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GEOLOGICAL REPORT

Well: Mike McClain No. 1

Location: 343' FNL 1500' FWL (NE-NW/4)
Section 8-Township 4 South-Range 14 East
Nemaha County, Kansas

KCC

OCT 15 2001

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Operator: Vector Minerals Corp, (303) 825-7080
518 17th St.-Suite 745
Denver, CO 80202

Operator Contact: W.C. Davis, operations engineer

Drilling Contractor: Berentz Drilling Company, Wichita, Kansas
Toolpusher: Cliff Camp
Rig:

Open Hole Log Company: Log-Tech, Wichita, Kansas, (316) 263-9360

Recording Engineer: Butch Drylie

Log Analyst: Sid Tomlinson

Logs Run: Dual Induction Log 250'-3661'
Borehole Compensated Sonic Log 250'-3654'
Dual Compensated Porosity Log 2350'-3641'
Microresistivity Log 2350'-3661'

Elevations: 1178' Kelly Bushing
1173' Ground Level

Spud Date: June 21, 2001
Surface Pipe: 8 5/8" set at: 276' (logger), June 21
Total Depth: Driller = 3660'
Logger = 3662'
TD and Log Date: June 28, 2001

Samples Caught and Evaluated: 30' sample interval = 1400'-1490'
10' sample interval = 1490'-3080'
3180'-3660'
(lost circulation at 3083' no samples to 3180')

Sample Condition: very good

Sample Description: included with this report

Disposition of Samples: Kansas Geological Survey (316) 943-2343
4150 Monroe, Wichita, KS 67209

Geological Supervision: on at 1450', June 23, in Lansing/Kansas City Formation
to TD at 3660'

Drill Time Logged: 5' drill time from 600'-3600' included with this report

Geograph Charts: Vector Minerals Corp.-1 copy
Berentz Drilling Co.-1copy

Circulated for Samples at:

2658' top of Hunton

3347' Viola porosity

3369' Viola porosity

3573' Upper Simpson Sand

3605' Lower Simpson Sand

3660' Total Depth in Granite Wash (Granite?)

ELECTRIC LOG TOPS (SUBSEAS)	Report well: Vector Minerals Corp Mike McClain No. 1 ne-nw/4, 8-T4S-R14E	Structural Relation to Offset Well	Offset well: Pendleton Land and Exploration, Inc. Johnston No. 1 sw-sw/4, 5-T4S-R14E
KB elevation	1178		1175
FORMATION			
Lansing/Kansas City	1175 (+3)	7' low	1165 (+10)
Cherokee	1700 (-522)	3' low	1694 (-519)
Mississippi	2384 (-1206)	7' low	2374 (-1199)
Kinderhook	2450 (-1272)	9' low	2438 (-1263)
Hunton	2659 (-1481)	30' high	2686 (-1511)
Maquoketa	3285 (-2107)	23' high	3305 (-2130)
Viola	3338 (-2160)	21' high	3356 (-2181)
Simpson Group	3500 (-2322)	23' high	3520 (-2345)
Upper Simpson Sand	3570 (-2392)	23' high	3590 (-2415)
Lower Simpson Sand	3598 (-2420)	25' high	3620 (-2445)
Granite Wash/ Granite?	3626 (-2448)	33' high	3656 (-2481)

Shows and Potential Pays:

Two shows in the well bore are regarded as possibly productive. These shows were encountered in the Upper Simpson Sand at 3570' and Lower Simpson Sand at 3598. Both samples were circulated to surface to provide the most objective interpretation. These two sands were regarded as the primary objectives of the McClain No. 1 and are the main producing zones in the McClain Field to the south. The McClain No. 1 Simpson Sands are structurally high to the field.

Shows were encountered in formations as noted on the following sample descriptions. However, due to the appearance of the shows and lack of cut or stain, the florescence was regarded either as mineral florescence or very slight amounts of methane gas associated with saltwaters that occupy the pore space. Those zones that demonstrated stain or cut, other than the two Simpson Sands, were not of a quality to characterize as potential pay zones.

