STATE CORPORATION COMMISSION OF KANSAS OIL & GAS CONSERVATION DIVISION	API NO. 15191-21.998 - 0000
	CountySummer.
WELL COMPLETION OR RECOMPLETION FORM ACO-1 WELL HISTORY	NE. NE. NE. Sec. 9 Twp34S.Rge.l West
DESCRIPTION OF WELL AND LEASE	
Operator: License # .3421	(Note: Locate well in section plat below)
Name Simmons Fnergy Corporation Address 6464 South Quebec Englewood, Colorado 80111	Lease Name. WAICHER. Well # 1
City/State/Zip	Fleid Name
PurchaserN/A	Producing FormationN/A
Towns Simmons	Elevation: Ground. 1170'KB. 1175.
Operator Contact Person Jerry Simmons	Section Plat
5840	5280 4950
Contractor:License #	4620
NamePAGVAG.YFAFFHIG.SKG.AVY	3960
Wellsite Geologist Ray. Wermeyer	3630
Phone303/771-6364	2970 2640
	2310
Designate Type of Completion	1980
New Well Re-Entry Workover	1320
OII SWD Temp Abd	990
Gas Inj Delayed Comp.	330
☑ Dry Other (Core, Water Supply etc.)	5280 4950 3950 3300 3300 2970 2970 2970 1980 1980 3300 3300 3300 3300 3300 3300 3300 3
If OWWO: old well info as follows:	WATER SUPPLY INFORMATION
Well Name	Disposition of Produced Water: Disposal
Comp. DateOld Total Depth	Docket # Repressuring
WELL HISTORY Drilling Method:	Questions on this portion of the ACO-1 call: Water Resources Board (913) 296-3717
X Mud Rotary Air Rotary Cable	Source of Water:
6-24-87 7-5-87 7-6-87	Division of Water Resources Permit #
Spud Date Date Reached TD Completion Date	GroundwaterFt North from Southeast Corner (Well)Ft West from Southeast Corner of
4475	Sec Twp Rge East West
Total Depth PBTD	
384' Amount of Surface Pipe Set and Cemented atfeet	Surface WaterFt North from Southeast Corner (Stream,pond etc)Ft West from Southeast Corner
Multiple Stage Cementing Collar Used? Yes No	Sec Twp Rge East West
If yes, show depth setfeet	
If alternate 2 completion, cement circulated from	(purchased from nearby pond
	iplicate MXXXX and filed with the Kansas Corporation Commission,
: () 특별 사내님에 하면 있었다면 얼굴에 되었다면 하는 이 전 이 이 이 사람이 없어요? () 사람이 사람이 사람이 있어요? () 사람이 사람이 사람이 사람이 사람이 가장 아니다. 그렇게 다른	2, within 90 days after completion or recompletion of any
well. Rule 82-3-130 and 82-3-107 apply.	Control of the second s
	eld confidential for a period of 12 months if requested
In writing and submitted with the form. See rule 82	og shall be attached with this form. Submit CP-4 form with
all plugged wells. Submit CP-111 form with all temp	[조진 - 기계
All requirements of the statutes, rules and regulation	
been fully complited with and the statements herein ar	ons promulgated to regulate the oil and gas industry have
	re complete and correct to the best of my knowledge.
Signature The State of the Signature of	Complete and correct to the best of my knowledge. K.C.C. OFFICE USE ONLY
Signal dip	re complete and correct to the best of my knowledge.
Title Date	K.C.C. OFFICE USE ONLY K.C.C. OFFICE USE ONLY C Wireline Log Received C Drillers Timelog Received E
Title Date	K.C.C. OFFICE USE ONLY K.C.C. OFFICE USE ONLY C Wireline Log Received C Drillers Timelog Received E
Subscribed and sworn to before me thisday of.	K.C.C. OFFICE USE ONLY K.C.C. OFFICE USE ONLY C Wireline Log Received C Drillers Timelog Received E
Subscribed and sworn to before me thisday of.	K.C.C. OFFICE USE ONLY K.C.C. OFFICE USE ONLY C Wireline Log Received C Drillers Timelog Received E
Title Date	K.C.C. OFFICE USE ONLY K.C.C. OFFICE USE ONLY C C Wireline Log Received C Drillers Timelog Received C Distribution KCC SWD/Rep NGPA KGS Plug Other
Subscribed and sworn to before me thisday of.	K.C.C. OFFICE USE ONLY K.C.C. OFFICE USE ONLY C C Wireline Log Received C Drillers Timelog Received C Distribution KCC SWD/Rep NGPA KGS Plug Other

