



Operator Name PV. Properties Lease Name Spangenberg Well# 1 SEC 10 TWP. 22 AGE. 12  East  West

**WELL LOG**

**INSTRUCTIONS:** Show important tops and base of formations penetrated. Detail all cores. Report all drill stem tests giving 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  
 Samples Sent to Geological Survey  Yes  No  
 Cores Taken  Yes  No

Formation Description  
 Log  Sample

DST #1 3342-3390  
 45-45-45-45  
 Blow: gts in 1 min., gauged 1,600,000  
 CFG to 2,100,000 CFG on 1st open and  
 2,600,000 to 3,000,000 CFG on 2nd open  
 Recovery: 1' gassy mud  
 IFP: 598-572 FFP: 590-590  
 ISIP: 1156 FSIP: 1156  
DST #2 3419-3470  
 45-45-45-45  
 Blow: strong blow off bottom  
 Recovery: 2200' gip, 180' ocgm, 240'  
 socgmw, 480' water  
 IFP: 83-240 FFP: 375-804  
 ISIP: 807 FSIP: 804  
DST #3 3481-3515  
 45-45-45-45  
 Blow: strong, off bottom of bucket  
 Recovery: 1900' sulfur water  
 IFP: 273-832 FFP: 832-832  
 ISIP: 832 FSIP: 832  
DST #4 3592-3661  
 45-45-45-45  
 Blow: weak blow  
 Recovery: 40' mud  
 IFP: 39-42 FFP: 44-46  
 ISIP: 74 FSIP: 69  
DST #5 3659-3664

Name	Top	Bottom
Anhy	647	675
Heebner	3143	
Toronto	3159	
Douglas	3178	
Br. Lime	3277	
Lansing	3295	
Viola	3548	
Simpson Shale	3598	
Arbuckle	3657	
RTD	3664	

DST #5 Con't.  
 45-45-45-45  
 Blow: 1" bldg to 3"  
 Rec: 110' sulfur water  
 IFP: 35-46 FFP: 48-51  
 ISIP: 862 FSIP: 852

**CASING RECORD**  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		8.5/8"	23#	250'	50/50poz	225	2% gel, 3% cc

**PERFORATION RECORD**

**Acid, Fracture, Shot, Cement Squeeze Record**

shots per foot	specify footage of each interval perforated	(amount and kind of material used)	Depth

**TUBING RECORD**

size set at packer at Liner Run  Yes  No

Date of First Production	Producing method <input type="checkbox"/> flowing <input type="checkbox"/> pumping <input type="checkbox"/> gas lift <input type="checkbox"/> Other (explain)				
Estimated Production Per 24 Hours	Oil	Gas	Water	Gas-Oil Ratio	Gravily
	Bbls	MCF	Bbls	CFPB	

**METHOD OF COMPLETION**

**PRODUCTION INTERVAL**

Disposition of gas:  vented  sold  used on lease  
 open hole  perforation  other (specify) .....  
 Dually Completed.  
 Commingled

DRILLER'S WELL LOG

DATE COMMENCED: 1-8-85  
DATE COMPLETED: 1-16-85

PV Properties, Inc.  
SPANGENBERG #1  
165' S of NE SW NW  
Sec. 10-22-12  
Stafford County, Ks.

ELEVATION: 1864 K.B.

0 - 145' Surface, Sand  
145 - 647' Red Bed  
647 - 675' Anhydrite  
675 - 1745' Shale  
1745 - 3664' Lime & Shale  
3664' R.T.D.

FORMATION DATA

Anhy.	647-675	
Heebner	3143	(-1279)
Toronto	3159	(-1295)
Douglas	3178	(-1314)
Brn. Lime	3277	(-1413)
Lansing	3295	(-1431)
Viola	3548	(-1684)
Simp. Shale	3598	(-1734)
Arbuckle	3657	(-1793)

Surface Pipe: Set new 8-5/8"  
23# pipe @ 250' W/225 sx. 50/50  
Pozmix 2% Gel 3% CC

## A F F I D A V I T

STATE OF KANSAS  
COUNTY OF BARTON) ss

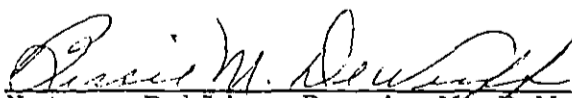
Don Popp of lawful age, does swear and state that the facts and statements herein are true and correct to the best of his knowledge.

  
\_\_\_\_\_  
Don Popp

Subscribed and sworn to before me this 22nd day of January 1985.

My Comm. Expires:

5-20-85

  
\_\_\_\_\_  
Notary Public: Bessie M. DeWerff



RECEIVED  
STATE CORPORATION COMMISSION

JAN 29 1985

CONSERVATION DIVISION  
Wichita, Kansas