Company: Address: Contact Geologist: Contact Phone Nbr: Well Name: Location: Pool:	OPERATOR Falcon Explortation, Inc. 125 N. Market Suite 1252 Wichita, KS 67202 Brian Fisher 316-262-1378 Smith #2-5 Sec 5 - T28S - R30W	API: Field:	15-069-20349-0000 Wildcat
State:	Kansas	Country:	USA
Well Name:	Scale 1:240 Imperial		
Surface Location: Bottom Location: API: License Number: Spud Date:	Siniti #2-3 Sec 5 - T28S - R30W 15-069-20349-0000 5316 10/24/2011	Time:	00:00
Region:	Gray County	Time:	20:30
Surface Coordinates: Bottom Hole Coordinates: Ground Elevation: K.B. Elevation: Logged Interval: Total Depth: Formation:	2170' FNL & 2440' FWL 2813.00ft 2826.00ft 3400.00ft 5550.00ft Mississippian	To:	5550.00ft
Drilling Fluid Type:	Chemical/Fresh Water Gel		
Well Type: Longitude: N/S Co-ord: E/W Co-ord:	SURFACE CO-ORDINATE Vertical 2170' FNL 2440' FWL	: <b>S</b> Latitude:	
	LOGGED BY		
	Keith Reavis		
	Consulting Geologist		
Address:	Keith Reavis, Inc. 3420 22nd Street Great Bend, KS 67530		
Phone Nbr: Logged By:	620-617-4091 KLG #136	Name:	Keith Reavis
Contractor: Rig #: Rig Type: Spud Date: TD Date: Rig Release:	CONTRACTOR Sterling Drilling Company 5 mud rotary 10/24/2011 11/5/2011 11/6/2011	Time: Time: Time:	00:00 20:30 00:00
	ELEVATIONS		
K.B. Elevation: K.B. to Ground:	2826.00ft Ground 13.00ft	d Elevation:	2813.00ft
Due to favorable results of DST # be set and cemented and the Miss	<b>NOTES</b> 3 as well as favorable log calculation sissippian St. Louis be further tested	ns, it was det I through perf	ermined that 5 1/2" production casing forations and stimulation.
The well samples were saved and located in Wichita, KS.	will be available for review at the K	ansas Geolo	gical Survey Well Sample Library
Respectfully submitted, Keith Reavis			
Falc	on Exploration	ı. Inc	

daily drilling report

DATE	7:00 AM DEPTH	REMARKS
10/28/2011		Geologist Keith Reavis on location @ 2220 hrs, 3502 ft., drilling Stotler
10/29/2011	3716	drilling ahead, Tarkio, Bern, Topeka, Heebner
10/30/2011	4287	drilling ahead, Douglas, Lansing
10/31/2011	4727	drilling ahead, Stark, lower KC, Marmaton, Cherokee
11/01/2011	5042	drilling Cherokee, run short trip at 5050', drill Morrow, warrants DST
11/02/2011	5125	conducting DST #1, complete DST #1, resume drilling Morrow, Miss, show in Miss St. Gen, warrants DST, TOH for DST #2
11/03/2011	5226	conducting DST #2, complete, successful test, resume drilling, show and kick in St. Louis, cfs
11/04/2011	5323	warrants test, TOH and conduct and complete DST #3, successful test
11/05/2011	5397	resume drilling, TD @ 5550 ft, ctch, TOH for logs
11/06/2011	5550	conduct and complete logging operations, geologist off loc. @ 0800 hrs