Potential reservoir rock was encountered in abundance in the Hunton formation where circulation was lost and in the Viola formation. Samples were carefully monitored for shows because of the quality of the rock. No show was regarded as potential pay in these zones, however, the Hunton and Viola demonstrate outstanding reservoir potential.

Recommendation:

At time of logging, the well was attended by representatives of NRG Resources Inc., the operations engineer for Vector Minerals, Log Tech's field engineer, and myself. After comparison of samples, shows, and drill time of the McClain No. 1 well to it's open hole logs, the offset well, existing wells in the McClain Field, and the NRG subsurface interpretation, it was decided the well merited casing be run to a sufficient depth to test the Upper and Lower Simpson Sands.

A 'Completion Procedure' has been circulated by Vector Minerals, Inc.

Sample Descriptions-not lagged

(number of asterisks indicates degree of show: *=very weak, **=weak, ***=fair, ****=good, *****=excellent)

depth	flor	stain	cut	description
Well Spud: 6/21/01				
Notes:				
• Samples begin in Lansing-Kansas City at 1400'. • A Lansing top was picked by drill time at 1175 and correlates to Lansing log top 1165 in sw-sw sec 5-4s-14e or 7'lo. • Circulation samples were taken at: 2658 at Top/Hunton; 3347 and 3369 at Upper/Viola drill offs; 3573 at Upper Simpson Sand; 3605 at Lower Simpson Sand; 3660 at TD.				
1400-30	**			Shale (Sh): light (lt) to (-) dark (drk) grey, blocky (blky), pyritic (pyr) Limestone (Ls): lt grey-tan, microcrystalline (mic xtal), no porosity (nφ), no fractures (frac), weak lt yellow mineral fluorescence (mf), no stain (ns), no cut (nc)
1430-60	**			Ls: white-tan-buff, slightly (sli) sucrosic (suc) on surface=fractured?, mxtal, dense, scattered, weak lt yellow mf, ns, nc
1460-90	**		*	Sh: lt-dk grey, blky, pyr Ls: white-tan-buff, micxtal, dense- nφ, weak lt yellow mf, ns, halo cut
1490-1500				Begin 10' Samples Sh: grey-black, carbonaceous (carb), blky; lt grey-laminar (lam); red-blky, micaceous (mic) Ls: decrease (dec) in sample- white-tan-buff, micxtal, dense- nφ, weak, lt yellow mf, ns, nc
1500-10	**			Sh: AA Ls: AA
1510-20	**			Sh: AA Ls: AA, sandy in part- subangular (sa)-subrounded (sr), fine grained (fg), pyr, no show
1520-30	**			Sh: AA Ls: white-tan-buff, micxtal, dense- nφ, weak, lt yellow mf in the buff Ls, ns, nc
1530-40				Sandstone (Ss): clear, fine grained (fg), well sorted (ws), white calcite cement (cem), friable (fri), φ, nf, ns, nc
	**			Sh: AA Ls: AA
1540-50				Sh: AA Ss: AA

	**				Ls: AA	
1550-60					Sh: AA, Ss: AA, dec Ls: AA	
1560-70	**				Sh: AA, increase (inc) in black carb sh & drk sh Ss: AA Ls: AA	
1570-80	**				Sh: lt grey, laminar, soft, Ls: AA	
1580-90	**				Sh: AA, increase (inc) in black carb sh & drk sh Ss: clear, fg, hematite stain, calcite cem, good ϕ , nf, ns, nc Ls: AA	
1590-1600	**				Sh: AA, increase (inc) in black carb sh & drk sh Ls: AA, inc	
1600-10	**				Ls: AA Sh: lt-med grey, red, very soft	
1610-20					Sh: lt-med grey, red, very soft, free quartz (qtz) grains-no show	
1620-30	**				Ls: white-buff-tan, granular, blk, n ϕ , lt yellow mf, ns, nc	
1630-40	**				Ls: AA Sh: grey, pyr	
1640-50	**				Sh: black, blk, carb Ls: AA, grades to brown	
1650-60	*				Ls: white-buff-tan, granular, blk, n ϕ , very lt yellow mf, ns, nc Sh: grey, lam, soft	
1660-70	*				Sh: AA, red, mic, blk Ss: clear, fg, well rdn, lt calcite cem, ϕ , very weak yellow f, ns, nc	
1670-80	*				Sh: AA, inc in dark grey; Pyrite Ls: white-buff-tan, granular, blk, n ϕ , very lt yellow mf, ns, nc	
1680-90	*				Sh: black, carb Ls: white-buff-tan, granular, blk, n ϕ , very lt yellow mf, ns, nc	
1690-1700	*				Sh: lt grey, red Ls: white-buff, lt yellow mf in buff, ns, nc	
1700-10	*				Sh: black, carb Ls: AA	

