RESUME

Operator: Union Pacific Resources Company

Well Name and Number: #1 Schaeffer Trust 13-35

Prospect: Arrowhead Development

Location: 700' FWL, 1980' FSL, Section 35, T-16S, R-46W

County and State: Cheyenne County, Colorado

Elevation: GL: 4093', KB: 4105'

Spud Date: August 27, 1995

Completion Date: September 4, 1995

Hole Sizes: 12 1/4" 0'-520', 7 7/8" 520'-5240'

Casing Data: 8 5/8" set at 514'

Logging Data: DIL/CNL/LDT/BHC/CAL/GR; Schlumberger

Development Geologist: Mark P. Germinario

Drilling Foreman: Jack Parrott

Wellsite Geologist: Richard O'Donnell

Contractor: Cheyenne Drilling, Rig # 6

Tool Pusher: Phil Loyd

Mud Type: Chemical

Mud Company: Jordan Drilling Fluids

Drilling Days: 8

Rotating Hours: 141 1/4

Bottom Formation: Spergen

Status: Dry & Abandoned

FORMATION TOPS AND CORRELATION

	UPRC #1 Schaeffer 13-35 35-16S-46W Cheyenne County, Co. KB 4105	UPRC #2 No Navajo 34-34 34-16S-46W Cheyenne County, Co. KB 4095
DAKOTA	1192(+2913)	1160(+2935)
CHEYENNE	1550(+2555)	1506(+2589)
BLAINE SALT	2091(+2014)	2050(+2045)
STONE CORRAL	2540(+1565)	2514(+1581)
NEVA	3302(+803)	3277(+818)
FORAKER	3378(+727)	3351(+744)
SHAWNEE	3616(+489)	3591(+504)
HEEBNER	3883(+222)	3848(+247)
TORONTO	3909(+196)	3876(+221)
LANSING	3934(+171)	3903(+192)
MARMATON	4305(-200)	4278(-183)
CHEROKEE	4477(-372)	4444(-349)
ATOKA	4629(-524)	4599(-504)
MORROW	4793(-688)	4762(-667)
V5 INTERVAL	4864(-759)	4838(-743)
V5 SANDSTONE	Not Deposited	4858(-763)
V7 INTERVAL	4927(-822)	4898(-803)
V7 SANDSTONE	Not Deposited	Not Deposited
LOWER MORROW LIMESTONE	4988(-883)	4961(-866)
SPERGEN	5141(-1036)	5107(-1012)
TOTAL DEPTH	5230	5185

BIT RECORD

BIT #	SIZE	TYPE	IN	OUT	FOOTAGE	HOURS	JETS
1	12 1/4"	S33F	0'	520'	520'	4	15-15-15
2	7 7/8"	F-17	520'	2927'	2407'	30 1/2	15-12-15
3	7 7/8"	ATJ-11C	2927'	5240'	2313'	106 3/4	15-12-15

SURVEYS

103 1/4	403 1/4	1677 1/2	3515 1	5240 1
224 1/4	520 1/2	2172 1	4015 1	
314 1/2	1019 3/4	2927 1 1/2	4547 1 1/4	

DAILY CHRONOLOGY

DAYS OVER HOLE	DATE	8AM CDT DEPTH	24 HOUR FOOTAGE	DAILY ACTIVITY
1	August 27	0'	0'	MIRU, spud at 14.30, drlg, prep for & run csg
2	August 28	520'	520'	RU & cem csg, WOC, NU, drlg at 08.15, LC, drlg
3	August 29	2465'	1945'	Drlg, LC, drlg, TFB
4	August 30	3175'	710'	Drlg, LC, drlg, displace & mud up
5	August 31	3800'	625'	Drlg
6	September 1	4295'	495'	Drlg
7	September 2	4702'	407'	Drlg
8	September 3	5120'	418'	Drlg, prep for & run logs
9	September 4	5240'	120'	Logging, LD DP & DC, plug

LOST CIRCULATION INTERVALS

Depth Of Occurrence	Barrels Lost	Prior LCM lb/gal	After LCM lb/gal
1333	100	NA	NA
2820	100	0	4
3440	100	0	4