JUL 27 1987

Operator NameSimm	nons Ene	rgy Corpora	ation L	ease Name	WALCHER	• • • • • • • •	Well #	1
Sec. 9 Twp34	45 Rge	.1	East West C	ounty	Sumner		•••••	
			WELL LOG					
INSTRUCTIONS: Show in tests giving interv pressure reached sta if gas to surface dur	al tested atic level	, time tool , hydrostatic	open and clos	ed, flowing tom hole tem	g and shut- perature, f	in pressu Iuld reco	res, whet very, and	her shut-li
Duitt Stan Tasta	Takan		Yee Div		F	01		
Drill Stem Tests Samples Sent to			Yes No		Log	on Descri	Sample	
Cores Taken			Yes No	N	ame		Тор	Bottom
				į				
				4				
		CASING R	The second	Used				
Көрс	OFT ALL ST		ductor, surface	, intermedia	te, product	ion, etc.	Type an	d
Purpose of String S	Size Hole Drilled	Size Casin		Setting Depth	Type of Cement	#Sacks Used	Percen	
Surface	.124			İ				AWAE .
			20.8.23#				2% ge	
					•••••			•••••
PERFO Shots Per Foot Speci	ORATION REC		erval Perforated	Acid, Frac	ture, Shot	Cement :	Squeeze R	ecord Depth
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	••••••	• • • • • • • • • • • • • • • • • • • •	••••••		•••••	•••••		
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TUBING RECORD Siz	:е	Set At	Packer at	Liner Rur	Yes	No		
Date of First Product	ion Produ	ucing Method	Flowing Pum	nping [] Gas	Lift 🔲 Ott	ner (expla	in)	
		011	Gas	Wate	er Ga	s-0il Rat	io	Gravity
Estimated Production	<u>,</u>							
Per 24 Hours	•	0.4			01.1			
		Bbls	MCF		Bbis		FPB	
		METI	HOD OF COMPLETIO	N		Proc	luction l	nterval
Disposition of gas:	Vented Sold	Lana	Open Hole Other (Spe	Perfor		• ***		1977 1908/1981
	Used on	rease		ally Complet	ed		•(11.)7	
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							421	
						74,	Pringing	

30	TNO

1	Operator Name	Simmons	nergy	Corpora	tic	n Lea	se Nainui	WALCHER	*******	Well	<i></i>
	Sec. 9 Tv	,, 34S	Rge	•••••	区 区 (文) W	Cast West Cou	inty	Sumer	•••••	· • • • •	••••••
						WELL LOG	·				
	instructions: Stests giving I pressure reach if gas to surface	nterval te ed static i	isted, ' level, h	time tool ydrostmtic	ope ope	en and close essures, botto	d, flowing m hole temp	and shut- erature, f	in pressur Iuld recov	os, wi	həther shut
	Samples Sea	Tests Taker nt to Geolog		7—:	í es	No		Formatio	on Descrip	oficn Sample	
DSTN	Cores Takei			<u>ر</u> ر	(es	Ø No	 N=	ime	,	[an	Bottom
M	. //\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	,15,30,60	,120	101 Mar	'T\ D	oo 15' @M				(OP	80110m 2508
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120'	FSIP=1682	FHP=195	6.				Layton		3	280	3292
_,		·.					KC			346	3554
DSTA	. 4050'-4120.	straddle.	15",3	30'',60'',3	120'	',	i BCK Marmato	n		554 622	3710
TUD.	.2072 TEP=102	-153. ISI	Y=1/82	、・ドアピーエフ、	3-2 2	24	Cheroke		3	768	3778
FSI	?=1802,FHP=20	52. Rec 2	.40' GM	1,180. G	M.		Miss	مماد		004 349	4349 4382
CL'4	vtr=22000ppm.						Kinderh Woodfor			382	4412
50	e attach	ment i	Da.oe	٩			Simpsor		۷	412	4475
		Report a		CASING F		RD X New	Used Intermediate	te product	·		
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	Purpose of Str	~ ;	,	Size Casir		Weight	Setting	Type of	#Sacks		cent
		Drii 	led (S	J.O ni) te	3.3	Lbs/Ft.	Depth	Cement	Used	Addi	tives
	Surface	124		8-578	••••	20.8.23#	384!	.60-40Po	210	38	CaCI
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								*********	• • • • • • • 	• • • • • • 	•••••
	Shots Per Foot	PERFORATIO					Acid, Frac	ture, Shot	Cement :	Squeez	e Record
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	TUBING RECORD	Size	Se	t At	Pac	cker at	Liner Run	F=1.0			
							Liner Rur	Ye:	s No		
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	Estimated Produ	iction 🕍									ļ
	Per 24 Hours	7		į		į					
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		(MET	HOD	OF COMPLETION			Proc	fuction	n Intervot
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		Sol	d			_ Open Hole _ Other (Spec	rertor (lfy:	at 10/1			
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UNLAGGED

