

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, 2011

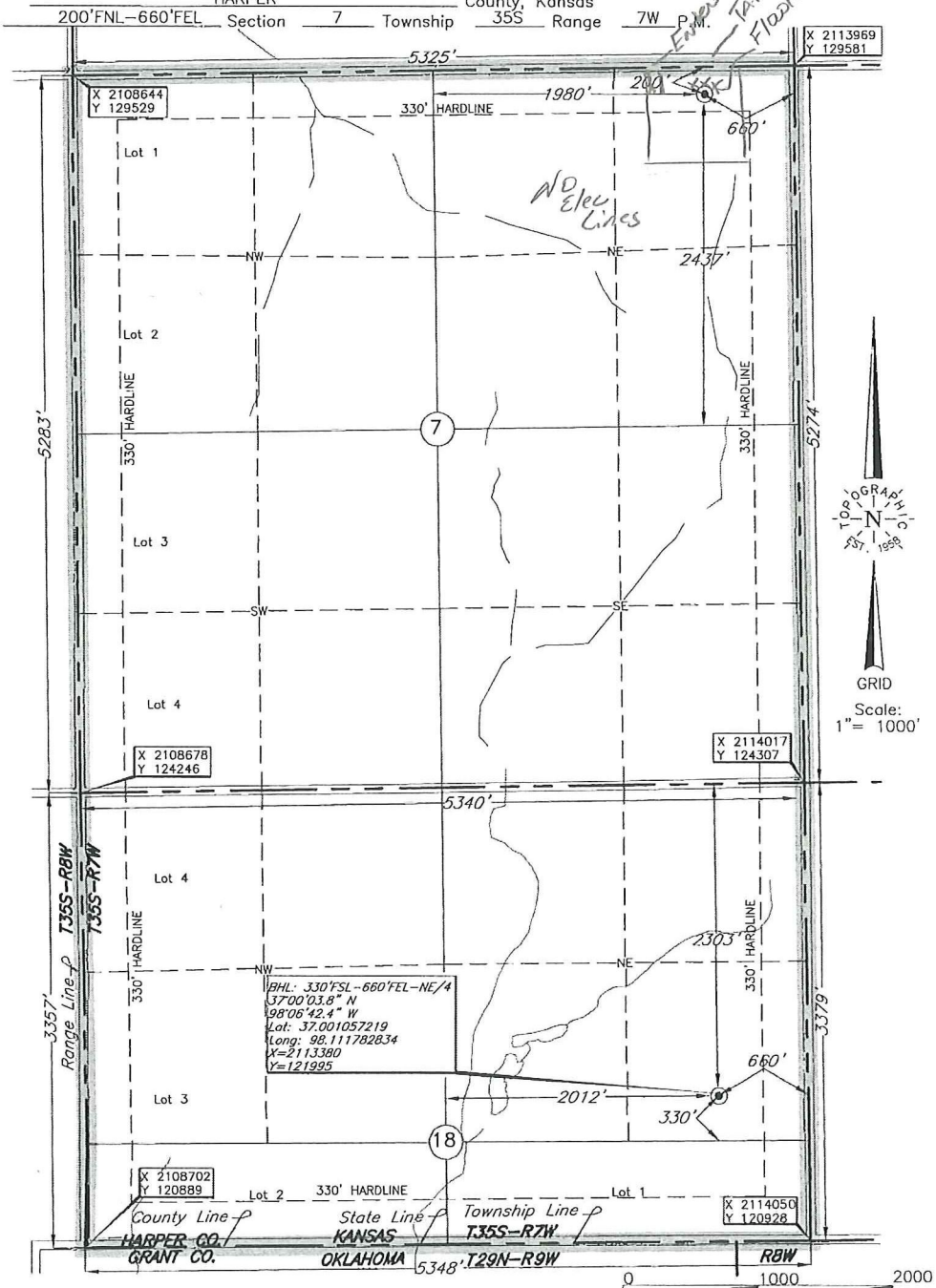
HARPER

County, Kansas

200'FNL-660'FEL Section 7 Township 35S Range 7W P.M.

X 2113969
Y 129581

BOTTOM HOLE INFORMATION PROVIDED
 OPERATOR LISTED
 MEASUREMENTS ARE TAKEN
 FROM POINTS SURVEYED IN THE FIELD.



