

Skyy Drilling, L.L.C.  
800 W. 47<sup>th</sup> Street, Suite # 716  
Kansas City, Missouri 64112  
Office (816) 531-5922  
Fax (816) 753-0140

Company: Haas Petroleum, LLC  
800 W. 47<sup>th</sup>, Suite # 716  
Kansas City, Missouri 64112

Lease: Pieratt – Well # 3 HP  
County: Coffey  
Spot: SE NW NE SE Sec 8, Twp 21, S.R. 14 E  
Spud Date: June 26, 2010  
API: 15-031-22808-00-00  
TD: 2057 ½ *KB.*

- 6/25/10: Moved in rig #3, rigged up. Started pumping water.  
6/26/10: Finish pumping water. Drilled rat hole. Spud 12 ¼ surface hole @ 12:30 PM. TD surface hole @ 41'. At TD cir hole clean. Trip out 12 ¼ bit. Rigged and ran 40' of 8 5/8 casing. Rigged up cementers and cemented with 35 sacks cement. Plug down @ 5:00 PM. Shut down for weekend.  
6/28/10: Start back up. Nipple up. Trip in hole with 6 ¾ PDC bit. Drilled out approx 5' of cement. Under surface drilling @ 2:00 PM. Drilled from 41' to 807'.  
6/29/10: Drilled from 807' to 1348'. At 1348' CFS. At 1348' trip out of hole with 6 ¾ bit. Pick up core barrel. Trip in hole with core barrel. Core hole from 1348' to 1387'. Trip out core barrel. Lay out core sample. Full recover of 39'. Lay down core barrel. Trip back in with 6 ¾ bit. Ream out core slot.  
6/30/10: At 1387' jet pits clean and mud up hole. Back to drilling @ 11:00 AM. Drilled from 1387' to 1739'.  
7/1/10: Drilled from 1739' to 1767'. Trip bit @ 1767'. Trip back in hole with 6 ¾ button bit. Drilled from 1767' to 1910'. Top Mississippi Lime 1708'.  
7/2/10: Drilled from 1910' to 2000'. At 2000' cir hole clean. Trip out of hole above 1000'. Shut down for 4<sup>th</sup> of July.  
7/5/10: Start back up. Trip in hole. Drilled from 2000' to 2057 ½ TD. CFS @ 2056' and 2057 ½'. Lost cir @ 2057 ½', cir for sample. Mix mud & LCM. Still losing fluid. Trip out of hole to 1000'. Shut down. Wait on more mud to be delivered.  
7/6/10: Start back up. Mix mud & LCM. Mixed to 40 vis and 8 pounds LCM. Trip back to bottom. Full return's. Cir hole 45 minutes. Rigged and L.D.D.P. & collars. Rigged and ran 2054' of 4 ½ casing with pack shoe. Tag bottom with casing. Picked casing up 4' off bottom. Rigged up cementers and cemented with 135 sacks cement. Job Complete.



**CONSOLIDATED**  
Oil Well Services, LLC

**ENTERED**

TICKET NUMBER 28867  
LOCATION Eureka  
FOREMAN Russell McCloy

PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676

**FIELD TICKET & TREATMENT REPORT**  
**CEMENT**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY																
6-26-2010	3451	Pieratt 3 HP				Coffey																
CUSTOMER Hans Petroleum L.L.C.			<table border="1"> <thead> <tr> <th>TRUCK #</th> <th>DRIVER</th> <th>TRUCK #</th> <th>DRIVER</th> </tr> </thead> <tbody> <tr> <td>445</td> <td>Justin</td> <td></td> <td></td> </tr> <tr> <td>515</td> <td>Jim</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				TRUCK #	DRIVER	TRUCK #	DRIVER	445	Justin			515	Jim						
TRUCK #	DRIVER	TRUCK #					DRIVER															
445	Justin																					
515	Jim																					
MAILING ADDRESS 800 West 47 <sup>th</sup> STE 409																						
CITY Kansas City	STATE MO	ZIP CODE 64112																				
SKYY Dring																						

JOB TYPE Surface 0 HOLE SIZE 12 1/4 HOLE DEPTH 44 CASING SIZE & WEIGHT 8 5/8  
 CASING DEPTH 41 DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER \_\_\_\_\_  
 SLURRY WEIGHT 15 # SLURRY VOL 8.5 Bbl WATER gal/sk 6.5 CEMENT LEFT IN CASING 10'  
 DISPLACEMENT 2 Bbl DISPLACEMENT PSI \_\_\_\_\_ MIX PSI \_\_\_\_\_ RATE \_\_\_\_\_  
 REMARKS: Safety meeting, Rig up to 8 5/8 casing, Break circulation w/ 5 Bbl water. Mix 35 sks Reg Cement 390 cc 2% Gel Displace w/ 2 Bbl water. Good cement Returns to surface. Close casing in. Job complete, tear down.

Thanks  
Russell McCloy

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
540/s	1	PUMP CHARGE	700.00	700.00
540/b	36	MILEAGE	3.55	126.50
1104 s	35 sks	CLASS A cement	13.10	458.50
1107	65 #	CAE 12 = 2%	.73	47.45
1118 A	65 #	Gel = 2%	.20	13.00
5407		Ton Mileage Bulk Truck	m/l	305.00
				1630.45
			SALES TAX	21.50
			ESTIMATED TOTAL	1651.95

Havin 9737

835040

AUTHORIZATION called by Ben Harrell TITLE Toot Pusher SKYY Dring DATE 6-26-2010

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.



