate Location Stakes Set None Yes Good Drill Site? From East off county road Best Accessibility to Location __ Distance & Direction From Cedar Vale, KS, go East ±2.0 mi, then ±1.0 mi South to from Hwy Jct or Town arrive at the Northeast corner of Sec. 18-T34S-R9E Date of Drawing: Nov. 29, 2012 Revision X A Invoice # 192525A Date Staked: Nov. 17, 2012

This information was thered with a GPS receiver with Sub-Meter accuracy.

DATUM: NAD-27 LAT: 37*05*55.7"N LONG: 96*27*51.6"W LAT: 37.098799651 LONG: 96.464335107

STATE PLANE COORDINATES: (US Feet)

ZONE: KANSAS SOUTH X: 2593699

163830

I, Michael Blake Brown 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.

CERTIFICATE:



TOPOGRAPHIC LAND SURVEYORS
6709 NORTH CLASSEN BLVD., OKIA. CITY, OKIA. 73116 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

Certificate of Authorization No. LS-99, Exp. Dec. 31, 2013 CHAUTAUQUA County, Kansas 85'FNL-1920'FWL Section _ 18 Township 34S Range 9E P.M. X 2597011 Y 163956 1920 X 2591778 Y 163909 X 2594372 Y 163917 675 2549 X 2597073 Y 161318 18 £37. 1958 X 2591822 Y 161261 П 11 **GRID** Scale: = 1000'500' 1000 2594512 2591866 158613 X 259717 Y 158663 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 <u>NOT</u> been measured on the ground. Corner Coordinates are Taken from Points Surveyed in the Field. Operator: NEMAHA OIL AND GAS **ELEVATION:** Well No.: 1A-18-34-9 Lease Name: MASSEY SWD 946' Gr. at Stake Topography & Vegetation Loc. fell in pasture Reference Stakes or Alternate Location Stakes Set None Yes Good Drill Site? From East off county road Best Accessibility to Location ___ Distance & Direction From Cedar Vale, KS, go East ± 2.0 mi, then ± 1.0 mi South to from Hwy Jct or Town arrive at the Northeast corner of Sec. 18-T34S-R9E LS-1552

LS-1552

LS-1552

MANSAS

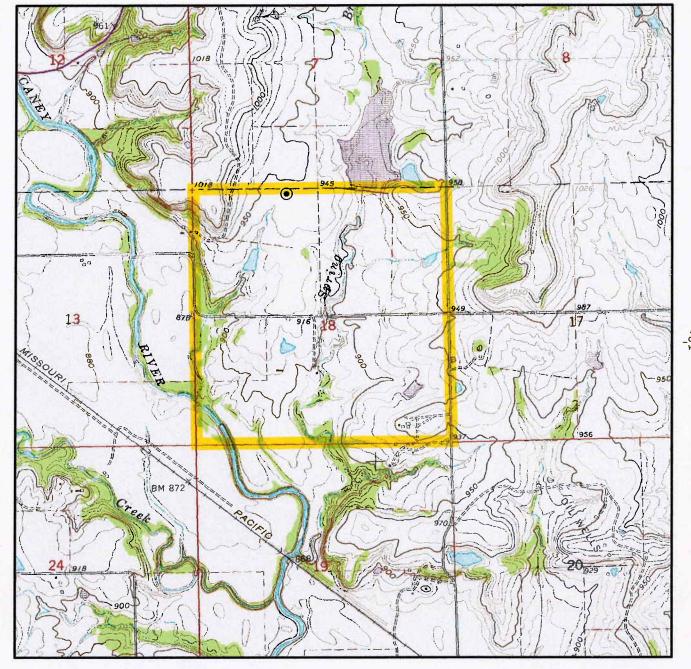
SURVEYORINING Date of Drawing: Nov. 29, 2012 Revision X A Invoice # 192525A Date Staked: Nov. 17, 2012 DATUM: NAD-27 LAT: 37°05'55.7"N LONG: 96'27'51.6"W **CERTIFICATE:** LAT: 37.098799651 I, Michael Blake Brown a Kansas Licensed Land LONG: 96.464335107 Surveyor and an authorized agent of Topographic Land Surveyors, do hereby certify that the above described STATE PLANE COORDINATES: (US Feet) well location was surveyed and staked on the ground KANSAS SOUTH as shown herein. ZONE: ___ X: 2593699

163830

TOPOGRAPHIC LAND SURVEYORS

Surveying and Mapping for the Energy Industry 6709 North Classen Blvd. Oklahoma City, OK 73116 www.topographic.com Telephone Numbers: Local (405) 843-4847 Toll Free (800) 654-3219

LOCATION & ELEVATION VERIFICATION MAP



Sec. 18 Twp. 34S Rng. 9E County CHAUTAUQUA State KS Operator NEMAHA OIL AND GAS Description 85'FNL-1920'FWL Lease MASSEY SWD 1A-18-34-9 946' Gr. at Stake Elevation U.S.G.S. Topographic CEDAR VALE EAST, KS Quadrangle Map

Above Background Data from U.S.G.S. Topographic Map Scale: 1"=2000'

Contour Interval 10'

This location has been very carefully staked on the ground according to the best official survey records, maps and photographs available to us, but its accuracy is not guaranteed. When elevation is shown hereon it is the ground elevation of the location stake.

Review this plat and inform us immediately of any possible discrepancy.



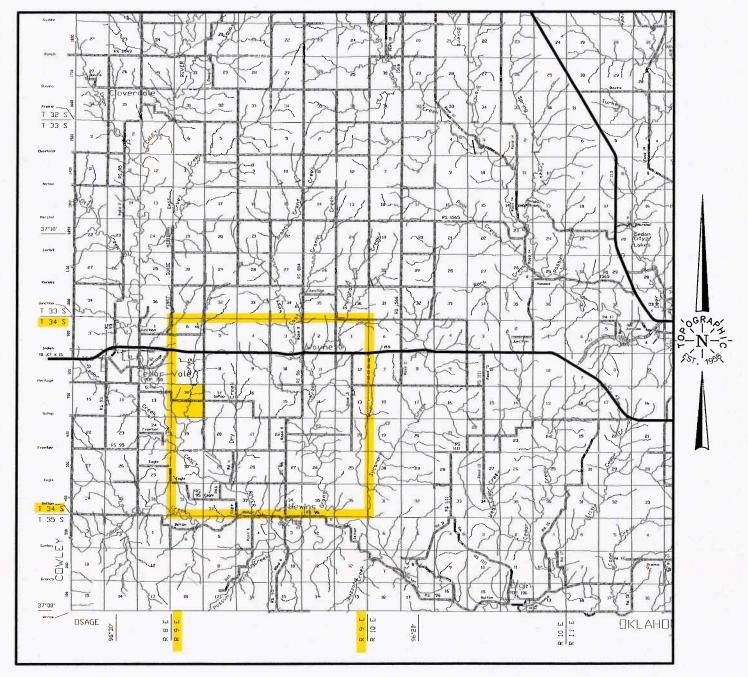
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VICINITY MAP



Scale: 1'' = 3 Miles

Sec	18Twp	34S Rng.	9E
County_	CHAUTAUQUA	State	KS
Operator	r NEMAHA OI	L AND GAS	