MUD REPORTS

Date	8-30	8-31	9-1	9-2	9-3
Depth	3480	3766	4202	4575	5016
Weight	8.6	8.6	9.1	8.8	9.0
Funnel Viscosity	36	45	44	46	52
Plastic Viscosity	8	15	15	14	18
Yield Point	6	10	15	14	12
Gel Strengths	2/9	4/12	10/20	6/14	5/12
Water Loss	22.2	20.1	32.7	12.2	9.6
Filter Cake	2/32	2/32	2/32	2/32	2/32
Solids	1.8	2.2	5.4	3	4.2
Sand	tr	tr	.25	.15	tr
pH	9.5	9.5	8.5	9.0	9.5
Alkalinity Pf/Mf	.3/.8	.4/.9	.15/1.3	.15/1.2	.35/1.1
Calcium	120	100	550	220	120
Chlorides	4100	4000	4400	4500	4600
LCM	4	4	4	4	5

DRILL STEM TESTS

No tests were conducted

SUMMARY

The #1 Schaeffer Trust 13-35 was drilled at the Arrowhead Field as a development well. The primary objective was the Morrow V5 Sandstone, which is gas productive at Arrowhead Field. Secondary objectives included the Marmaton and Spergen Formations. The location was selected upon the basis of sub-surface geological interpretation as well as upon interpretation of Formation Micro Scanner log data.

Structurally, the Morrow Shale was encountered twenty one feet low to the correlatory well, the #2 North Navajo 34-34. The Morrow Clastic Interval was one hundred and ninety four feet thick, being five feet thinner than in the correlatory well. Neither the V5 nor V7 Sandstones were deposited at this location. However, both non-marine intervals were present, but were composed entirely of shale, being lighter colored and waxy to silty.

Minor shows of little significance were encountered in both of the secondary objectives, the Marmaton and Spergen Formations. Following electric logging operations, the test was plugged.

SAMPLE DESCRIPTIONS

Unlagged Sample Depths and Log Tops

3510 Sh rdsh bn blky frm-hd slty gran fri rgh txt Ls lt gy micxl Wkst sdy suc glau hd dns NSFOC

3530 Sh cont'd Ls incr sli glau incr fxl

3540 Ls bec lt tnsh gy micxl Pkst vdns hd

3560 Ls lt tnsh gy micxl-fxl Pkst tr Wkst varg Sh sft

3570 Ls incr lt-m gy fxl Pkst mod arg vchlky crmbly vdns

3590 Ls cont'd Sh m gy sb plty frm-sft smth txt

3600 Ls lt gy fxl Wkst vfos dns crmbly

3610 Sh cont'd Ls gy-rdsh gy fxl Wkst vfos varg i.p. hd vdns

3620 Sh m gy sb plty frm-sft vslty i.p. smth-rgh txt

SHAWNEE 3616'

