

ORIGINAL

STATE CORPORATION COMMISSION OF KANSAS  
OIL & GAS CONSERVATION DIVISION  
WELL COMPLETION FORM  
ACD-1 WELL HISTORY  
DESCRIPTION OF WELL AND LEASE

API NO. 15- 065-22,6990001

County Graham  
~~NW~~ ~~SW~~ ~~SE~~ ~~NE~~ - SE - SE - SW Sec. 9 Twp. 10s Rge. 24 X W

Operator: License # 03655

523 Feet from (S) (circle one) Line of Section

Name: STAAB ENERGY & LEASING

2117 Feet from (E) (circle one) Line of Section

Address 2514 Haney Drive

Footages Calculated from Nearest Outside Section Corner:  
NE, SE, NW or (SW) (circle one)

Hays, Kansas 67601

Lease Name Anton Herman Well # 4

City/State/Zip \_\_\_\_\_

Field Name Bryan

Purchaser: NCRA

INJECTION  
Producing Formation LKC

Operator Contact Person: Norman G. Staab

Elevation: Ground 2480 XB 2485

Phone (913) 628-1326

Total Depth 4102 PBTB 4082

Contractor: Name: SHIELD DRILLING CO., INC.

Amount of Surface Pipe Set and Cemented at 221 Feet

License: 5665

Multiple Stage Cementing Collar Used? X Yes \_\_\_\_\_ No \_\_\_\_\_

Wellsite Geologist: Todd Morgenstern

If yes, show depth set 2168 Feet

Designate Type of Completion  
\_\_\_\_ New Well \_\_\_\_ Re-Entry X Workover

If Alternate II completion, cement circulated from 224'

\_\_\_\_ Oil \_\_\_\_ SWD \_\_\_\_ SIOW \_\_\_\_ Temp. Abd.  
\_\_\_\_ Gas X ENHR \_\_\_\_ SIGW  
\_\_\_\_ Dry \_\_\_\_ Other (Core, MSW, Expl., Cathodic, etc)

feet depth to Surface w/ 150 60/40 Poz <sup>2% Gel</sup> <sub>3% cc</sub>

If Workover/Re-Entry: old well info as follows:

Drilling Fluid Management Plan REWORK 2/11-7-96  
(Date must be collected from the Reserve Pit)

Operator: Same

Chloride content 68,000 ppm Fluid volume 310 bbls

Well Name: Herman # 4

Dewatering method used Air Dry Evaporation

Comp. Date 09-04-96 Old Total Depth 4,102

Location of fluid disposal if hauled offsite: \_\_\_\_\_

\_\_\_\_ Deepening \_\_\_\_ Re-perf. X Conv. to (In) SWD  
\_\_\_\_ Plug Back \_\_\_\_\_ PBTB  
\_\_\_\_ Commingled \_\_\_\_\_ Docket No. \_\_\_\_\_  
\_\_\_\_ Dual Completion \_\_\_\_\_ Docket No. \_\_\_\_\_  
X Other (SWD or (In)) Docket No. E27289

Operator Name \_\_\_\_\_

9-1-96

9-4-96

Lease Name \_\_\_\_\_ License No. \_\_\_\_\_

Date of START 9-1-96 Date Reached TD \_\_\_\_\_ Completion Date OF WORKOVER 9-4-96

Quarter \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S Rng. \_\_\_\_\_ E/W \_\_\_\_\_

County \_\_\_\_\_ Docket No. \_\_\_\_\_

All requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Signature Norman G. Staab

K.C.C. OFFICE USE ONLY  
F \_\_\_\_\_ Letter of Confidentiality Attached  
C \_\_\_\_\_ Wireline Log Received  
C \_\_\_\_\_ Geologist Report Received  
Distribution  
X KCC \_\_\_\_\_ SWD/Rep \_\_\_\_\_ NEPA  
\_\_\_\_\_ KGS \_\_\_\_\_ Plug \_\_\_\_\_ Other \_\_\_\_\_  
(Specify)

Title Owner Date 09-20-96

Subscribed and sworn to before me this 20th day of September, 19 96.

Notary Public Cacilie M. Staab  
NOTARY PUBLIC - State of Kansas  
CACILIE M. STAAB  
My Appt. Exp. 10-26-98

Date Commission Expires October 26, 1998

Operator Name STAAB ENERGY & LEASING

Lease Name ANTON HERMAN

Well # 4 Inj

Sec. 9 Twp. 10 Rge. 24

East  
 West

County Graham

INSTRUCTIONS: Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests of interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface during test. Attach extra sheet if more space is needed. Attach copy of log.

Drill Stem Tests Taken  Yes  No  
(Attach Additional Sheets.)  
See enclosed Geological Report  
Samples Sent to Geological Survey  Yes  No  
Cores Taken  Yes  No  
Electric Log Run  Yes  No  
(Submit Copy.)

Name	Formation (Top), Depth and Datum		Sample
	Top	Datum	
Anhydrite	2133	+352	
Anhydrite Base	2168	+317	
Topeka	3570	-1085	
Heebner	3785	-1300	
Toronto	3808	-1323	
Lansing	3823	-1338	
Base KC	4053	-1568	
Rotary Depth	4100	-1615	
Log Total Depth	4102	-1617	

CASING RECORD

New Surface - Used 5-1/2"  
 New  Used

Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs./Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12-1/4"	8-5/8"	20#	221	60/40 Poz	150	2% Gel 3% Ca
Prod. 2-Stage	7-7/8"	5-1/2"	14#	4096	ASC	160	500 Gal WFI
Prod. Top Stage	7-7/8"	5-1/2"	14#	2168	50/50 Poz	450	6% Gel FloS

ADDITIONAL CEMENTING/SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
Perforate				
Protect Casing				
Plug Back TD				
Plug Off Zone				

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record (Amount and Kind of Material Used)	Depth
2	16 Shots S.C.C'S LKC	5,000 N-Emulsion Acid	4020-28
		500 Mud Clean Up Acid	

TUBING RECORD Size Set At Packer At Liner Run  Yes  No  
2-3/8" OD Stl Tbg Seal-Tite 3,983.75' 3,988.35'

Date of First, Resumed Production, SUD or Inj. Oct. 1, 1996 Injection Producing Method  Flowing  Pumping  Gas Lift  Other (Explain) Injection  
Estimated Production Per 24 Hours Oil Bbls. Gas Hcf Water Bbls. Gas-Oil Ratio Gravit. Inject Initial 100 to eventual 300 BWPD

Disposition of Gas:  Vented  Sold  Used on Lease (If vented, submit ACO-18.)  
METHOD OF COMPLETION:  Open Hole  Perf.  Dually Comp.  Conningled 4020-4028  
 Other (Specify) Waterflood - Injection Well W/ Packer