**CONSOLIDATED**  
Oil Well Services, LLC

**ENTERED**

TICKET NUMBER 28896

LOCATION Eureka

FOREMAN Troy Strickler

PO Box 884, Chanute, KS 66720  
620-431-9210 or 800-467-8676

**FIELD TICKET & TREATMENT REPORT**  
**CEMENT**

DATE	CUSTOMER #	WELL NAME & NUMBER	SECTION	TOWNSHIP	RANGE	COUNTY
7-6-10	3451	Piratt 3-18				Coffey
CUSTOMER Hags Petroleum, LLC			TRUCK # DRIVER TRUCK # DRIVER			
MAILING ADDRESS 800 West 47 <sup>th</sup> Ste 409						
CITY Kansas City		STATE Mo	ZIP CODE 64112			

JOB TYPE L/S 0 HOLE SIZE 6 3/4" HOLE DEPTH 2060' CASING SIZE & WEIGHT 4 1/2" 9.5#  
 CASING DEPTH 2054' DRILL PIPE \_\_\_\_\_ TUBING \_\_\_\_\_ OTHER PRD-2044'  
 SLURRY WEIGHT 13.8# SLURRY VOL \_\_\_\_\_ WATER gal/sk 70 CEMENT LEFT in CASING 10'  
 DISPLACEMENT 33.18bl DISPLACEMENT PSI 300 MIX PSI 800 to 800 RATE \_\_\_\_\_

REMARKS: Safety meeting: Rig up to 4 1/2" casing. Break Circulation w/ 5RBbl Fresh water. Set Parker w/ 1200 PSI. Pump 5RBbl water. Mixed 135 sk, 60/40 Poz-mix Cement w/ 5# Kol-Seal, 4% Gel, 2% Cacl<sub>2</sub> + 1/2# Phenoseal 1sk @ 13.8# gal w/ out Pump + liner. Release Ply. Displace w/ 33.18bl Water. Final Pumping Program 300 PSI. Pump Ply to 800 PSI. Wait 2mng Release Pressure. Float Hold. Good Circulation @ all times. white Cementy.

Job Complete

ACCOUNT CODE	QUANTITY or UNITS	DESCRIPTION of SERVICES or PRODUCT	UNIT PRICE	TOTAL
5401	1	PUMP CHARGE	900.00	900.00
5406	30	MILEAGE	3.55	106.50
1131	135 SK	60/40 Poz-mix Cement	11.38	1532.25
1110A	675 #	5# 1sk Kol-Seal	.42 #	283.50
1118A	465 #	Gel 4%	.20 #	93.00
1102	115 #	Cacl <sub>2</sub> 2%	.75 #	86.25
1107A	68 #	Phenoseal 1/2# 1sk	1.15 #	78.20
5407		Ton-mileage	m/c	305.00
4251	1	Type A Parker shoe	1525.00	1525.00
4103	2	4 1/2" Cement Baskets	208.00	416.00
4404	1	4 1/2" Top Rubber Ply	45.00	45.00
4236	1	4 1/2" Baffle Plate	55.00	55.00
			Sub Total	5425.70
			SALES TAX	259.21
			ESTIMATED TOTAL	5684.91

Thank  
035113

Form 9797

AUTHORIZATION Witnessed by Gary Neal

TITLE Owner

DATE \_\_\_\_\_

I acknowledge that the payment terms, unless specifically amended in writing on the front of the form or in the customer's account records, at our office, and conditions of service on the back of this form are in effect for services identified on this form.

## Griffin Geological Resources, Inc.

David B. Griffin, RG, President  
1502 W. 27<sup>th</sup> Terrace  
Lawrence, Kansas 66046

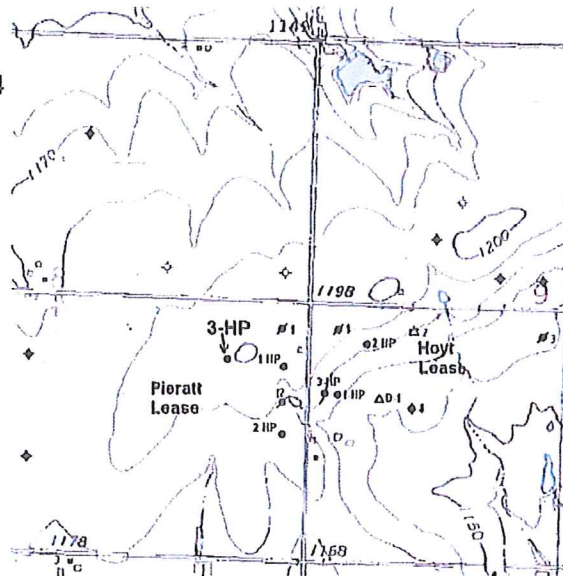
Ph. (785) 842-3665  
Cell (785) 766-0099  
Fax (785) 856-3935