3630 Ls lt-m gy micxl Pkst hd vdns NSFOC

3640 Ls lt buf-lt gy fxl Wkst i.p. occ fos chlky mtx crmbly dns

3660 Ls incr lt buf-lt gy fxl Wkst fos chlky i.p.

3670 Ls incr m gy micxl Pkst hd dns Sh rdsh bn gy vari

3680 Ls lt buf-lt gy fxl Wkst tr Pkst fos i.p. crmbly vdns

3690 Ls lt gy fxl Wkst Sh m gy sb plty frm-sft smth txt

3700 Ls lt gy fxl Wkst Sh m gy

3710 Ls m gy micxl Pkst hd dns

3720 Ls lt-m gy pred fxl Wkst vfos arg i.p. pr vis intrxl poro MSFOC

3730 Ls wh-lt gy micxl Pkst hd vdns fr amt chlk Sh sm amt lt gnsh gy

3750 Ls incr lt gy micxl-fxl Wkst vfos fr amt intrxl chlk sb crmbly dns

3760 Ls lt gy micxl Pkst fos decr

3770 Sh incr lt-m gy sb plty frm-sft smth txt sb blky vslty crmbly Ls lt gy

3780 Sh cont'd Ls fxl Pkst

3790 Ls lt gy fxl Pkst Sh m-dk gy vslty-sdy i.p.

3800 Dol sm amt lt tn micxl micr-suc crmbly fr-pr vis intrxl poro NSFOC Sh m gy sb blky frm-sft smth txt

3810 Ls lt gy fxl Pkst vchlky Sh incr rdsh bn m-dk gy vari col

3820 Ls incr vlt gy fxl Wkst tr Pkst tr fos hd vdns NSFOC

3830 Sh vari col pred rdsh bn

3840 Ls incr lt-m gy fxl Pkst hd vdns

3860 Sh incr gy rdsh bn vari col tr lt gy sft-frm smth txt Ls sm amt cont'd

3870 Ls incr lt gy micxl-fxl Pkst sb crmbly vdns

3880 Sh rdsh bn Ls sm amt

3890 Sh rdsh bn blky frm-hd slty i.p. rgh txt

3910 Sh cont'd Ls cont'd Dol sm amt lt tn micxl micr suc pr vis poro NSFOC

HEEBNER 3883'

3920 Sh tr blk sb plty frm-sft smth txt carb

3930 Sh lt-m gy gn mar sb blky frm-sft smth txt

TORONTO 3909'

3940 Sh cont'd Ls incr wh micxl Pkst abdt chlk chlky mtx i.p. crmbly vdns NSFOC

3950 Sh rdsh bn abdt Ls vlt gy fxl Pkst sli arg i.p. hd dns tr fos

3960 Sh rdsh bn gy sb plty frm-sft fis Ls fxl Wkst

LANSING 3934'

3970 Ls chng wh-vlt buf micxl-fxl Wkst suc fos i.p. occ chlky mtx crmbly pr vis intrxl poro NSFOC

3990 Ls micxl Pkst vhd dns Sh rdsh bn gy mar vari col cont'd
4000 Sh rdsh bn Ls tr
4010 Sh incr dk gy sb blky frm-sft sb fis smth txt Ls lt gy micxl-fxl Pkst vdns sb crmbly
4030 Ls tr cont'd Sh rdsh bn
4040 Sh rdsh bn lt-m gy sb plty
4050 Ls incr lt gy fxl Wkst sli fos hd vdns
4060 Ls bec ool i.p.
4070 Ls def incr lt gy-m tnsh gy fxl Pkst tr Wkst fos occ varg hd dns
4080 Ls lt-m gy fxl Pkst occ intrxl chlk-chlky mtx arg i.p. hd vdns tr Wkst sb fos NSFOC Sh tr m gy sb blky frm-hd smth txt
4090 Sh m gy sb plty frm incr sli Ls m tnsh gy fxl Wkst i.p. scat fos hd
4100 Sh m gy sli incr Ls lt-m gy pred fxl Pkst occ Wkst
4110 Ls lt gy-m tnsh gy fxl Wkst occ Pkst rr fos frags arg i.p. hd vdns Sh m-dk gy sb blky frm-hd sb smth txt
4120 Ls m gy fxl Pkst hd tr ool Sh decr
4130 Ls m gy varg Sh incr lt-m gy sb blky frm vslty i.p. smth txt
4150 Ls incr m gy fxl Pkst occ Wkst /scat fos frags hd crmbly occ intrxl chlk dns
4160 Ls abdt lt-m gy-m tnsh gy fxl Wkst vool fos arg fr amt intrxl chlk i.p. crmbly hd dns NSFOC
4170 Ls ool fos decr
4200 Ls cont'd Sh m gy sb plty frm-sft smth txt
4240 Sh def incr gy mar lt gn
4250 Ls lt tn fxl Wkst vfos ool i.p. Sh vari col cont'd
4260 Ls lt tn-lt buf fxl Pkst vdns
4270 lt buf-lt tn fxl Wkst tr Pkst ool hd vdns
4280 Ls lt-m gy fxl Wkst
4290 Ls lt tnsh gy micxl Pkst tr Wkst hd vdns Sh vari col cont'd
4300 Ls chng lt tn-lt gy fxl bndstn voom occ ool g vis poro tr scat bri flor vwk slo mlky sb stmrg crush ct fr odor
4310 Ls lt-m gy fxl Wkst chlky i.p. tr fos hd dns
4320 Ls cont'd Sh incr lt gy sb blky vslty smth txt crmbly fri

MARMATON 4305'