SAMPLE DESCRIPTIONS

DEPTH	FURMATION	DESCRIPTION
2450-2460'		Shale, medium to dark gray, blocky, inpart subsplintery, dolomitic to slightly calcareous, pyritic. Limestone, off white to very light gray, some buff, micro-crypto-crystalline, moderately hard trace fossil debris, dense, nil porosity,
2460-2500*		Shale medium gray, blocky, slightly calcareous, pyritic, minor inclusions anhydrite.
2500-2520*		Shale, medium gray, blocky, slightly calcareous. Limestone, off white, very light gray, some buff, tan, exypto-crystalline, moderately hard, dense.
2520-2530'		Shale, medium gray as above. Limestone, as above, decreasing. Shale, trace, black, fissile.
2530-255 0 °	HEEBNER	Shale, medium gray, as above. Limestone, as above, trace fossils. Shale, black, carbonaceous, sft.
2550-2560'		Shale, medium, blocky, slightly calcareous. Limestone, off white (increasing), cryptocrystalline, moderately hard, dense. Shale, brownish red, silty, firm, blocky.
2560-2580*		Snale, medium gray, decreasing, as above. Limestone, off white, very light gray, some buff, tan, crypto-crystalline, moderately hard, dense. Shale, red, blocky to nacky, moderately hard.
2580 - 2600 •		Limestone, off white, very light gray, buff, crypto-crystalline, firm to moderately hard, dense. Shale, gray as above. Shale, red, as above.
2600-2660•	Amazonia Ls.	Limestone, off white, cream, inpart fossiliferous, moderately hard, micro-crystalline. Shale, gray, red, firm, inpart silty, blocky.
2660-2700		Shale, gray, soft to firm, non-calcareous, blocky. Shale, red, firm, blocky. Shale, greenish gray, firm blocky.
2700-2760		Sand, white, fine grain, angular to subangular, moderately well sorted, calcareous, friable, poor to fair porosity, no show. Shale, gray, as above. STATE CORPORATION COMMISSION Shale, red, as above. AUG 2 6 1987

2760-2780' Limestone, buff, some cream, crypto-crystalline, pelletoidal, fossiliferous, moderately hard. dense, nil porosity. Shale, gray to dark gray, firm, inpart moderately hard, blocky, pyritic. 2780-28701 Shale, gray, inpart silty, inpart slightly calcareous, soft to firm, inpart moderately hard, blocky. 2870-29001 Sand, very light gray to white, fine grain, some medium grains, subangular to subround, moderately well sorted, moderately well cemented, calcareous, tite, no show. Shale, gray, as above. 2900-2908 Stalnaker Circulated Out 10 minutes τo

30 minutes

2908-30201

3020-3230'

3230~3240'

1240-32901

3290-3360' LAYTON

Sand, very light gray to white, fine grain, subangular to subround, moderately well sorted, becoming very fine to fine grain, friable, inpart with fine carbonaceous specks, poor porosity, now show. Shale, gray, inpart very silty, soft to firm, blocky, slightly calcareous.

Sand, very light gray to white as above, becoming fine to medium downward, rare very fine to silt size, moderately sorted, moderately cemented, friable, calcareous.

Shale, medium gray, inpart silty, soft to firm.

Shale(trace), very dark gray to black, subsplintery, firm to moderately hard.

Shale, medium to dark gray, blocky, moderately compacted, inpart subsplintery, brittle, locally grades to siltstone, firm.
Shale, (rare), gray green, blocky, firm.