July 8, 2010

### Geological Wellsite Report

Well: Pieratt 3-HP  
145' S and 35' W of SE NW NE SE4  
2000' fsl, 860' fel  
Section 8, T21S – R14E  
Coffey County, Kansas  
Lat: N38.234212  
Long: W-95.887364  
API: 15-031-22608-00-00  
Datum: KB 1205', (GL 1198')  
RTD: 2057.5', KB  
Field: Pieratt  
Status: 4½' Casing Set  
Pending Viola Open-Hole Test

Operator: Haas Petroleum, LLC  
800 W. 47<sup>th</sup> St, Suite 716  
Kansas City, MO 64112  
License: 33640  
Mark Haas, President



The following report on the subject well is based on microscopic examination of rotary drill cuttings from 1300' to 1348' and 1387' to 2057.5' and core from 1348' to 1387' below kelly bushing (KB) reached on July 5, 2010. This report includes a sample log with drilling and coring time, sample cuttings description, core descriptions and geological tops. The primary objective of Pieratt 3-HP is to evaluate and test the Viola Dolomite for oil production with a secondary objective to evaluate the oil potential of the Middle Squirrel Sandstone through core samples. Subsea corrected geological sample tops were based on a KB datum above sea level elevation of 1205', (GL 1198') obtained from a relative survey to a nearby road intersection.

Drilling Contr.: Sky Drilling, Rig #3  
Yates Center, Kansas, 66865  
KS Operator License No.: 33557  
Owner: Mark Haas  
Tool Pusher: Ben Harrell

Commenced Drlg: June 27, 2010, 12¼" Bit, Set ~40' of 8½" Surface Casing

Completed Drlg: July 5, 2010, Set and Cemented ~2054' of 4½" Production Casing

**Drilling Notes:** 4½" Drill Pipe, One 5-blade PDC Bit, from 40' to 1348',  
 One button bit from 1348' to 1767'  
 One button bit from 1767' to 2057.5' (RTD)

**Mud Program:** Native fresh water native mud to 1387'  
 Fresh water chemical gel mud from 1387' to RTD,

**Cement Co.:** Consolidated Oil Well Service Co., KS Operator License No.: 04996

**Geological Supervision:**  
 David Griffin, RG, President of GGR, Inc., provided wellsite supervision on June 29, 30, and July 1, 5, 2010. Samples and core examined from 1300' to 2057.5".

**Logs, Gas Detection, Cores, DST's:**  
 The Squirrel Sandstone was cored with a 40' core barrel from 1348' to 1387', KB. MP 2300 gas detection instrumentation was in use from 1308' to 1767'. No open-hole logs or drill stem tests were obtained for this well.

**Geological Datums:**

<b>Haas Petroleum, LLC Pieratt 3-HP SE NW NE SE4 Sec. 8-T21S-R14E</b>				<b>Struc.Comparison</b>			
				<b>Haas Petro., LLC Pieratt 1-HP N2 SE NE SE4 Sec. 8-T21S-R14E</b>		<b>Dunne Equittles Pieratt 1 NE NE SE4 Sec. 8-T21S-R14E</b>	
<b>Geological Tops</b>							
Zones of Interest	Sample Tops		STRC COMP	Sample Tops		Sample Tops	
	KB Elev 1205'			KB Elev 1202'		KB Elev 1203'	
	Depth	Subsea		Depth	Subsea	Depth	Subsea
Base Kansas City Group	1052	153	-1	1048	154	1061	142
Cherokee Group	1339	-134	+4	1340	-138	1342	-139
M. Squirrel SS	1353	-148	+6	1356	-154	1358	-155
Top of Moveable Oil	1353	-148	+9	1359	-157	na	
Base of Moveable Oil	1367	-162	+3	1367	-165	na	
Base SS	1387	-182	+3	1387	-185	na	
L. Squirrel SS,	1403	-198	+4	1404	-202	1408	-205
Base SS	1418	-213	+3	1418	-216	na	
"V"-Shale	1459	-254	-4	1452	-250	na	na
Mississippian	1706	-501	0	1703	-501	1713	-510
Osage Chert Zone	1781	-576	-11	1767	-565	1778	-575
Kinderhook Shale	1978	-773	-12	1963	-761	1970	-767
Viola Dol	2050	-845	-10	2037	-835	2044	-841
Total Depth	2057.5	-852.5		2039	-837	2051	-848

### Structural Comparisons:

Structural comparison of subsea sample tops for Pieratt 3-HP indicates that the Viola Dolomite is 10' low to Haas Petroleum, LLC, Pieratt 1-HP lying 560' to the east and 4' low to the Dunne Equities Pieratt 1 well lying to the northeast.

## Middle Squirrel Sandstone

### General Core Description of Sandstone

**1353' to 1367', KB, (14')**, Sandstone with siltstone interbeds, mostly dark brown to grayish-brown, very fine grained, sub-angular quartz, silty, micaceous, good oil stain, scattered (~20% of interval) bleeding oil in core, fair to good pay zone potential, abundant current ripple marks to massive bedding. Total gas readings peaked at 78 units, no gas bubbles observed. Gas readings subdued by smaller (4½") hole.

**1367' to 1387', KB, (20')**, Sandstone, brownish-gray to dark gray, very fine grained, silty, micaceous, fair residual oil stain, no bleeding in core, no potential for pay zone, current ripple marks to massive bedded.