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

Distances shown in (parenthesis) are calculated based upon the Quarter Section being 2640 feet, and have not been measured.

Operator: SANDRIDGE ENERGY, INC.
 Lease Name: VORNAUF

Well No.: 1-18H
ELEVATION:
 1336' Gr. at Stake

Topography & Vegetation Loc. fell in terraced plowed field

Good Drill Site? Yes No Reference Stakes or Alternate Location Stakes Set None

Best Accessibility to Location From North off county road

Distance & Direction from Hwy Jct or Town From St. Hwy. 132 & Kansas-Oklahoma State Line North of

Manchester, Ok., go 4 miles West, then 1.6 miles North to the NE Cor. of Sec. 7-T35S-R7W

The following information was gathered using a GPS receiver
 Accuracy ±2-3 Meters.

GPS
 DATUM: NAD-27
 LAT: 37°01'16.8"N
 LONG: 98°06'42.9"W
 LAT: 37.021326257
 LONG: 98.111769445
 STATE PLANE
 COORDINATES:
 ZONE: KS SOUTH
 X: 2113311
 Y: 129375

Revision A Date of Drawing: Mar. 1, 2012
 Invoice # 173197 Date Staked: Sep. 23, 2011 LC

CERTIFICATE:

I, T. Wayne Fisch a Registered 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.

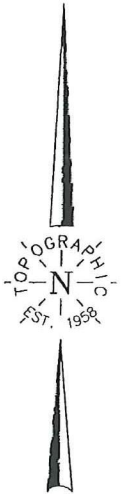
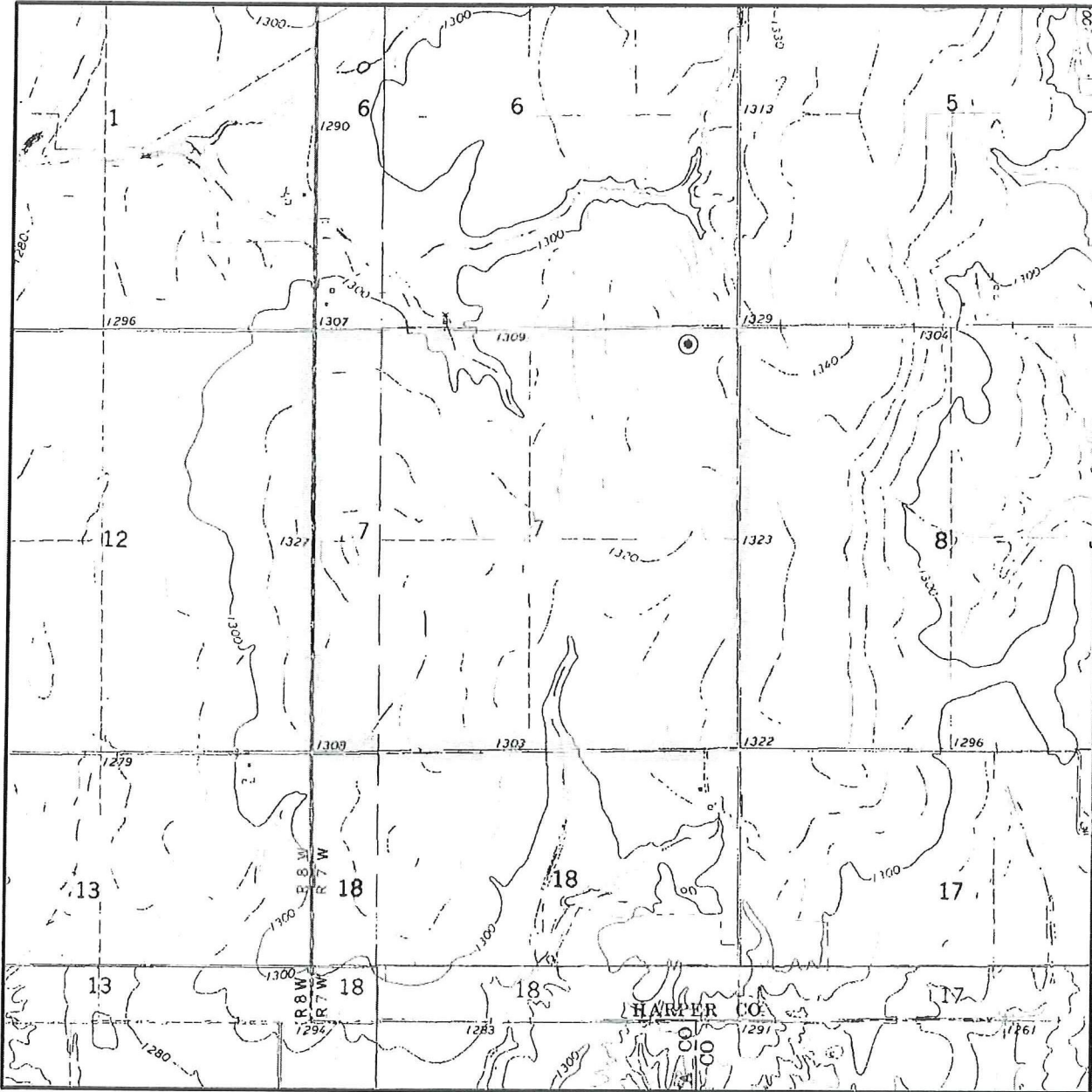
Kansas Reg. No. 1213