Shale, medium to dark gray, as above. Shale, (trace), black, carbonaceous, soft. Chert, brown, conchoidal fracture, hacky, hard.

Shale, medium to dark gray, as above. Shale, red brown, hacky, soft to hard. Shale, brown, angular, soft to firm. Shale, black carbonaceous, soft to firm.

Sand, white, fine to medium grain, some very fine, subangular to subround, fair sorting, moderately cemented to friable, calcareous, rare glauconite, vey poor porosity, no show. Sand, white to very light gray, very fine to fine grain, some medium grains, generally as above, NAMISSION tite, no show, inpart grades to siltstone.

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Shale, light to medium gray, silty, slightly calcareous, inpart salt and pepper. Shale, (locally), black, firm, blocky, silty, carbonaceous. Limestone, very light gray to buff, inpart very finely sandy, dense, poor porosity, no show.

3360-3430' KANSAS CITY

Limestone, buff to tan, inpart pelletoidal, inpart chalky, moderately hard to hard, dense. Limestone, brown to buff, crypto-crystalline, moderately hard to hard, dense. Limestone, very light gray, inpart chalky, pelletoidal, rare micro-fossils, moderately hard. Shale, medium to dark gray rarely black, soft to firm, blocky.

3430-34701

Shale, medium to dark gray, moderately hard, moderately compacted, blocky. Limestone, buff to tan, pelletoidal, hard, dense.

3470-34901

Limestone, light gray to gray, subchalky, firm to moderately hard, dense. Limestone, buff to tan, as above. Shale, medium to dark gray, moderately compacted, blocky. Shale, red brown & green mottled, hacky, blocky, moderately hard.

3490-35001

Shale, medium gray, moderately compacted, firm to moderately hard, slightly carbonaceous. Shale, brownish gray, subsplintery, well compacted, hard. Sand (trace), very light gray, fine grain, moderately well to well sorted, calcareous, scattered very fine black inclusions, mil porosity.

3500-35201

Limestone, buff to light gray, some brownish gray, inpart pelletoidal, micro-crystalline, dense, hard. Shale, medium gray, firm, blocky, poor to moderately compacted. Shale, brownish red to red, moderately well compacted.

3520-35301

Limestone, light gray, buff, tan generally as above. Limestone, very light gray, pelletoidal to oolitic, moderately hard, poor to fair porosity.

3530-3570' BASE KANSAS CITY

Llimestone, buff to very light brown, some tan, crypto-crystalline, inpart pelletoidal, hard. dense.

Shale, medium to dark gray black, Scarbonaceous COMMISSION inpart, subcompacted.

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3570-3 600

**** '...

Limestone, buff, pelletoidal, questionable oolites, crypto-crystalline, hard dense WATION SIVISION Wichita, Kansas

- 22 -

very soft. Shale, medium to dark gray, blocky, moderately hard. Shale, black, carbonaceous, firm Shale (trace), red brown, firm, subsplintery. Shale, medium gray, blocky, moderately hard. 3600-36401 Shale, very dark gray to black, soft to firm, inpart carbonaceous. Shale, red brown, blocky, hacky, moderately well compacted. 3640-3680' MARMATUN Limestone, cream to tan, crypto-crystalline, hard. dense. Limestone, buff to light tan, crypto-crystalline, trace fossil debris, moderately hard. Limestone, gray, crypto-crystalline to subchalky, moderately hard, dense. Shale, medium to dark gray, blocky, moderately hard. Shale, black, carbonaceous, firm. 3680-3700' Limestone, buff to light gray, some white, subchalky to crypto-crystalline, moderately hard, dense. Shale, medium gray, as above. 3700-3710 Limestone, white to very light gray, subchalky, moderately hard, dense. Limestone, buff to gray tan and gray brown mottled, crypto-crystalline, inpart pelletoidal. 3710-3720' Limestone, buff to gray tan, generally as above. Shale, light green, subwaxy, firm to moderately hard. 3720-37401 Limestone, white to very light gray, subchalky, moderately hard, dense. Limestone, buff, micro-to crypto-crystalline, inpart re-crystallized, slightly fossiliferous, hard. Shale, medium to dark gray, moderately compacted, blocky, inpart subsplintery. Shale, black, carbonaceous, firm. 3740-37701 Limestone, buff to light tan, crypto-crystalline. hard, dense. Shale, medium to dark gray, blocky, subcompacted. Shale, black, carbonaceous, firm. 3770-37801 CHEROKEE Limestone, buff, white, subchalky inpart, dense. Shale, black, soft, poorly compacted, carbonaceous, pyritic. Limestone, buff, cryptocrystalline Thard, dense MMISSION 3780-3800

Limestone, very light gray, subchalky to chalky,

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Shale, medium to dark gray, blocky, subcompacted.

