

STATE OF KANSAS  
 STATE CORPORATION COMMISSION  
 200 Colorado Derby Building  
 Wichita, Kansas 67202

WELL PLUGGING RECORD  
 K.A.R.-82-3-117

API NUMBER 15-163-00888-00-00

LEASE NAME Nettie

WELL NUMBER 3-3

       Ft. from S Section Line

       Ft. from E Section Line

SEC. 33 TWP. 9S RGE. 17W (Exor (W))

COUNTY Rooks

Date Well Completed       

Plugging Commenced 8-9-90

Plugging Completed 8-28-90

TYPE OR PRINT  
 NOTICE: Fill out completely  
 and return to Cons. Div.  
 office within 30 days.

LEASE OPERATOR Phillips Petroleum Company

ADDRESS Rt #3 Box 20-A Great Bend, KS. 67530

PHONE# (316) 793-8421 OPERATORS LICENSE NO. 5229

Character of Well Oil

(Oil, Gas, D&A, SWD, Input, Water Supply Well)

The plugging proposal was approved on        (date)  
 by        (KCC District Agent's Name).

Is ACO-1 filed?        If not, is well log attached?       

Producing Formation        Depth to Top        Bottom        T.D. 3543'

Show depth and thickness of all water, oil and gas formations.

OIL, GAS OR WATER RECORDS

CASING RECORD

Formation	Content	From	To	Size	Put in	Pulled out
				8 5/8"	1075'	none
				5 1/2"	3538'	1452'

Describe in detail the manner in which the well was plugged, indicating where the mud fluid was placed and the method or methods used in introducing it into the hole. If cement or other plugs were used, state the character of same and depth placed, from        feet to        feet each set.  
Sanded bottom to 3190' ran 5 sacks cement. Shot pipe @2618'.  
Down 8 5/8" casing 600# MAX pressure. Mixed 5 sacks hulls with  
300 sacks cement and shut in @400#, 300 sacks 65/35 10% gel.

(If additional description is necessary, use BACK of this form.)

Name of Plugging Contractor KELSO CASING PULLING, INC. License No. 6050

Address P.O. Box 347 Chase, Kansas 67524

NAME OF PARTY RESPONSIBLE FOR PLUGGING FEES: Phillips Petroleum Company 9-18-90

STATE OF Kansas COUNTY OF Rice, ss.

R. Darrell Kelso (Employee of Operator) or (Operator) of

above-described well, being first duly sworn on oath, says: That I have knowledge of the facts, statements, and matters herein contained and the log of the above-described well as filed that the same are true and correct, so help me God.

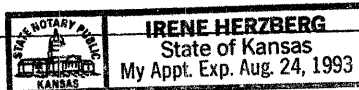
(Signature) *R. Darrell Kelso*

(Address) P.O. Box 347 Chase, KS. 67524

SUBSCRIBED AND SWORN TO before me this 13 day of Sept, 19 90

*Irene Herzberg*  
 Notary Public

My Commission Expires:       



Date: May 9, 1990

Number: 00000002

## P&amp;A Procedure for Nettie Unit #3-03

Nettie Unit No. 3-03	Procedure # 41-90
NE NW SW Sec. 33-T9S-R17W	Charge Code 80-7159
Rooks County, Kansas	Lease Code 350125
Nettie Field, Arbuckle, LKC Formation	W.I. 31.65017 %
	R.I. 27.52178 %

Elevation: 2100' GL, 2105' KB

Casings: 8 5/8" set @ 1075' w/ 550 sx cement.

5 1/2", 15.5#, set @ 3538' w/ 75 sx cement.

Perforations: 3247-50', 3282-85', 3297-3301', 3329-33',  
3414-18', 3426-30', 3448-52', 3469'73'. (LKC)

Open Hole: 3538' - 3543' (Arbuckle)

TD: 3543'

Note: Csg. leak @ 3050 squeezed off w/ 100 sx cement.

Other casing leaks present below 1900' in well prior to shut down.

Objective: Plug and Abandon shut down well by filling casing with  
65/35 pozmix-10% gel w/ 1/4 lb/sk flocele and 5 sx hulls.