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. 7 Twp. 35S Rng. 7W

County HARPER State KS

Operator SANDRIDGE ENERGY, INC.

Description 200'FNL-660'FEL

Lease VORNAUF 1-18H

Elevation 1336' Gr. at Stake

U.S.G.S. Topographic
Quadrangle Map SPRING, KS

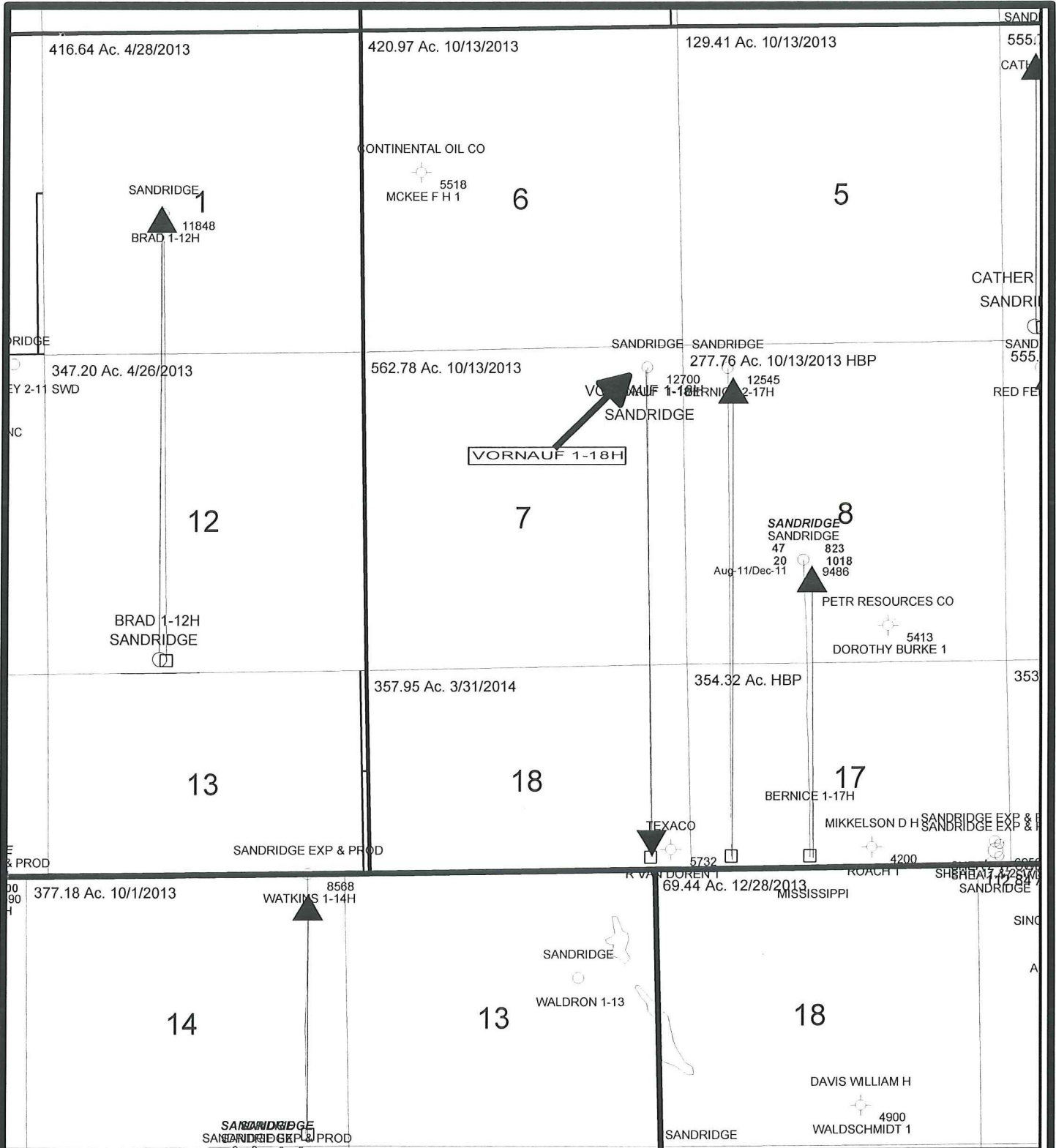
Above Background Data from
U.S.G.S. Topographic Map
Scale: 1"=2000'