3800-38101 Shale, black, carbonaceous, soft, poor compacted. Shale, medium to dark gray, blocky, moderately compacted. 3810-3850' Limestone, buff, crypto-crystalline, hard, dense. Limestone, white, chalky, inpart fossiliferous. Sahle, dark gray black to black, carbonaceous, firm to moderately compacted. Shale, light to medium gray, silty, moderately 3850-3870* hard. Shale, black, soft to firm, moderately compacted, carbonaceous. Limestone buff, light brown, crypto-crystalling, hard, dense 3870-39101 Shale, medium gray, silty, moderately compacted. Shale, red brown mottled green, firm, blocky, Shale, black, firm carbonaceous. Shale, brownish gray, blocky, silty, fine carbonaceous spects. 3910-3930' Shale, medium gray, as above, Shale, brownish gray, blocky, moderately compacted. Shale, greenish gray, hard, blocky, subwaxy. Limestone, gray, crypto-crystalline, inpart subchalky, blocky, hard, dense. Shale, black, carbonaceous, firm. 3930-39501 Shale, medium gray, as above. Shale, gray green to green, blocky, moderately compacted, hard. Shale, red brown, blocky, well compacted, hard. Shale, black, carbonaceous, firm. 3950-3980" Limestone, buff to tan, crypto-crystalline, hard, conchoidal fracture, dense. Limestone, cream, subchalky, soft to firm. Shale, gray to gray brown, blocky moderately hard to hard. Shale, red brown, blocky, moderately compacted. Shale, black, carbonaceous, firm. 3980-40001 Limestone, buff to gray, crypto to microcrystalline, hard, dense. Limestone, cream, micro to crypto-crystalline, hard, dense. Shale, gray green, blocky, moderately compacted. Shale, red brown to brown, as above. Shale, black, carbonaceous, firm. 4000-4010* Limestone, buff, soft, water soluble, subchalky. Limestone, buff, sort, water solding mottled, (2)
Limestone, gray brown to brown, inpart mottled, (2)
Limestone, gray brown to brown, inpart mottled, (2)
Limestone, gray brown to brown, inpart mottled, (2) Shale, gray, blocky, moderately compacted, AUG 2 6 1987

Limestone, mottled light and dark gray, blocky, William

4010-4020

hard, dense.
Limestone, buff, as above.
Limestone, brown, crypto-crystalline, hard dense.
Shale, brownish gray, blocky, moderately hard,
inpart water soluable.

Drilling break at4009-4016. Circulated out. Gas increased 110 units.

10 minutes MISSISSIPPIAN

Limestone, tan to light brown, trace buff, cryptocrystalline to micro-crystalline, moderately hard, dense, no visible porosity, no stain, cut or fluorescence. Chert, gray, very light gray, smoky, gray brown,

Chert, gray, very light gray, smoky, gray brown, conchoidal fracture, very hard.

20 minutes

Limestone, as above. Chert, as above.

4020-40501

Limestone, cream to buff, subchalky, moderately hard, dense, very poor to nil porosity, no show. Limestone, brown, crypto-crystalline, hard dense, nil porosity, no show. Chert (trace), smoky, very hard.

4050-4070*

Limestone, brown, crypto-crystalline, hard, dense.
Limestone, buff and mottled buff and tan, sub-

chalky, hard dense, nil porosity.

Chert, light gray, smoky, green, brown, very

4070-4080*

Limestone, brown, crypto-crystalline, hard dense, nil porosity
Limestone cream to buff, subchalky, moderately hard dense, nil porosity.
Shale, greenish gray, blocky, well compected.
Chert (trace), light brown, very rare green.

4080-41071

Limestone, brown, as above. limestone, gray brown, crypto-crystalline, hard dense, nil porosity. Chert (increasing), white, very light tan, brown, gray tan, very hard.