Base/Kansas City-Top/Cherokee log top at 1700 correlates to log top 1694 in sw-sw sec 5-4s-14e or 3' lo)				
1710-20	*			Ls: AA Sh: lt grey, red Ss: clear, fn grn, calcite cem, noφ, nf, ns, nc Sh: grey, pyr Ss: very fn grn, sr, calcite cem, noφ, nf, ns, nc; Free Qtz: clear sr, fn grn, no show Sh: grey Ss: fn grn, sa-sr, calcite cem, no show Sh: grey, some darker-near black Sh: black carb: Free Qtz grns, abundant chert Granite Wash (GW): Qtz=fn-med grn, sa-sr, clear-milky opaque, no cement; Feldspar=abundant white-pink, angular Glauconite; nf, ns, nc GW: AA, grain size increases to med-coarse (crs); no glauconite: no show GW: AA GW: AA GW: AA; Pyrite Ls (cave?): buff, blk, dense, very weak yellow mf, ns, nc Sh: grey GW: AA, decrease in feldspar, no show Ls: AA Sh: grey GW: AA, free quartz, very little feldspar, no show Ls: AA Sh: grey GW: AA, free quartz, inc in feldspar, no show Ls: AA Sh, GW, Ls: AA GW: AA Sh: black carb, dec in grey sh GW: AA Sh: grey, dec in black carb sh GW, Ls: AA, dec in feldspar Sh: inc in black carb sh GW, Ls: AA, dec in feldspar
1720-30				
1730-40				
1740-50				
1750-60				
1760-70				
1770-80				
1780-90				
1790-1800				
1800-10	*			
1810-20				
1820-30	*			
1830-40				
1840-50	*			
1850-60				
1860-70				
1870-80	*			
1880-90	*			

					Sh: AA, black carb sh; red, blkly, mic
1890-1900	*				GW, Ls: AA
1900-10	*				Sh: AA, dec in black carb sh
1910-20	*				GW, Ls: AA
1920-30	*				Sh: AA
1930-40	*				GW, Ls: AA
1940-50	*				Sh: AA
1950-60	*				GW, Ls: AA
1960-70	*				Sh: AA
1970-80	*				GW, Ls: AA
1980-90	*				Sh: AA, black carb, grey-grey green, red, blkly, mic
1990-2000	*				GW: AA, very slight feldspar, pyr; Ls: AA
2000-10	*				GW, Ls: AA
2010-20	*				Sh: AA, dec in black carb
2020-30	*				Ss: free qtz grains-well rdn, med-crs, no show
2030-40	*				Sh: AA, dec in black carb
2040-50	*				Ss: free qtz grains-well rdn, med-crs, no show
2050-60	*				Sh: AA
2060-70	*				Sh: grey-grey green, lam; red blkly
2070-80	*				Ss: free qtz grains-well rdn, med-crs, no show
2080-90	*				Sh: AA
					Ss: free qtz grains-well rdn, med-crs, no show
					Sh: AA, black carb
					GW: AA, very little feldspar
					Ls: buff, blkly, dense, very weak yellow mf, ns, nc
					Sh, GW, Ls: AA
					Sh, GW, Ls: AA
					Sh, GW, Ls: AA; dec in black carb
					Sh, GW, Ls: AA; inc in black carb
					Sh, GW, Ls: AA, inc in red blkly sh