Falcon Exploration,	Inc.
well comparison sheet	

	DRILLING WELL				COMPARISON WELL			COMPARISON WELL					
		Smith	#2-5			Smith	#1-5		Josserand #1-5				
		2170' FN	TL & 2	440' FWL		1460' FN	TL & 330	' FWL	380' FSL & 850' FEL				
	Sec 5-T28S-R30W				Sec 5-T28S-R30W			Sec 5-T28S-R30W					
							Struct	ural	Struct			ural	
	2826	КВ			2832	KB	Relatio	onship	2823	KB	Relatio	Relationship	
Formation	Sample	Sub-Sea	Log	Sub-Sea	Log	Sub-Sea	Sample	Log	Log	Sub-Sea	Sample	Log	
Stotler	3540	-714	3541	-715	3530	-698	-16	-17	3542	-719	5	4	
Tarkio	3612	-786	3613	-787	3602	-770	-16	-17	3616	-793	7	6	
Bern	3712	-886	3712	-886	3700	-868	-18	-18	3712	-889	3	3	
Topeka	3812	-986	3810	-984	3800	-968	-18	-16	3812	-989	3	5	
Heebner	4147	-1321	4146	-1320	4140	-1308	-13	-12	4151	-1328	7	8	
Lansing	4245	-1419	4249	-1423	4236	-1404	-15	-19	4250	-1427	8	4	
Stark	4612	-1786	4610	-1784	4590	-1758	-28	-26	4614	-1791	5	7	
Marmaton	4742	-1916	4748	-1922	4738	-1906	-10	-16	4746	-1923	7	1	
Pawnee	4833	-2007	4832	-2006	4822	-1990	-17	-16	4843	-2020	13	14	
Cherokee	4881	-2055	4881	-2055	4870	-2038	-17	-17	4889	-2066	11	11	
Morrow Sand	5081	-2255	5081	-2255	5078	-2246	-9	-9	5103	-2280	25	25	
Mississippian	5146	-2320	5145	-2319	5154	-2322	2	3	5139	-2316	-4	-3	
St. Lo Por	5276	-2450	5276	-2450	5284	-2452	2	2	5302	-2479	29	29	
Salem	5474	-2648	5476	-2650	5474	-2642	-6	-8	5473	-2650	2	0	
Total Depth	5550	-2724	5551	-2725	5552	-2720	-4	-5	5547	-2724	0	-1	

			Drill S	Stem Test #1				
RICKETT	S TESTING	3		(620) 326-583	כ		F	age 1
Company Address CSZ Attn.	Falcon Explo 125 N. Marke Wichita, KS ( Keith Reavis	oration, Inc. t, Ste. 1252 87202		Lease Name Lease # Legal Desc Section Township County Diffuse Cont	Smith (NW 2-5 NE-SE-SE- 5 28S Gray Sterling Dr	) NW	Job Ticke Range State	t 2170 30W KS
Comments	Legal Descri	ption Feet: 2	170' FNL & 244	o FWL	Sterling Dr	ining Co.	Kig #6	
Test # 1 Tester Test Type # of Packers Mud Type Mud Weight Filtrate Drill Collar Ler	Tim Venters Conventiona Successful T 2.0 Gel Chem 9.2 8.4 337.0	Test Date Il Bottom Hol est Packer Siz Viscosity Chlorides	11/2/2011 le 22 6 3/4 56.0 2400	Chokes Top Recorder Mid Recorder Bott Recorder Mileage Standby Time Extra Equipmr Time on Site Tool Picked Up Tool Layed Dw	3/4 # W1119 # W1023 # 13310 244 0 244 9:20 PM 0 11:25 PM /m8:50 AM	Hole Appr ety joint	Size 77/8	
Formation	Morrow			Start Date/Tim	2813.00	C:22 PM	y Busnings 2	826.00
Interval Top Anchor Len Be Total Depth Blow Type	5061.0 blow 64.0 5125.0 Weak 1/4 inc hes. Very we 1 1/2 inches.	Bottom Between h blow at the eak surface t Times: 5, 90	5125.0 0 e start of the in blow at the star 0, 60, 120.	End Date/Time titial flow period, bu t of the final flow pe	a 11/3/2011 € illding to 3/4 ariod, buildin	inc ig to		

Feet Description		Gas	Oil	Water	Mud	
30	Mud	0% Oft	0% Oft	0% Oft	100%30ft	
90	Mud with specs of oil	0% Oft	trace	0% Oft	100%90ft	