### Detailed Core Description

**1348.0' to 1350.0', KB, (2.0')**

Siltstone, light gray, very fine grained sandy, micaceous, poor porosity, limey, no oil stain, massive to current rippled bedded, evidence of bimodal (tidal) current direction.

**1350.0' to 1353.0', KB, (3.0')**

Siltstone, light greenish-gray, shaley, micaceous, massive to current rippled bedded, calcareous.

**1353.0' to 1353.7', KB, (0.7')**

Sandstone, 60%, very dark brown to brown, very fine grained, silty, micaceous, good porosity, very good show of residual oil, good bleeding from unrinsed core, strong odor on fresh break, current ripple marks, calcareous; Shale laminations, 40%, light gray, silty, micaceous. **Top of moveable oil column, fair to good pay zone potential.**

**1353.7' to 1355.0', KB, (1.3')**

Siltstone, light gray, limey, poor porosity, no oil stain or bleeding, faint current ripple marks, micaceous.

**1355.0' to 1356.5', KB, (1.5')**

Sandstone, 50%, light brown to grayish-brown, very fine grained, silty, micaceous, fair porosity, strong odor on fresh break, fair show of residual oil, no bleeding on unrinsed core, current ripple marks; Siltstone and shale, 50%, light gray.

**1356.5' to 1359.2', KB, (2.7')**

Sandstone, 90%, brown to dark brown, very fine grained, silty, micaceous, good porosity, very good show of residual oil, 30% of interval has good bleeding of moveable oil on unrinsed core for a short time, current ripples; Shale laminations, 10%, light gray, silty, micaceous. *Moveable oil column, fair to good pay zone potential.*

**1359.2' to 1360.4', KB, (1.2')**

Sandstone, 80%, grayish-brown, very fine grained, silty, micaceous, fair porosity, good show of residual oil, no bleeding on unrinsed core, current ripples; Shale laminations, 20%, light gray, silty, micaceous.

**1360.4' to 1362.6', KB, (2.2')**

Sandstone, 90%, dark brown to grayish-brown, very fine grained, silty, micaceous, fair to good porosity, very good show of residual oil, no bleeding on unrinsed core, current ripples; Shale laminations, 10%, light gray, silty, micaceous.

**1362.6' to 1365.1', KB, (2.5')**

Sandstone, 95%, dark brown to very dark brown, very fine grained, silty, micaceous, mostly good porosity, very good show of residual oil, 20% of interval has fair to good bleeding of moveable oil on unrinsed core for a short time, current ripples; Shale laminations, 5%, light gray, silty, micaceous. *Moveable oil column, fair to good pay zone potential.*

**1365.1' to 1365.2', KB, (0.1')**

Shale, gray, silty, micaceous, horizontal laminae, mud drape.

**1365.2' to 1366.8', KB, (1.6')**

Sandstone, 80%, dark brown to grayish-brown, very fine grained, silty, micaceous, fair to good porosity, good show of residual oil, 25% of interval has fair to good bleeding of moveable oil on unrinsed core for a short time, current ripples to massive bedded; Shale laminations, 20%, light gray, silty, micaceous. *Bottom of moveable oil column, fair to good pay zone potential.*

**1366.8' to 1366.9', KB, (0.1')**

Shale, gray, silty, micaceous, horizontal laminae, mud drape.

**1366.9' to 1368.0', KB, (1.1')**

Sandstone, 70%, dark grayish-brown, very fine grained, silty, micaceous, fair to good porosity, good show of residual oil, no bleeding on unrinsed core, horizontal laminations; Shale laminations, 30%, gray, silty, micaceous.

**1368.0' to 1370.3', KB, (2.3')**

Sandstone, 98%, grayish-brown, very fine grained, silty, micaceous, fair to good porosity, fair to good show of residual oil, no bleeding on unrinsed core, current ripples; Shale, 2%, gray, silty, micaceous.

**1370.3' to 1387.0', KB, (16.7')**

Sandstone, 98%, brownish-gray, very fine grained, silty, micaceous, fair to good porosity, fair show of residual oil, no bleeding on unrinsed core, mostly massive bedded; Shale, 2%, gray, silty, micaceous.

## Lower Squirrel Sandstone

### Sample Descriptions

**1403' to 1407', KB, (4')**

Sandstone, 80%, dark gray, very fine grained, sub-angular quartz, micaceous and carbonaceous, good porosity, good odor, very good show of free dark brown heavy oil rinses from samples and bleeds in sample bag, (~20 to 22 gravity), oil breaks out of samples readily; Shale, 20%, silty, sandy, micaceous and carbonaceous. Total gas readings peaked at 141 units, no gas bubbles observed. **Fair to good potential as oil pay zone.**

**1407' to 1412', KB, (5')**

Sandstone, 80%, dark gray, very fine to fine grained, sub-angular quartz, fair to good porosity, fair odor, good to very good show of heavy oil and tar, good bleeding, micaceous and carbonaceous; Shale, 20%, gray, silty, abundant mica and carbon. **Fair potential as pay zone.**

**1412' to 1417', KB, (5')**

Sandstone, 60%, dark gray, very fine to fine grained, sub-angular quartz, fair to good porosity, fair odor, fair show of heavy oil and tar, slight bleeding, abundant mica and carbon; Shale, 40%, gray, silty, abundant mica and carbon.