2090-2100				Sh: grey-black carb	
2100-10				Sh: AA	
				Ls: white-tan-buff, dense, granular, nφ, nf, ns, nc	
				Free qtz drops out	
2110-20				Sh, Ls: AA	
2120-30				Ls, Sh: AA, lt grey-green	
				Free qtz-unconsolidated, fn-med grn, well rdn, no show	
2130-40				Ls, Sh, Qtz: AA, inc in Ls-nf, ns, nc	
2140-50				Ls, Sh, Qtz: AA	
2150-60				Ls, Sh, Qtz: AA, more sh than Ls, inc in black sh	
2160-70				Ls, Sh, Qtz: AA, more sh than Ls, inc in Ls	
2170-80				Sh: drk grey-black	
				Ls, Qtz: AA	
2180-90				Sh, Ls, Qtz: AA	
2190-2200				Sh, Ls, Qtz: AA	
2200-10				Sh, Ls, Qtz: AA	
2210-20				Sh, Ls, Qtz: AA	
2220-30				Sh, Ls, Qtz: AA	
2230-40				Sh, Ls: AA	
2240-50				Sh, Ls: AA	
2250-60				Sh, Ls: AA	
2260-70				Sh, Ls: AA	
2270-80				Sh, Ls: AA	
2280-90				Sh, Ls: AA	
2290-2300				Sh, Ls: AA	
2300-10				Sh, Ls: AA	
2310-20				Sh, Ls: AA	
2320-30				Sh, Ls: AA	
2330-40				Sh, Ls: AA	
2340-50				Sh, Ls: AA	
2350-60				Sh, Ls: AA	
2360-70				Sh, Ls: AA	
Base/Cherokee-Top/Mississippi log top: 2384 correlates to 2374 in sw-sw sec 5-4s-14e or 7' lo					
2370-80				Sh, Ls: AA	

					Ss: clear, fg, sa, well sort, calcite cem, fri, nφ, nf, nc, ns Sh, Ls: AA; Ss drops out
2380-90					
2390-2400					Ss: clear, fg, sa, well sort, calcite cem, fri, nφ, nf, nc, ns; free qtz grains Sh, Ls: AA
2400-10					Ss: clear, fg, sa, well sort, calcite cem, fri, nφ, nf, nc, ns; free qtz grains Sh, Ls: AA
Note: the following dolomite log top of 2405 was correlated to the dolomite at 2421 in sw sw sec 5-4s-14e or 19' hi at the time of drilling. The correct correlation by log top is 2405 in the McClain No.1 correlates to 2380 in sw sw sec 5 or 22'lo.					
2410-20		*	*		Dolomite (Dolo): Brown, crs xtal, sucrosic in part, visible rhombs, scattered vugular φ, dense in part, sandy in part: med-lg grain, clear, rdn sand embedded in dolo, nf, stain, very weak residue cut
2420-30			*		Dolo: AA
2430-40					Sh: grey-black
2440-50					Sh: grey-black
2450-60					Ss: clear, fn grn, sr, fair sort, calcite cem, glauconitic, nf, ns, nc
Base/ Mississippi-Top/Kinderhook log top: 2450 correlates to 2438 in sw sw sec 5-4s-14e or 9'lo.					
2460-70					Sh: drk grey Chert (Cht): white, opaque, sharp, nf, ns, nc
2470-80					Sh: grey-black, fissle, very soft
2480-90					Sh: AA, red Cht: buff-milky white, sharp, nf, ns, nc
2490-2500					Sh: soft, silty, variegated: grey-black, smooth-blky; lt grey-grey green, mic, lam; red-brown blky, mic; Pyrite
2500-10					Sh: AA
2510-20					Sh: AA
2520-30					Sh: AA
2530-40					Sh: AA
2540-50					Sh: AA
2550-60					Sh: AA
2560-70					Sh: AA
2570-80					Sh: AA, black sh becomes more fissle
2580-90					Sh: AA
2590-2600					Sh: AA
2600-10					Sh: AA
2610-20					Sh: AA