## Drill Stem Test #2

RICKETTS	STESTING		(620) 326-5830	0	Paj	9e 1
Company Address CSZ Attn.	Falcon Exploration, 125 N. Market, Ste. 1 Wichita, KS 67202 Keith Reavis	Inc. 252	Lease Name Lease # Legal Desc Section Township County Drilling Cont	Smith (NW) 2-5 NE-SE-SE-NW 5 28S Gray Sterling Drilling C	Job Ticket Range State	2170 30W KS
Comments	Legal Description F	et: 2170' FNL & 2440'	FWL		-	
GENERAL I	NFORMATION		Chokee	3/4	le Size 7 710	
Test # <b>2</b> Tester Test Type	Test Tim Venters Conventional Botton	Date 11/3/2011 n Hole	Top Recorder a Mid Recorder a Bott Recorder	# W1119 # W1023 # 13310	Ne 312e 7 776	
# of Packers	2.0 Pack	er Size 6 3/4	Mileage Standby Time	88 Ap	proved By	
Mud Type Mud Weight Filtrate	Gel Chem 9.3 Visco 7.6 Chlor	sity <b>48.0</b> ides <b>2500</b>	Extra Equipmn Time on Site Tool Picked Uj Tool Layed Dw	nt Jars & Safety join 11:45 PM p 2:45 AM vn12:00 PM	it	
Drill Collar Len Wght Pipe Len	337.0 0		Elevation	2813.00 Ke	elley Bushings 282	26.00
Formation Interval Top Anchor Len Be Total Depth Blow Type	Mississippian 5148.0 Botto low 78.0 Betw 5226.0 Weak 1/4 inch blow	m 5226.0 een 0 throughout the intilal f	Start Date/Time End Date/Time	ne 11/3/2011 1:35 AM e  11/3/2011 12:16 P y weak surface blov	1 M	
	hroughout the final	now period. Times: 5,	90, 60, 124			
RECOVERY	on		Gas	Oil W	ater Mu	d
20 Mud			0% Oft	0% Oft 0%	6 Oft 100	0%20ft
4000						7 <sup>131</sup>
3600						120
3200	/			7		109
2800				(	~	98 ,
s 2400		-		1-9		e 87 9
g 2400				M	1	F F
2000					5	76
1600						64
1200	1					53
800					1	42
400						21
400	1	IS			1	31
0		TR2 PFT	FF2	₽s T		20
IH	Date 11/3/2011 4:38:20 A	M 3.055556	2506.113	109.641	Initial Hydro-s	tatic
IF1	11/3/2011 4:43:40 A	M 3.144444	59.814	110.362	Initial Flow (1)	
IS	11/3/2011 6:19:30 A	M 4.741667	297.597	114.387	Initial Shut-In	
FF1	11/3/2011 6:19:50 A	M 4.747222	52.869	114.364	Final Flow (1) Final Flow (2)	
FS	11/3/2011 9:22:20 A	M 7.788889	47.046	117.322	Final Shut-In	
FH	11/3/2011 9:33:20 A	M 7.972222	2483.461	119.008	Final Hydro-si	tatic
		Drill Ste	em Test #3			
DICKETTS	TESTING		(620) 326-5830		Page	-1
Company	Falcon Exploration	nc.	Lease Name	Smith (NW)	- age	100
Address CSZ Attn.	125 N. Market, Ste. 1 Wichita, KS 67202 Keith Reavis	252	Lease # Legal Desc Section Township County	2-5 NE-SE-SE-NW 5 285 Gray	Job Ticket 2 Range 30 State K	170 5W
Comments	Legal Description Fe	et: 2170' FNL & 2440' F	Drilling Cont WL	Sterling Drilling Co	. Rig #5	
GENERAL II	VFORMATION		Chokes	3/4 Hole	Size 77/8	
Test # 3 Tester Test Type	Tim Venters Conventional Botton	Date 11/4/2011	Top Recorder # Mid Recorder # Bott Recorder #	W1119 W1022 13310		
# of Packers	2.0 Packs	er Size 6 3/4	Mileage Standby Time	88 App	roved By	
Mud Type Mud Weight Filtrate	Gel Chem 9.3 Visco 7.2 Chlori	sity 48.0 des 2350	Extra Equipmnt Time on Site Tool Picked Up	Jars & Safety joint 2:45 AM 4:45 AM		
Drill Collar Len Wght Pipe Len	337.0		Tool Layed Dwn Elevation	2813.00 Kell	ev Bushings <b>2826</b>	.00
But the Cell	No y a se mare	121		2010/00 1100	-) Delet in Se 2020	







chalky to dense, poor visible porosity, trace pyritic, some chalk, no shows, scattered fluoresence

# Stotler 3540 -714

limestone, cream to light gray to pale green, crypto-microcrystalline, dense, fossiliferous, some mottled weathered chalky fossiliferous, , no shows, light green fluoresence

limestone, cream to white, microcrystalline, slightly fossiliferous, some secondary calcite, poor visible porosity, no shows, faint fluoresence

limestone, gray to gray/green, cryptocrystalline, dense, some fossiliferous, some arenaceous, with limestone, cream, cryptocrystalline, chalky, slightly fossiliferous, some mixed shales

## Tarkio 3612 -786

F

C

F

F

limestone, gray/green to cream, cryptocrystalline, dense, arenaceous, some secondary calcite, no shows, faint fluoresence