## Viola Dolomite

### Sample Description

**2050' to 2054', KB, (4')**

Dolomite, off-white, medium to coarse crystalline, slightly sandy with 1% to 2% fine grain sub-rounded quartz, mostly poor porosity, no oil stain or odor; Sample contains shale (Kinderhook), dark gray to very dark brownish-gray, very fine mica, algal platelets, strong organic hydrocarbon-like odor. **Top of Viola cap rock, 2050'.**

**2054' to 2056', KB, (2')**

Dolomite, mostly off-white, 10% with good show of brown oil, coarse crystalline, some crystals faces have a slight curvature possibly from relic fossils, good intercrystalline porosity similar to fracture porosity, poor vugular porosity, fair oil odor, the porous fraction exhibits a good show of free brown oil that breaks out when crushed, oil droplets in cuttings are not well connected, trace amount of oil rinses from samples and bleeds in sample bag, good show of "frogeyes" of heavy oil breaking out on the surface of the pit that does not abate. Lost 1 to 2 feet of drilling mud from pit. **Good pay zone potential.**



**2056' to 2057.5', KB (RTD), (1.5')**

Dolomite, mostly off-white, drills quicker than above interval, good porosity, 5% of dolomite has good show of brown oil that breaks out when crushed and good show on pit, similar to that in above sample description, lost circulation, driller states that sample returns were poor, not enough mud in pit to get good samples to surface. **Good pay zone potential.**

**Summary:**

The Middle Squirrel Sandstone was cored from 1348' to 1387' with full recovery. The Middle Squirrel SS was present from 1353' (-148) to 1367', (-162), (34' thick) and contained scattered (~15% of interval) bleeding oil in the core from 1353' to 1367' with the best zones from approximately 1353' to 1354', 1357' to 59', 1363' to 1366', KB. The Middle Squirrel SS exhibited fair to good porosity and has fair to good pay zone potential. The Lower Squirrel Sandstone was present from 1403' (-197) to 1417', KB, (14' thick) and contained good to very good show of moveable free heavy oil from 1403' to 1412', KB. It exhibited good porosity and also has fair to good potential as pay zone, however, the oil appears heavier the Middle Squirrel.

The Viola Dolomite was present from 2050' (-845') to 2057.5' (-852.5'), KB. Good porosity was exhibited from 2054' to 2057.5', which contained a good show of oil that breaks out of the samples when crushed and continually produces "frogeyes" of oil breaking out on the surface of the pit. This zone took over two feet of drilling mud from the suction pit.

Production casing was set to a depth of ~2054' to test the Viola Dolomite through open-hole completion.

**Recommendations:**

The float shoe should be milled and the well cleaned out to RTD using a power swivel. It should then be evaluated for fluid volume and oil cut by swabbing. Much drilling mud was lost in the open hole portion (2054' to 2057.5') therefore, it is recommended that as much drilling mud as possible be removed by swabbing. The open hole should be stimulated with a proportionate treating quantity of mud acid to facilitate removal of the drilling mud. HCL acid treatment may be needed to further stimulate the well.

**Respectfully Submitted,**



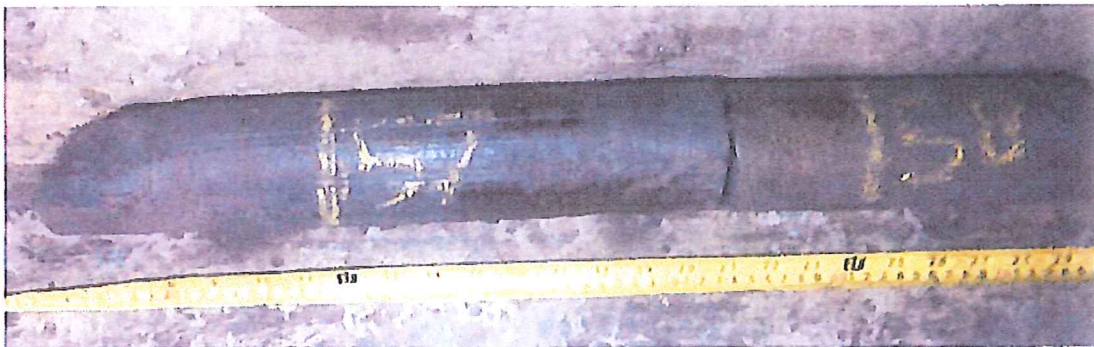
David B. Griffin, Licensed RG, President  
Griffin Geological Resources, Inc.