## Procedure:

1. Notify KCC representative 24 hours prior to beginning plugging operations (Hays office 628-1200).
2. Determine depth of well with wireline to verify that cement will reach the bottom of the hole. If depths below 3538' are not reached, notify office for further instructions.
3. Move in and rig up casing perforators. Perforate 5 1/2" csg @ 1375'. Rig down move out perforators. Move in and rig up Well Service Unit and Cementing Company. Go in hole with work string tubing to 1400' to get below anhydrite. Pump 200 sx of 65/35 pozmix-10% gel w/ 1/4 lb/sk flocele and 5 sx hulls through tubing to fill hole below 1400'. Pull tbg to 1200' and pump 250 sx cement to fill casing and annulus. Pull tubing, swedge in 5 1/2" casing, and pump in 50 sx cement. Shut in under pressure.
4. Rig up to 5 1/2" - 8 5/8" annulus and pump into, if possible, with 50 sx cement and shut in under pressure.

(Total calc. 5 1/2" csg volume - 485 cu. ft., 20% excess, 1.7 cu. ft/sack yield, slurry density 13 lb/gal, water requirement - 9.13 gal/sk of mix, gives ~350 sx of 65/35 pozmix-10% gel w/ 1/4 lb/sk flocele to fill casing.)

Water requirement for 550 sx cement @ 4.6 sx/bbl = 119 bbls fresh water.

5. Check fillup in casings and outside of 8 5/8" csg. If necessary, fill to surface w/ redimix.
6. Cut off casing 3' below ground level and weld on steel plate marked with "PPCo, well name, and date plugged."
7. Restore location.

FORMATION LOG

NETTIE UNIT 3-3

San Diego Corporation #3 Schrandt  
 CN $\frac{1}{2}$  N $\frac{1}{2}$  SW; 33-9S-17W  
 Rooks County, Kansas  
 Elevation: 2105 Kelly Bushing

8 5/8" Casing: 1075  
 5 1/2" Casing: 3538 (E.L.)  
 Comm: 9-28-55  
 Comp:

Note: All measurements are taken from the top of the Kelly Bushing.

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
0 - 100	Clay and sand	Drillers log 0-3100'
100 - 450	Shale	
450 - 670	Shale and shells	
670 - 770	Shale and sand streaks	
770 - 850	Sand	
850 - 935	Shale and shells	
935 - 1060	Sand	
1060 - 1075	Shale	
1075 - 1363	Red bed	
1363 - 1403	Anhydrite	Stone Corral, electric log top
1403 - 1620	Shale and shells	
1620 - 1840	Shale	
1840 - 2495	Limastone	
2495 - 2825	Shale and limestone	
2825 - 3100	Limestone	
3100 - 13	Limestone, white, subcrystalline chalky, some dolomitic	Sample log 3100' to total depth
3113 - 21	Limestone, buff, finely crystalline, oolitic; good honeycomb porosity	No show
3121 - 25	Limestone, tan, dense	
3125 - 31	Shale, gray to dark gray	
3131 - 38	Limestone, tan, dense	
3138 - 41	Shale, brown-black to gray-black, soft, fissile	
3141 - 46	Limestone, tan, dense	
3146 - 53	Limestone, tan to buff, finely sucrose, dolomitic, oolitic; spotted oolitic and fracture porosity	Spotted fair dark stain
3153 - 67	Limestone, gray, subcrystalline to tan, dense, lithographic, streaks gray and brown shale	
3167 - 76	Limestone, gray-blue to tan, subcrystalline to finely sucrose; spotted poorly developed vugs	Spotted stain

## -2- Formation Log: San Diego Corp. #3 Schrandt.

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
3176 - 3202	Limestone, tan, subcrystalline to gray-blue, finely crystalline; much tan to gray, subvitreous chert; streaks shale, as above	
3202 - 06	Shale, brown-black; fissile	Haebner
3206 - 10	Limestone, tan, subcrystalline cherty; chert, blue-gray, vitreous semi-translucent	Leavenworth
3210 - 19	Shale, green to gray-green to brown	Snyderville
3219 - 33	Limestone, cream to white, subcrystalline, fossiliferous; streaks gray shale 3227-30	Toronto
3233 - 43	Shale, gray to brown; trace gray, very silty, micaceous shale	Douglas
3243 - 71	Limestone, cream to white, subcrystalline; trace, milky, vitreous, translucent chert; streaks brown shale	Top Lansing 3243
3271 - 77	Shale, brown and gray	
3277 - 86	Limestone, cream to white, subcrystalline, crypto-fossiliferous; chert, white, vitreous, translucent	
3286 - 97	Shale, brown; streak limestone 3288-91	
3297 - 3300	Limestone, cream, subcrystalline, fossiliferous; trace vugular porosity	Trace light stain
3300 - 14	Limestone, cream to buff, subcrystalline, streaks brown shale	
3314 - 31	Mostly brown shale; few thin limestone streaks	
3331 - 37	Limestone, tan, very finely sucrose, oolitic and fossiliferous spotted oolitic and vugular porosity 3331-33; chert, white to cream, vitreous, semi-translucent	Slight show dark asphaltic oil
3337 - 39	Shale, brown and gray	
3339 - 49	Limestone, tan to gray, finely sucrose, oolitic, very good oolitic porosity 3341-44, spotted oolitic porosity 3344-49	Good odor, fair show free oil, good stain; D.S.T. #1