Circulate out drilling break 4080-4107*
10 minutes

Limestone, brown, as above. Chert, as above.

20 minutes

Limestone, brown, crypto-crystalline, hard, dense, nil porsity, no show.
Chert (abundant), white, brown, light gray tan.
Shale (trace), black, carbonaceous.

30 minutes

Limestone, brown, as above. Chert, as above.

RECTIVED STATE CORPUSSION

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4107-4110*	Limestone, brown, subchalky to crypto-crystalline, hard, dense.
	Chert, white, light gray, gray tan.
4110-4210•	Limestone, brown, as above, inpart becoming siliceous.
	Limestone, buff to tan, subchalky, moderately hard, dense.
	Shale, gray, gray brown, becoming brown, hard well compacted.
	Chert, white, brown, gray very hard. Shale, black, carbonaceous, firm.
(210, (220)	Timestone brown as shows
4210-4230*	Limestone, brown, as above. Limestone, buff, as above.
	Shale, medium to dark gray, blocky to sub-
	splintery, moderately well compacted.
	Shale, brown, subsplintery to splintery.
	Shale, red brown to red, sub-blocky, moderately
	compacted.
	Chert, brown, gray brown, very hard.
	Shale, very dark gray to black, subsplintery,
	moderately well to well compacted, carbonaceous.
4230-4290*	Limestone, brown, crypto-crystalline, inpart
	siliceous, locally finely crystalline, hard,
	dense.
•	Limestone, buff, as above.
	Shale, brown, cherty, hard
	Chert, brown, smoky, very hard.
	Shale, black, carbonaceous, firm to moderately hard.
	naru.
4290-4320'	Limestate, buff to light brown, finely crystal- line, inpart glauconitic, moderately hard to
	hard, dense.
	Limestone, brown, finely crystalline, hard, dense.
4320-4340'	Limestone, brown, finely crystalline, hard, dense. Limestone, buff, finely crystalline, moderately
	hard to hard, dense.
	Shale, brownwell compacted, subfissile to fissile, hard.
	Sand(trace), loose quartz grains.
4340-4360'	Limestone, brown, very fine to fine crystalline, cherty, argillaceous.
	Shale, gray, moderately well to well compacted, subsplintery.
	Shale, black, carbonaceous firm to moderately hard.
	Limestone, very light gray, crypto-crystalline
	to subchalky, hard, dense.
4360-4390 KINDERHOUK	Shale, brown to dark brown, moderately, well
	to well compacted, moderately hard out of an analysion

Limestone, very light gray, as above. Shale, black, carbonaceous, moderately compacted.
Shale (trace), green, subwaxy, firm

4390-4420' WOUDFORD

Shale, dark brown to very dark brown, blocky, inpart splintery, inpart carbonaceous, well compacted, hard.

Shale, black, carbonaceous, firm to moderately hard.

Limestone (trace), white, micro-crystalline, hard, dense.

4420-4465' SIMPSOM

Sand, clear to opaque to white, some brown, and mottled, fine grain, moderately well to well sorted, subangular to subround, moderately cemented to friable, dolomitic to calcareous, poor to nil porosity, very rare light yellow fluorescence, questionable very spotty residual oilstain, no cut.

Shale, very dark brown, as above.

Shale, black, carbonaceous.

Shale (trace), green, subwaxy.

4465-44751

Sand, mottled white and brown, as above, possible brown residual oilstain.

Sand, brown, fine, grain, subangular to subround, moderately well sorted, moderately cemented to friable. low to nil porosity, questionable residual oilstain, no fluorescence or cut, abundant loose fine quartzgrains, rare coarse grains.

Shale, dark brown, as above.

Shale (trace), green, subwaxy.

Circulated out at 4975'
10 minutes

Shale, gray, blocky, moderately compacted. Shale, dark brown, as above. Sand (trace), white as above. Decrease in loose quartz grains.

20 minutes

Shale, dark gray, moderately well compacted. Shale, dark brown, as above. Sand, gray to brown, fine grain, subangular to subround, moderately well sorted, scattered dark inclusions, poor porosity, questionable residual oilstain, no fluorescence, no cut.

30 minutes

Shale, dark brown, moderately well compacted. Shale, gray brown, moderately well compacted, subsplintery, hard.
Sand (trace), clear, brown, as above.
Common loose, very fine to coarse quartz grains, subangular to subround.

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