Attachments: Sample Log with Drilling Time, Photograph Log

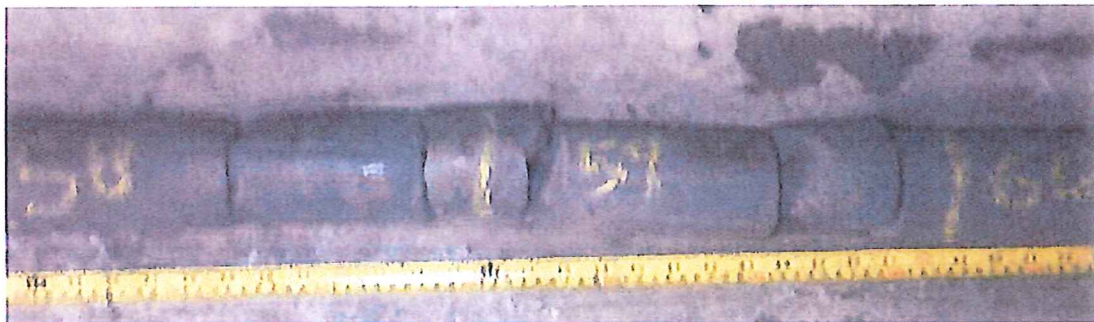
## Photograph Log



Middle Squirrel Sandstone, 1351.9' to 1354.1', Unrinsed Core



Middle Squirrel Sandstone, 1356.5' to 1358.4', Unrinsed Core

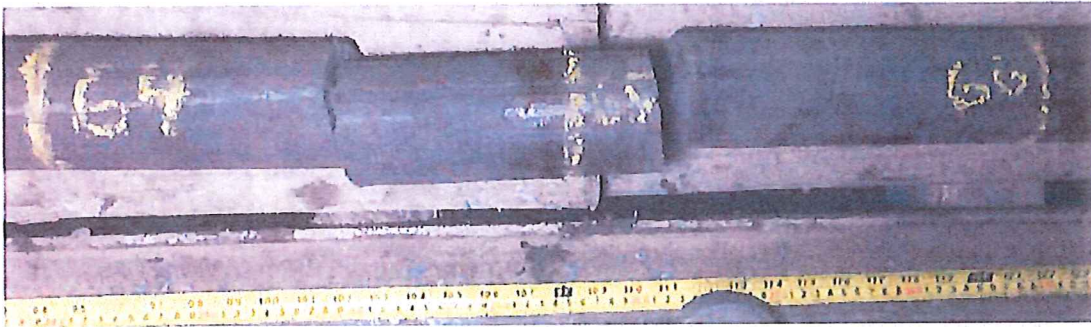


Middle Squirrel Sandstone, 1358' to 1360.3', Unrinsed Core

## Photograph Log



Middle Squirrel Sandstone, 1362' to 1364.3', Unrinsed Core



Middle Squirrel Sandstone, 1363.9' to 1366.2', Unrinsed Core



Middle Squirrel Sandstone, 1365.7' to 1368.3', Unrinsed Core

## Photograph Log



Middle Squirrel Sandstone, 1353' to 1370', Rinsed and Dried Core



Middle Squirrel Sandstone, 1358.5' to 1382', Rinsed and Dried Core.

Depth	Lithology	Shows	By David Griffin, RG, Lawrence, KS		Well No: <i>Pieratt 3-HP</i>	Pg. 2 of 4	
			Penetration Rate		Total Gas	Location: <i>145°S+36'W of FERRINGSEY</i>	Datum/Elev.
			Min/Foot	Units	2000' tel, 800' tel, sec 8-T215-R14 E	KB 1205'	
					Sample Descriptions	Top/Remarks	
1550					Sh, g y to vdk gy		
63070 1010P					sh, tsf, lth-gy, min mar, siderite		
					sh, vari-col, lth-gy, tan, vltgy, dkgy, mar		
					sh, vdkgy, silty		
					sh, tan, lth-gy, bk		
					sh, vari-col, mst lth-gy		
1600					sh, vdkgy, min gy + vltgy		
					sh, tan, vltgy, g y		
					sh, vari-col, also mar, red-bed		
					sh, tan, vltgy, gy, vdkgy		
1650					sh, vdkgy, min tan, vltgy		
					sh, bk to vltgy, tan, silty, mixed		
					coal		
					sh, AA		
					coal		
					sh, tan, min bk		
					coal		
1700					coal		
					LS, lthgy, mxh, int bld/dol, lthgy, pr φ, NS	Top Miss Lime 1706 (-501)	
					cht, t <sub>1</sub>		
					LS + dol, 20% cht, pr φ, NS		
					Dol, lth bnto tan, v x ln, pr φ, NS, cht 20%		
					pr φ, trp, wh lthgy, chl, sh, 20% tan		
					LS, gy-tan, f x ln, dol, NS, min dol AA		
					cht 20%		
					LS, AA, 10% s lth, sdg, 10% chl, sh-gy, vltgy		
					cht 15%		
1750					LS, tan-gy, f-cs x ln, NS		
					AA		
					LS, tan, g y, m-cs x ln, pr φ, cht 10%	Bit Trip 1767'	
7-1-10					NO		
					SAT		
					Detection		
					cht, 60%, wh lth, trp	Osage Chert 1781 (-576)	
					Dol, tan, f x ln, sdg, x + v φ, NS		
					cht 20%, Dol 30% AA		
1800							