## -3- Formation Log: San Diego Corp. #3 Schrandt.

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
3349 - 3361	Limestone, cream to gray, sub-crystalline, chalky	
3361 - 65	Shale, as above	
3365 - 71	Limestone, as above	
3371 - 73	Shale, as above	
3373 - 75	Limestone, as above	
3375 - 84	Shale, as above	
3384 - 91	Limestone, gray to tan, sub-crystalline to finely crystalline, dolomitic, fossiliferous; chert brown and white, subvitreous, figured	
3391 - 93	Limestone, light gray, very finely sucrose, oolitic; spotted oolitic porosity	No show
3393 - 3401	Limestone, cherty, as above; much cream to gray, subvitreous, opaque chert; streak gray and brown shale 3398-3400	
3401 - 07	Shale, brown to gray-green	
3407 - 12	Limestone, cream to tan, sub-crystalline to dense; much chert, as above	
3412 - 20	Limestone, light tan to gray, finely sucrose, oolitic; spotted oolitic porosity 3412-14 and 3417-20; shaly 3414-17	Spotted stain D.S.T. #2
3420 - 30	Limestone, cream to light gray, subcrystalline; chert, gray, opaque; streak gray-green and brown shale 3422-24	
3430 - 34	Limestone, tan to brown, sub-crystalline; oolitic; fair vugular and fine oolitic porosity	Good show free oil, good odor; D.S.T. #2
3434 - 37	Limestone, light gray, sub-crystalline to dense	
3437 - 49	Shale, as above	
3449 - 60	Limestone, tan to gray, medium crystalline to dense	
3460 - 69	Shale, as above	
3469 - 81	Limestone, as above	Base Kansas City 3481
3481 - 93	Shale, gray-green, silty and brown to maroon	Top Marmaton 3481
3493 - 97	Limestone, tan, subcrystalline, fossiliferous, dolomitic, some gray, finely crystalline dolomite; chert salmon to gray, subvitreous, semi-translucent, figured	

## -4- Formation Log: San Diego Corp. #3 Schrandt.

<u>Depth</u>	<u>Formation Description</u>	<u>Remarks</u>
3497 - 3501	Shale, as above	
3501 - 12	Limestone, white, subcrystalline and dolomite, brown, finely crystalline; fair pin-point porosity 3505-07	Very slight show free oil, no odor
3512 - 21	Limestone, buff to red, finely crystalline, some chert, as above	
3521 - 39	Mostly shale, pale green to bright, green, sandy; thin streaks dolomite, yellow-tan, finely crystalline to medium crystalline, sandy; some poorly sorted shaly sand	Top Simpson 3521
3538 - 42	Dolomite, tan to gray, medium to finely crystalline, rhombohedral; fair vugular porosity 3540-42	Top Arbuckle 3538; Good show free oil, slight odor
3542 - 44	Dolomite, tan to cream, finely crystalline to subcrystalline	
3544	Rotary Total Depth	

5 1/2" casing set at 3538, electric log measurements (3540 drilling measurements).

Drill Stem Test Data: The following drill stem tests were run on the #3 Schrandt. Both tests were in the Lansing-Kansas City.

D.S.T. #1: 3340-50; open 1 hour - weak blow throughout test, flushed tool at 30 minutes. Blow remained same after flushing.

Recovered 70' oily smelling watery mud  
Initial flow pressure: 20 P.S.I.  
Final flow pressure: 50 P.S.I.  
Bottom hole pressure: 350 P.S.I. (68 minutes).

D.S.T. #2: 3410-35; open 45 minutes - weak blow for 12 minutes, flushed tool and again had weak blow for 7 minutes.

Recovered 35' slightly oil cut mud  
Initial flow pressure: 30 P.S.I.  
Final flow pressure: 50 P.S.I.  
Bottom hole pressure: 370 P.S.I.

Samples examined and log compiled by

Willis Jack Magathan