4330 Ls chng buf-lt tn fxl Pkst tr Wkst hd dns pltl i.p. NSFOC
4350 Ls chng wh-vlt gy fxl Wkst fr amt intrxl chlk rthy crmbly dns NSFOC
4360 Ls cont'd Sh lt-m gy sb plty vfrm vfis smth txt
4370 Ls lt buf-lt gy micxl Pkst micr ool i.p. dns
4380 Sltst lt gy arg mtx crmbly fri vdns rgh txt fr amt chlk
4400 Ls tr lt tn-lt gy micxl Pkst dns tr micr ug fos poro scat bri flor tr wk stn vmlky vslo sb strmg ct
4410 Ls m gy tnsh i.p. micxl Pkst occ intrxl chlk hd vdns NSFOC
4420 Ls tnsh incr intrxl Chrt hd vdns
4440 Ls incr fxl Wkst scat fos ool i.p.bec varg vdns
4450 Ls dk tnsh gy
4460 Ls chng bec buf fxl Pkst fr amt intrxl chlk crmbly-hd vdns

4470 Ls lt gy-buf fxl Pkst varg i.p.
4480 Ls lt-m tnsh gy micxl-fxl Pkst
4500 Ls cont'd Sh incr sm amt m-vdk gy sb plty frm-sft smth txt

CHEROKEE 4477'

4510 Sh tr blk blky hd-frm smth txt carb
4520 Sh incr vari m gy lt gn Ls wh-m gy sprkd fxl Wkst ool vchlky i.p. arg crmbly vdns NSFOC
4540 Sh incr blk plty frm-sft vfis smth txt
4550 Ls lt-m tnsh gy fxk Wkst fos vool i.p. hd vdns arg i.p. Sh m-dk gy
4560 Ls fxl Pkst i.p.
4570 Sh m gy sb plty-sb blky frm-sft sb fis smth txt Ls buf-m gy micxl Wkst tr fos
4590 Ls gysh tn fxl Wkst fos ool i.p. arg i.p. vdns
4600 Ls m tnsh gy fxl Pkst vdns arg Sh incr blk sb plty frm-sft fis smth txt carb
4610 Ls tnsh gy fxl Pkst Sh blk
4620 Ls fxl Wkst i.p. fos ool arg vdns
4630 Sh m-dk gy blky fis Ls lt tn-buf fxl Pkst

ATOKA 4629'

4660 Sh vdk gy sb plty carb Ls m gysh tn micxl Pkst
4670 Sh plty rr slty Ls m tnsh gy micxl Pkst
4680 Sh incr Ls tr micr-ool arg i.p.
4690 Sh m-dk gy plty Ls tn-m-dk gy fxl Pkst arg hd vdns
4700 Sh dk gy plty Ls dk gy
4720 Sh incr m gy sb plty-sb blky frm-sft sb fis smth txt Ls dk gy fxl Pkst arg hd dns
4730 Ls vdk gy fxl Pkst varg hd dns Sh sb plty-sb blky frm-sft-hd fis smth txt
4740 Sh m gy Ls m tnsh gy micxl Wkst varg hd dns
4750 Sh dk gy sb blky Ls m gy fxl Pkst varg
4770 Ls m-dk gy fxl Pkst varg tr chlk hd dns Sh m-dk gy blky frm-sft fis flky i.p. smth txt
4780 Ls m gy fxl Pkst arg Sh m gy i.p.
4800 Ls dk gy fxl Pkst varg vdns Sh m gy plty sft-frm fis smth txt
4810 Sh m gy vfis Ls m-dk gy fxl Pkst arg

Lagged Sample Depths

MORROW SHALE 4793'

4805 Sh m-dk gy sb plty frm-sft vfis i.p. tr micr-slty occ pyr pred smth txt
4811 Sh cont'd tr Pyr slty
4816 Sh tr carb debr scat
4821 Sh cont'd Ls bn micxl Pkst hd dns NSFOC
4827 Sh chng m gy tnsh sb plty intrlmntd i.p. frm-sft micr-slty smth txt tr lt gn Sh blky smth sb wxy txt
4833 Sh chng lt gy sb plty sb blky frm-sft intrlmntd /m gy mot i.p. pyr smth sb wxy txt
4844 Sh m gy sb plty occ lt gysh gn sb plty
4848 Sh m gy sb plty frm-sft fis smth txt
4851 Sh occ tnsh m gy sb plty sb blky frm-sft vfis smth sb wxy txt
4862 Sh chng incr lt gy-gnsh gy i.p. sb plty frm-sft lmntd smth sb wxy txt

V5 INTERVAL 4864'

4867 Sh pred m gy sb blky-blky frm-sft sb fis sb lmntd vsmth txt
4874 Sh m gy incr lt gy sb plty frm-sft smth sb wxy txt
4882 Sh m-dk gy intrlmntd i.p.