Depth	Lithology	Shows	By David Griffin, RG, Lawrence, KS			Well No: <i>Pigraff 3-HP</i>	Pg. 1 of 4
			Penetration Rate		Total Gas	Location: <i>N45°35'W SE 1/4 NW 35°E, 2000' E 1/2, 860' E 1/2, sec 8-T21S-R14E</i>	Datum/Elev. <i>KB 1205'</i>
			Min./Foot	150	Units	Sample Descriptions	Tops/Remarks
1300 6-29-10 1630P			0 5 10 15 0	60 100 150	<i>Oper: Haas Petro, LLC</i> <i>Contr: Skayy Drilling, LLC</i> <i>API No: 15-031-22608</i> <i>6 3/4" 5-Blade PDC</i> <i>Fresh Water Native Mud for coring</i>		
1350					<i>sh, dk gy</i> <i>LS, lt gnish-gg, silty, dns</i> <i>sh, bk</i> <i>LS, tan-gy</i> <i>sh, bn-blk</i> <i>sh, dk gy, bn, v fcdy, clayey, mat, prop fr all stn, no odor</i> <i>Core Desc. (1348-1387')</i> <i>1348-1363': ss, lt gy to sh-gy, lmb, mlt, rip, ns, cur, rip, no muss.</i> <i>1353-1358': ss, dk bn, v fgn, silty, v 650</i> <i>1353-1355': ss, dk bn, v fgn, silty, v 650</i> <i>1355-1356': ss, dk bn, v fgn, silty, v 650</i> <i>1355-1356': ss, dk bn, v fgn, silty, v 650</i> <i>1356-1359': ss, dk bn, v fgn, silty, v 650</i> <i>1359-1360': ss, dk bn, v fgn, silty, v 650</i> <i>1360-1362': ss, dk bn, v fgn, silty, v 650</i> <i>1362-1364': ss, dk bn, v fgn, silty, v 650</i> <i>1364-1366': ss, dk bn, v fgn, silty, v 650</i> <i>1366-1368': ss, dk bn, v fgn, silty, v 650</i> <i>1368-1370': ss, dk bn, v fgn, silty, v 650</i> <i>1370-1372': ss, dk bn, v fgn, silty, v 650</i> <i>1372-1374': ss, dk bn, v fgn, silty, v 650</i> <i>1374-1376': ss, dk bn, v fgn, silty, v 650</i> <i>1376-1378': ss, dk bn, v fgn, silty, v 650</i> <i>1378-1380': ss, dk bn, v fgn, silty, v 650</i> <i>1380-1382': ss, dk bn, v fgn, silty, v 650</i> <i>1382-1384': ss, dk bn, v fgn, silty, v 650</i> <i>1384-1386': ss, dk bn, v fgn, silty, v 650</i> <i>1386-1387': ss, dk bn, v fgn, silty, v 650</i>	<i>Cherokee</i> <i>1339(-134)</i> <i>Mid Squirrel SS</i> <i>1363(-148)</i> <i>34' thick</i> <i>15% Bleeding</i> <i>1353-1367'</i>	
6-29-10 6-30-10					<i>1367-1368': ss, dk bn, v fgn, silty, v 650</i> <i>1368-1370': ss, dk bn, v fgn, silty, v 650</i> <i>1370-1372': ss, dk bn, v fgn, silty, v 650</i> <i>1372-1374': ss, dk bn, v fgn, silty, v 650</i> <i>1374-1376': ss, dk bn, v fgn, silty, v 650</i> <i>1376-1378': ss, dk bn, v fgn, silty, v 650</i> <i>1378-1380': ss, dk bn, v fgn, silty, v 650</i> <i>1380-1382': ss, dk bn, v fgn, silty, v 650</i> <i>1382-1384': ss, dk bn, v fgn, silty, v 650</i> <i>1384-1386': ss, dk bn, v fgn, silty, v 650</i> <i>1386-1387': ss, dk bn, v fgn, silty, v 650</i>	<i>Base SS</i> <i>1387(-182)</i>	
1400					<i>1387-1388': ss, dk bn, v fgn, silty, v 650</i> <i>1388-1390': ss, dk bn, v fgn, silty, v 650</i> <i>1390-1392': ss, dk bn, v fgn, silty, v 650</i> <i>1392-1394': ss, dk bn, v fgn, silty, v 650</i> <i>1394-1396': ss, dk bn, v fgn, silty, v 650</i> <i>1396-1398': ss, dk bn, v fgn, silty, v 650</i> <i>1398-1400': ss, dk bn, v fgn, silty, v 650</i>	<i>L. Squirrel SS</i> <i>1403(-198)</i> <i>15' thick</i> <i>Base SS</i> <i>1418(-213)</i>	
1450					<i>1400-1402': ss, dk bn, v fgn, silty, v 650</i> <i>1402-1404': ss, dk bn, v fgn, silty, v 650</i> <i>1404-1406': ss, dk bn, v fgn, silty, v 650</i> <i>1406-1408': ss, dk bn, v fgn, silty, v 650</i> <i>1408-1410': ss, dk bn, v fgn, silty, v 650</i> <i>1410-1412': ss, dk bn, v fgn, silty, v 650</i> <i>1412-1414': ss, dk bn, v fgn, silty, v 650</i> <i>1414-1416': ss, dk bn, v fgn, silty, v 650</i> <i>1416-1418': ss, dk bn, v fgn, silty, v 650</i> <i>1418-1420': ss, dk bn, v fgn, silty, v 650</i> <i>1420-1422': ss, dk bn, v fgn, silty, v 650</i> <i>1422-1424': ss, dk bn, v fgn, silty, v 650</i> <i>1424-1426': ss, dk bn, v fgn, silty, v 650</i> <i>1426-1428': ss, dk bn, v fgn, silty, v 650</i> <i>1428-1430': ss, dk bn, v fgn, silty, v 650</i> <i>1430-1432': ss, dk bn, v fgn, silty, v 650</i> <i>1432-1434': ss, dk bn, v fgn, silty, v 650</i> <i>1434-1436': ss, dk bn, v fgn, silty, v 650</i> <i>1436-1438': ss, dk bn, v fgn, silty, v 650</i> <i>1438-1440': ss, dk bn, v fgn, silty, v 650</i> <i>1440-1442': ss, dk bn, v fgn, silty, v 650</i> <i>1442-1444': ss, dk bn, v fgn, silty, v 650</i> <i>1444-1446': ss, dk bn, v fgn, silty, v 650</i> <i>1446-1448': ss, dk bn, v fgn, silty, v 650</i> <i>1448-1450': ss, dk bn, v fgn, silty, v 650</i>	<i>1459(-254)</i> <i>"V"-shale Marker</i>	
1500					<i>1450-1452': ss, dk bn, v fgn, silty, v 650</i> <i>1452-1454': ss, dk bn, v fgn, silty, v 650</i> <i>1454-1456': ss, dk bn, v fgn, silty, v 650</i> <i>1456-1458': ss, dk bn, v fgn, silty, v 650</i> <i>1458-1460': ss, dk bn, v fgn, silty, v 650</i> <i>1460-1462': ss, dk bn, v fgn, silty, v 650</i> <i>1462-1464': ss, dk bn, v fgn, silty, v 650</i> <i>1464-1466': ss, dk bn, v fgn, silty, v 650</i> <i>1466-1468': ss, dk bn, v fgn, silty, v 650</i> <i>1468-1470': ss, dk bn, v fgn, silty, v 650</i> <i>1470-1472': ss, dk bn, v fgn, silty, v 650</i> <i>1472-1474': ss, dk bn, v fgn, silty, v 650</i> <i>1474-1476': ss, dk bn, v fgn, silty, v 650</i> <i>1476-1478': ss, dk bn, v fgn, silty, v 650</i> <i>1478-1480': ss, dk bn, v fgn, silty, v 650</i> <i>1480-1482': ss, dk bn, v fgn, silty, v 650</i> <i>1482-1484': ss, dk bn, v fgn, silty, v 650</i> <i>1484-1486': ss, dk bn, v fgn, silty, v 650</i> <i>1486-1488': ss, dk bn, v fgn, silty, v 650</i> <i>1488-1490': ss, dk bn, v fgn, silty, v 650</i> <i>1490-1492': ss, dk bn, v fgn, silty, v 650</i> <i>1492-1494': ss, dk bn, v fgn, silty, v 650</i> <i>1494-1496': ss, dk bn, v fgn, silty, v 650</i> <i>1496-1498': ss, dk bn, v fgn, silty, v 650</i> <i>1498-1500': ss, dk bn, v fgn, silty, v 650</i>		
6-30-10 10PM 1550					<i>1500-1502': ss, dk bn, v fgn, silty, v 650</i> <i>1502-1504': ss, dk bn, v fgn, silty, v 650</i> <i>1504-1506': ss, dk bn, v fgn, silty, v 650</i> <i>1506-1508': ss, dk bn, v fgn, silty, v 650</i> <i>1508-1510': ss, dk bn, v fgn, silty, v 650</i> <i>1510-1512': ss, dk bn, v fgn, silty, v 650</i> <i>1512-1514': ss, dk bn, v fgn, silty, v 650</i> <i>1514-1516': ss, dk bn, v fgn, silty, v 650</i> <i>1516-1518': ss, dk bn, v fgn, silty, v 650</i> <i>1518-1520': ss, dk bn, v fgn, silty, v 650</i> <i>1520-1522': ss, dk bn, v fgn, silty, v 650</i> <i>1522-1524': ss, dk bn, v fgn, silty, v 650</i> <i>1524-1526': ss, dk bn, v fgn, silty, v 650</i> <i>1526-1528': ss, dk bn, v fgn, silty, v 650</i> <i>1528-1530': ss, dk bn, v fgn, silty, v 650</i>		