Contour Interval 10'

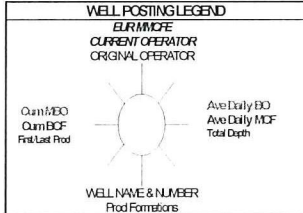
This location has been very carefully staked on the ground according to the best official survey records, maps and photographs available to us, but its accuracy is not guaranteed. When elevation is shown hereon it is the ground elevation of the location stake.
Review this plat and inform us immediately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


TOPOGRAPHIC
SURVEYING • MAPPING • GIS • GPS

Sep. 23, 2011



- PRODUCING FORMATION LEGEND**
- Tonkawa-Virgilian
 - Cottage Grove
 - Oswego
 - Red Fork
 - Inola
 - Morrow
 - Chester
 - Meramec
 - Hunton
 - Pre-Hunton (Viola/Simp/Arbk)

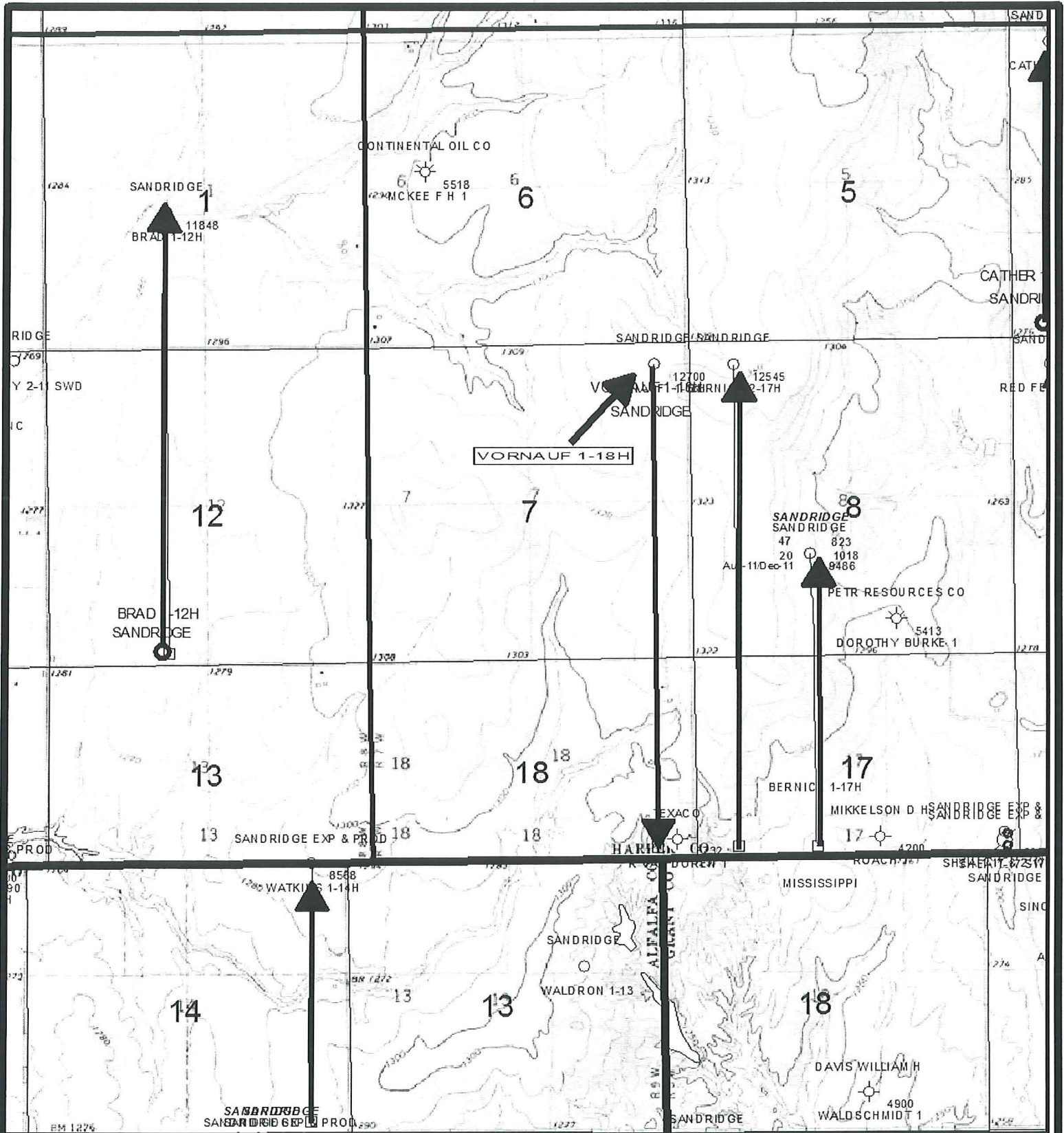




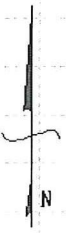
WALDRON
Vornauf 1-18H 18-35S-7W
Harper County, Kansas
Production Map

VornaufProdMap.gmp

Date: 1 March, 2012	Geol: T. Alcorn
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- PRODUCING FORMATION LEGEND**
- Tonkawa-Virgilias
 - Cottage Grove
 - Oswego
 - Red Fork
 - Inola
 - Morrow
 - Chester
 - Maramec
 - Hurston
 - Pre-Hurston (Viola/Elroy/Arb.)