Total Gas (units)

C2 (units)

C3 (units)

C4 (units)

Mud-Co Mud Ck @ 3775' 0845 hrs 10/29/11 vis 47 wt.8.9 pv 14 yp 15

wl 8.4 cake 1/32 pH 10.0 . chl 3600

cal 20 sol 4.8 lcm2# dmc \$66.15 cmc \$10398.20

100

10

otal Gas (units)

C2 (units)

C3 (units)

C4 (units)

0

100

10

limestone as above

limestone, light gray, cryptocrystalline, chalky, with limestone, mixed gray, cryptocrystalline, dense, fossiliferous, no shows

#### Bern 3712 -886

limestone, tan, microcrystalline, fossilifeorus, some vugs, with limestone, gray, mottled, very fossiliferous, some large clasts, poor visible porosity, no shows

limestone, gray, microcrystalline, argillaceous, with gray limey shales

limestone, cream to white to light gray, microcrystalline, fossiliferous, fairly chalky, poor visible porosity, no shows, some scattered white cherts

limestone, cream to light gray, mixed fossiliferous, chalky, some oolitic, with limestone, gray, dense fossiliferous, abundant mixed shales

## Topeka 3812 -986

С

F 1 С

C

1

limestone, light gray to white, chalky fossilierous to bioclastic, poor visible porosity, no shows, 20-30% chalk, some white scattered cherts, no shows

limestone and chalk as above

as above, increasing chalk

limestone, light gray to white, microcrystalline, chalky, bioclastic to fossiliferous, some scattered pinpoint porosity, no shows, abundant chalk in samples 30%+

as above

as above, with limestone, gray grainy, shaley, argillaceous, dark gray chalky, some gray silty shale, gray to white cherts

Lecompton

Т

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> C

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1

F

as above, abundant chalk

limestone, cream to gray, microcrystalline, chalky, fossiliferous, no shows

limestone, cream to gray, micro-cryptocrystalline, grainy, fossiliferous, chalky, no shows, appx 30-40% chalk

chalk, appx 60% of samples, with limestone as above







100

10

100

10



as above, some dark gray cryptocrystalline, fossiliferous limestone, some gray smokey cherts

# Stark 4612 -1786

black carbonaceous shale, gassy

limestone, mixed gray to light gray, crypto-microcrystalline, fossiliferous, cherty to chalky, poor visible porosity, no shows

shale, black carbonaceous

limestone, cream, cryptocrystalline, oolitic, few oomolds, otherwise poor visible porosity, no shows, no fluoresence

limestone, mixed gray fossiliferous, mostly dense





limestone, mottled gray, fossiliferous, chalky, large clasts, some oolitic, abundant chalk, no shows

limestone, dark gray, slightly fossiliferous, argillaceous, dense cherty, with dark gray argillaceous limey shale, some scattered gray cherts

## Marmaton 4742 --1916

limestone, cream to gray and tan, microcrystalline, fossiliferous, some oolitic, chalky to dense mix, some smooth compact lithographic, some pyritic, poor overall visible porosity, no shows, some chalk in samples

limestone, cream to light gray, microcrystalline, fossiliferous, oolitic to pelletal, grainy, chalky, poor visible porosity, no shows

limestone as above, with influx brown to gray fossiliferous, some grainy, some pelletal, with scattered brown and gray cherts, moderate chalk

# Pawnee 4833 -2007

limestone, white to cream, cryptocrystalline, chalky fossiliferous to bioclastic, remains, poor visible porosity, abundant chalk, scattered cherts, fossiliferous, slight fluoresence, no shows

limestone, gray to cream, fossiliferous, grainy, poor overall porosity, some chalk, no shows

#### Cherokee 4881 -2055 shale, black carbonaceous

limestone, mixed gray to cream and tan, chalky, fossiliferous, abundant gray and black shales

flood limestone, gray to light brown, grainy, oolitic to pelletal, some fossiliferous shales

#### shale, black carbonaceous

limestone, mixed gray to dark gray and tan, crypto-microcrystalline, fossiliferous, some lithographic, dense, with gray arenaceous, some cream to light gray chalky, abundant black, brown and gray shales, scattered gray to brown chert, samples wash heavy



C2 (units)

C3 (units)

short trip @ 5050'