Depth	Lithology	Shows	By David Griffin, RG, Lawrence, KS				Well No: Dieruff 3-HP		Pg. 4 of 4			
			Penetration Rate Min./Foot		Total Gas Units		Location: 145° S + 36° W of SENNAWESSEY 2000' x 1, 800' x 1, sec. 8 - T21S - R. 14E		Datum/Elev. KB 1205'			
			0	5	10	15	0	50	100	150	Sample Descriptions	Top/Remarks
2050		2054	1-2% oil		1-2% oil						2050-2054'	Viola
7-5-10				1-2% oil		1-2% oil						Dol, off-wh, m-ds xln, prod, HS 1-2% oil, f. yu
			1-2% oil		1-2% oil						2054-2056'	Total Depth
			1-2% oil		1-2% oil						Dol, AA and 100% Dol, ss ES xln, large dol xlns, some kls facs curved, poss remnant fossils gd show bn oil between kls similar to fracture system, path lge blobs of oil breaking out on pit, 10st 18" d rig mud	2057.5 (-852.5)
			1-2% oil		1-2% oil						2056-2057.5'	
			1-2% oil		1-2% oil						Dol, AA, ~5% of sample has fr-gd show bn oil that breaks out only when crushed, no bleeding in bag, continues to put large blobs of oil on pit - 10st circulation, no mud fall to KC, shut down 7-6-10 - Mix mud, can not get good circulation, Not open-hole logged Set casing to ~2054' KB	