WELL POSTING LEGEND

OWNER
CURRENT OPERATOR
ORIGINAL OPERATOR

○ Cum/EO
○ Cum/EO
○ Full/EO Prod

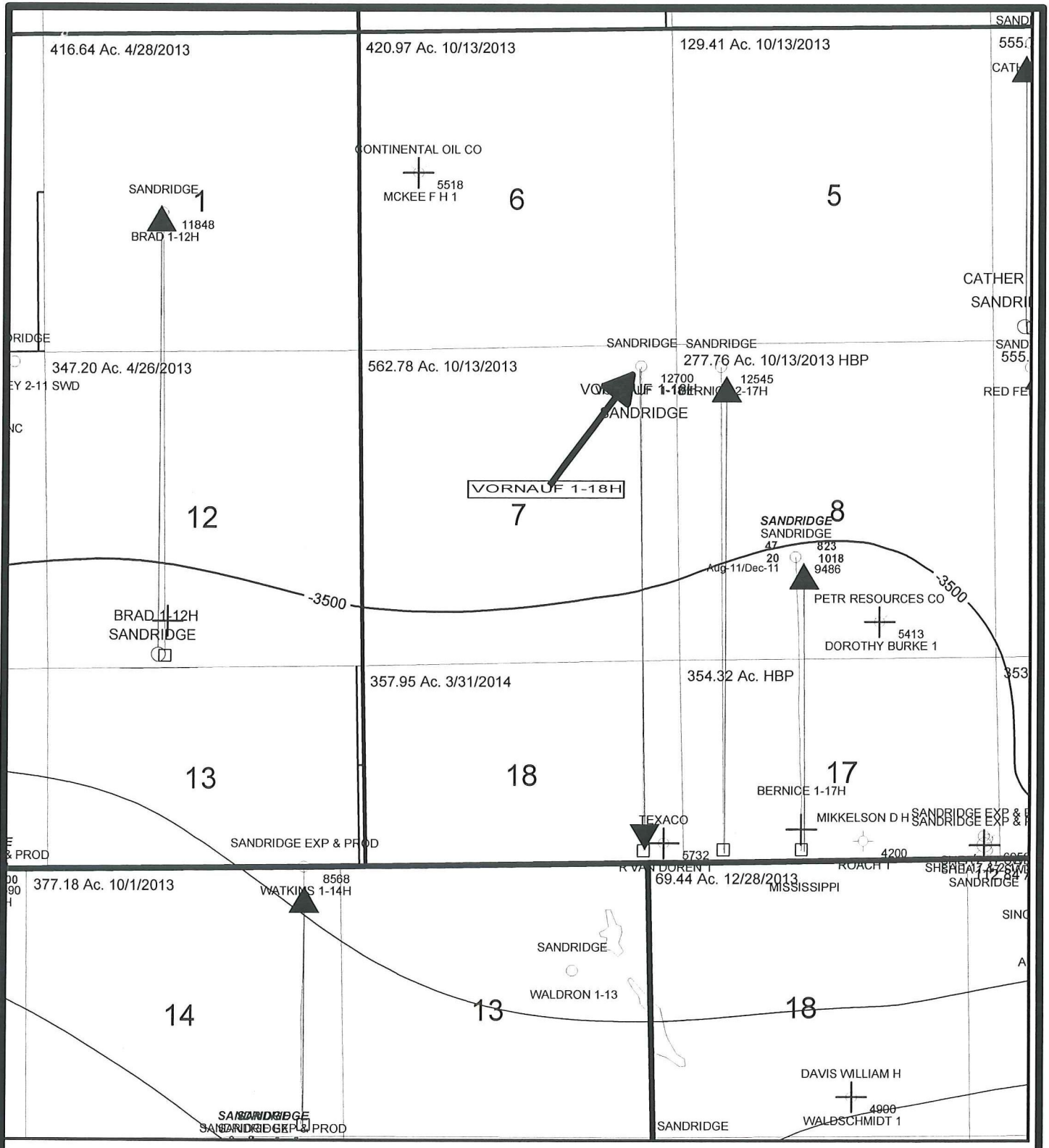
○ Ave Daily EO
○ Ave Daily MCF
○ Top Oil

