(04)

PERMIT # : (b)(9) [redacted]
COMPANY NAME : KWB Oil Property Management, Inc.
WELL #: (b)(9) [redacted]
LOCATION [redacted]

REVIEWER : R. Quance 7/8/93
DATE : July 7, 1993

TECHNICAL REVIEW

Type Injection Well: (SWD) (New) (Active/Inactive)

Injection: (Continuous)

Approximate # days operating/year 365
Rate (B/Mo): Average 10,000 Maximum 10,000
Wellhead Pressure (psi): Average 0 Maximum 0
Fluid: TDS 100,807 Mg/L Sp. Gr. 1.066 Analysis included:(yes)
Source (formation name) Bartlesville

Geologic Data (all references to depths are below land surface)

SW/4 Sec. 18
Base of USDW and how determined: 160 feet (Well # GI-25 Adj. for Elev.)
Injection Interval: Top 1813' ; Bottom 2301' ; Effective Thickness 497'
Formation name Arbuckle Lithology Ls.

Initial Reservoir Pressure 800 psi Date 6-22-93 Fluid Level 83'
Permeability (md) 20 Porosity (%) 10
Confining Zones: Thickness between injection zone & USDW 1650'
Lithology Sand, Shale and Lime
Cumulative shale 1200' : thickest shale zone 470' (300-770')(interval)

Well Data: (all references to depths are below land surface)

Total Depth: 2301'
Surface Elevation: 673' (GL) Plugged Back Depth: 2301'
Date Drilled or to be drilled: June 15,1993 Date Converted: June 24, 1993
Type logs available on (this well) : (Included)
Dual Induction, Compensated Neutron / Density
Test data: (By reference/included) None - Passed MIT June 24, 1993.

CONSTRUCTION:	Size (in)	Depth Interval	Sacks of Cement	Hole Size	Cement Interval	How Determined
Surface Csg.	8 5/8	0-135'	245	12 1/4"	0-135'	Calc.& Circ.
Intermediate						
Long String	5 1/2	0-1813'	250	7 7/8"	0-1813'	Calc.& Circ.
Liner						
Tubing	2 3/8	0-1802'	Packer Type & Depth Arrow Set Down			

Type Cement	= ft^3/sx	X # of sx	total ft^3 of cmt	X (from tables) lin ft/ft^3	= Lin ft of cement
Flocele - CaCl.	1.18	245	289	2.42	700
Prem. Lite & Poz.	1.29	250	322	5.77	1860

AOR (1/4 Mile Radius)
Map submitted: (yes) Tabulation of Wells Submitted: (yes)
Faults Located: (no) [none present]
Number of wells in the AOR:
Total 15 [Abandon____; Production____; Injection: SWD 1 EOR___]
Number of wells in the Zone of Endangering Influence: Total None
Number of wells requiring corrective action: Total None - No wells within 1/2 mile radius penetrate Arbuckle, according to OW/OP tabulation.
Radius of Endangering Influence_____ft at _____B/D injection rate

Maximum Injection Pressure Calculation
Pm = [Fracture Gradient - (0.433 x Sp.Gr.)] X Depth
Pm = [0.75 - (0.433 x _____)] X _____ = 0 (psi)

Technical Review (Passed)

Corrective Action Code:
None