Mud-Co Mud Ck

1415 hrs 11/1/11

vis 56 wt. 9.2 pv 17 yp 18 wl 8.4 cake 1/32

sol 6.3 lcm 4#

dmc \$926.05 cmc \$16153.95

@ 5098'

pH 11.5

chl 2400

cal 20

strap 0.66' stb

@ 5125 1130 hrs 11/2/11

-pH 11.5 chl 2100

cal 20

dev. survey 3/4 deg

vis 88 wt. 9.2

sol 6.3 lcm 3# dmc \$954.70

cmc \$17108.65

pv 26 yp 28 wl 7.6 cake 1/32

Mud-Co Mud Ck

68 unit total

10





flood mixed green red and gray shales, with mixed gray to brown fossiliferous limestones

as above, increasing black carb. shales

F

limestone, mixed fossiliferous, some bryozoans, decrease in shale

dense black and gray shales, with silty green shales, gray and black chert, brown and gray dense fossiliferous limestones and light gray to cream chalky limestone

DST #1, 5061-5125, 5-90-60-120, rec 30 mud, 90 mud w/specs oil, FPs 57-48# & 64-63#, SIPs 1416# & 1372#, HSH 2444# & 2412#, BHT 119 deg F

limestone, dense gray and brown, fossiliferous, with cream to gray chalky fossiliferous, some chert and stringers of shale as above, no shows, some sandy limestone

## DST #1.pdf

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# Morrow Sand 5081 -2255

5098 sample: sandstone, quartz, stained dark brown to black, some saturated, very fine grain, rounded to well rounded, well cemented, fair sorting, some tarry heavy free oil, no odor or fluoresence, slow milky cut

5098 30 min sample, sand as above, no increase, flood dark gray soft shale

sandstone as above, slight increase, some glauconitic, more friable, some barren, fair show free oil, some gassy, still no fluoresence or odor, shale as above, still abundant cherokee lime sluff

flood shale, gray to black, dense, fissile

sandstone, quartz to gray, fine to very fine grain, sub-round, poor sorting, friable, dolomitic cementing, glauconitic and pyritic in part, some shale loading, light to fair saturated brown stain, good show bleeding gassy oil, heavy tarry, faint odor, no fluoresence, good cut

pyritic, claybound barren sand with: gray/black mottled shale (does not seem micaceous)

 $5150\ sample$  - carrying sands as above, shale, gray to brown/maroon to tan, fossiliferous to pyritic, some with inclusions of multicoloroed shale

# Mississippian 5146 -2320

5160 sample - limestone, white to pale green, very sandy, some sandstone (stained) inclusions and adhering sand, with few clusters dense sandstone, gray/black stain, vfgr, well cem., with limestone inclusions, overall barren to spotty to sat. brn-blk-gry staining, no odor, bleeing heavy free oil after about 20 min under lamp, no odor, no fluoresence, fair cut

sandy stained limestone as above, abundant mixed shale, some white limestone, fossiliferous, fairly dense, large clasts, no show, abundant red clays heavy red wash, abundant chalk and pyrite nodules

#### DST #2, 5148-5226, 5-90-60-120, rec 20 mud, FPs 59-44# & 52-26# SIPs 297# & 47#, HSH 2506# & 2483#, BHT 119 deg F

flood red and lavender shale, fairly dense, with sandy limestone as above, red wash goes away

### DST #2.pdf

limestone, white to light gray, very sandy, poor overall visible porosity, spotty light brown stained to black saturated stain, some very friable, show free oil in tray, show free oil on break, weak odor in wet cup, fairly even faint green fluoresence, good cut, instant to slow streaming, w/halo

cfs 30 min - a.a. decrease show, some sandy oolitic, 60 min - a.a. with some mature chalky white oolitic, no show, influx of chalk

sandy limestone as above, dense, with slight staining, sandy oolitic, alauconitic. abundant chalk

limestone, white, mature oolitic, very chalky, some glauconitic, some dense flattened oolitic with some sandy limestone a.a., abundant tan chert and tan cryptocrystalline limestone, dense compact lithographic, moderate chalk, no show or fluoresence

limestone, gray and pale green, very sandy, dense, oolitic limestone drops out, some light orange and tan chert

## St. Louis

1 D

1

limestone, white to light gray, oolitic, large oolites, glaucontic, poor visible overall porosity, some pinpoint vugs, very chalky, spotty scattered stain, fair odor, slight show free oil, light green fluoresence, good milky





white cut, orange, tan - gray oolitic chert

	540		
E		Rotary TD @ 5550 ft. 2030 hrs 11/5/11 Log Tech TD @ 5551 ft	
		complete logging operations @ 11/6/11	