○ WELL NAME & NUMBER
○ Prod Formations

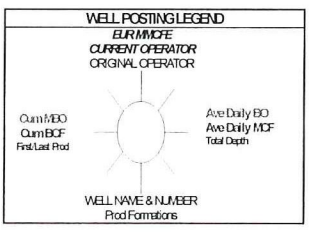
SANDRIDGE
THE POWER OF US

WALDRON
Vornauf 1-18H 18-35S-7W
Harper County, Kansas
Topographic Map
C-110

Date: 1 March, 2012 Geol: T. Alcorn

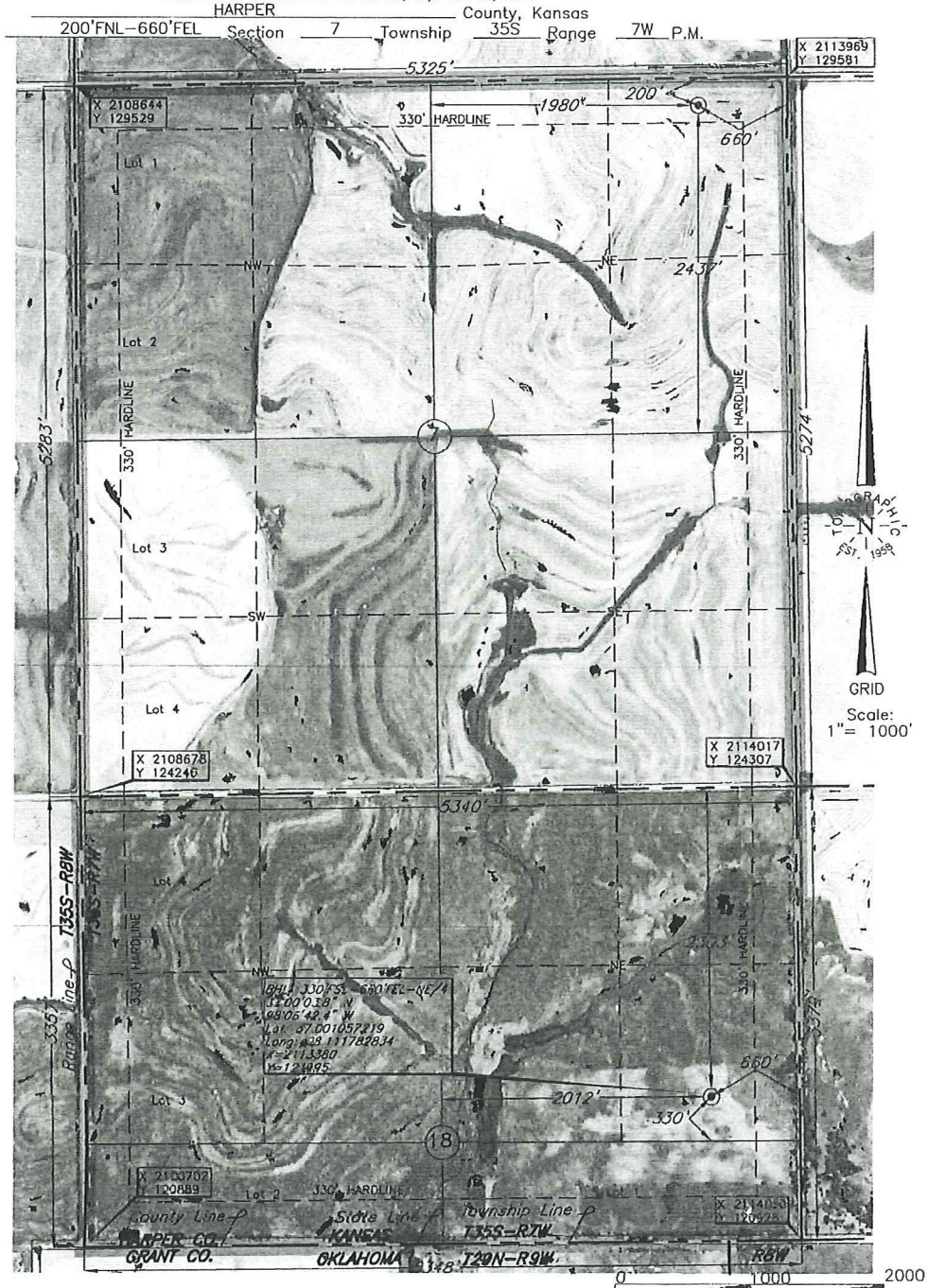


- PRODUCING FORMATION LEGEND**
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WALDRON
Vornauf 1-18H 18-35S-7W
Harper County, Kansas
Subsea Top Mississippi Lime Structure Map
C1 20
Vorna/MssStr.grp

Date: 1 March, 2012 Geol: T. Aloom



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 Lease Name: VORNAUF

Well No.: 1-18H

ELEVATION:
1336' Gr. at Stake

Topography & Vegetation Loc. fell in terraced plowed field

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

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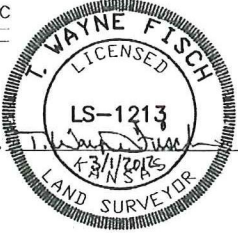
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Kansas Reg. No. 1213



GEOLOGICAL PROGNOSIS

SandRidge Energy, Inc.
 Kansas – Waldron
 Tammy Alcorn - Geologist
 Stacey Bryant - Landman

Target Line	
TVD @ 0' VS	4,895
INC	90.00

Footages	
FNL	200
FSL	-3,025

Total VS	8,105.00
EOC (MD)	5,319.67
EOC (TVD)	4,895.00
KOP	4,005.38
Traverse Length	7,291.12
TD (MD)	12,610.78
TVD @ TD	4,895.00
TVD displacement/ EOC to TD	0.00

Operator
 SandRidge Energy

Well Name and Number
 Vornauf 1-18H

Well Surface Location
 200' FNL & 660' FEL 7-35S-7W

Well Bottom Hole Location
 330' FSL & 660' FEL 18-35S-7W

County and State
 Harper County, Kansas