4887 Sh m gy sb plty frm-sft-hd fis smth txt
4895 Sh chng m gy sb plty sb blky frm-sft fis fri i.p. micr-slty gran i.p. /dns arg occ glau arg mtx smth-rgh txt
4900 Sh m gy slty /incr mass pyr
4905 Sh lt tnsh gy sb plty frm-sft tr carb debr glau micr-sity rgh rrly txt incr gn sb blky smth sb wxy txt
4915 Sh lt tnsh-m gy tr lt gn mot i.p. scat tr carb debr loc pyr
4919 Sh occ mot intlmntd
4923 Sh chng m gy sb plty sb lmntd scat dk gy carb debr vfis frm-sft smth txt

V7 INTERVAL 4927'

4928 Sh bec lt-m gy sb blky frm-sft uncon tr micr glau crmbly smth txt
4934 Sh m-dk gy sb plty frm-sft sb fis smth txt
4939 Sh chng incr lt gy blky-sb blky frm-sft tr uncon micr-slty i.p. crmbly fri
4954 Sh m gy sb plty-plty frm-sft fis smth txt
4959 Sh chng lt gy def incr blky-sb blky sft micr-slty i.p.
4968 Sh lt gy incr pyr mssv glau incl mot /dk gy i.p.
4973 Sh chng lt gy blky frm-sft crmbly i.p. smth txt scat glau Sh debr
4990 Sh lt gy bec sft uncon i.p.

LOWER MORROW LIMESTONE 4988'

4997 Sh chng bec m gy sb plty frm-sft fis smth txt Ls sm amt wvlt gy fxl Wkst abdt fos glau altrd fr amt intrxl chlk crmbly vdns NSFOC
5001 Sh lt gy Ls lt-m gy tnsh i.p. fos decr
5006 Ls def incr lt tnsh gy fr amt intrxl free chlk crmbly dns
5016 Ls incr cont'd lt buf fxl Wkst fos incr
5037 Ls buf fxl Wkst decr fos intrxl chlk crmbly
5049 Ls lt buf-buf fxl Wkst incr intrxl glau altrd scat fos intrxl chlk
5060 Ls buf fxl Pkst i.p. chlk glau decr
5069 Ls buf fxl Pkst fxl Wkst decr
5088 Ls buf occ fxl Wkst micr-ool i.p.
5097 Ls buf-m tnsh gy fxl Pkst hd dns fr amt free chlk
5114 Ls incr tn fxl Pkst hd brit i.p. vdns
5125 Ls wh-vlt gy-lt buf fxl Pkst vchlky
5143 Ls pred lt tn fxl Pkst hd brit vdns

SPERGEN 5141'

5150 Ls cont'd Dol lt tn micr-suc arg hd loc crmbly pred dns Chrt tr tnsh-blu opq frsh shrp
5159 Dol gysh tn micr-suc i.p. arg i.p. pr vis poro NSFOC
5174 Dol incr gysh tn suc varg i.p. crmbly vscat dull gn flor vslo wk sb stmg ct
5187 Dol tn suc hd scat dull gn flor
5205 Dol bec lt gy micxl micr-suc arg mtx i.p. crmbly vdns NSFOC
5215 Dol tnsh gy micxl-fxl suc-micr suc hd dns Ls incr lt buf fxl Wkst occ fos vchlky crmbly vdns NSFOC
5225 Dol lt-m gy micr-suc arg hd vdns Ls sli decr Sh ooc lt gy plty frm-sft vfis smth txt

Note: Circulating at 5234'

+30min Dol fxl suc varg rthy i.p. tr Pyr NSFOC

+60min Dol wthd i.p. Chrt tr intrxl lt blu opq Sh sli incr lt-m gy blky hd-frm vbrit smth txt