2620-30				Sh: AA	
2630-40				Sh: AA	
2640-50				Sh: AA, pyrite increases	
Base/Kinderhook-Top/Hunton log top: 2659 correlates to 2686 in sw-sw sec 5-4s-14e or 30' hi. Kinderhook thins by 48' to well in sec 5.					
Circ				Sh: AA	
Sample @ 2658-15"				Dolo: Lt-med tan, brown mottled, lt grey, mic xtal-fn xtal, sucrosic in part, friable-hard dense lmy, nφ nf, ns, nc=no show Pyrite: lots of it	
2650-60				Sh, Dolo, Pyrite: AA	
2660-70				Dolo: Lt-med tan, brown mottled, lt grey, mic xtal-fn xtal, sucrosic in part, soft friable mild acid reaction-brittle hard dense lmy, scattered vug φ, fractures, nf, ns, nc=no show	
2670-80				Dolo: AA, inc in tan sucrosic, dolo-white sucrosic, vy clear qtz spears (open fracture?), sandy in part	
2680-90			*	Dolo: buff-brown, fn-med xtal, rhombs, vug φ, nf, ns, very weak milky cut Chert: grey	
2690-2700			*	Dolo: tan-buff, fn-med xtal, rhombs, vug φ, white granular, dense, free Qtz spears (open fracture?), nf, ns, very weak cut	
2700-10	*			Ls: dolomitic, white-buff, dense, vigorous acid, pyr, cherty, nφ, yellow-green flores, ns, nc	
2710-20	*			Ls: AA	
2720-30	**			Dolo: lmy white-tan-buff, granular dense, cherty, free Qtz, pyr, nφ, yellow-green flores, ns, nc	
2730-40	**			Ls, Dolo: AA	
2740-50	**			Dolo: lmy, buff gran to mic xtal, sucrosic-dense, scattered vug φ, brittle, hard, pyr, yellow-green flores, ns, nc	
2750-60	**			Chert: white, opaque, dense, sharp, hard, brittle, nf, ns, nc	
2760-70	**			Chert, Dolo: AA, chert increasing	
2770-80	**			Chert, Dolo: AA	
2780-90	**			Chert, Dolo: AA	
2790-2800	**			Ss: clear, fn grn, very well rdn, calcite cement, nφ, nf, ns, nc	
2800-10	**			Chert, Dolo, Ss: AA	
2810-20	*		*	Chert, Dolo, Ss: AA, ss decreasing Dolo: lmy, buff, granular to xtal, dense-vug φ, weak yellow-green flores, ns, very weak cut Chert: AA	
2820-30	*		*	Dolo, Chert: AA	

2830-40	**	*		Dolo: AA, florescence increases from 10% to 35% of sample
2840-50	*	*		Dolo: AA, florescence decreases from 35% to 15% of sample
2850-60	***			Dolo: lmy, buff-brown, granular to xtal, dense-vug ϕ , fair yellow-green flores, ns, nc
2860-70	***	*		Dolo: AA, fine-med rhombs, interxtal ϕ , vug ϕ , fair yellow green flores, ns, weak cut
2870-80	*			Dolo: lmy, buff-grey, dense, n ϕ , dec in yellow green flores, ns, nc Chert: blue white, opaque, no show
2880-90	*			Dolo: AA, no chert Ss: clear, fn grn, dolo cement, n ϕ , nf, ns, nc, free Qtz grains
2890-2900	**			Dolo, Ss: AA
2900-10	*			Dolo: lmy, buff, dense, n ϕ , weak yellow green flores, ns, nc Chert: grey-blue white, opaque, no show
2910-20	*			Dolo: lmy, buff-grey, granular to xtal, sli sucrosic-dense, vug ϕ , weak yellow-green flores, ns, nc Chert: AA
2920-30	*			Dolo: AA, dolo-white sucrosic, good interxtal ϕ , weak yellow green flores, ns, nc; Chert decreases
2930-40	*			Dolo, Chert: AA
2940-50	**			Dolo: grey-buff, fn-med xtal, rhombs, interxtal ϕ , weak yellow green flores, ns, nc Chert: AA
2950-60	*			Dolo, Chert: AA
2960-70	*			Dolo, Chert: AA
2970-80	*			Dolo, Chert: AA
2980-90	*			Dolo, Chert: AA
2990-3000	**			Dolo: buff, sucrosic-med xtal, med rhombs, interxtal ϕ , yellow green flores, ns, nc
3000-10	*			Dolo: grey-buff, granular, dense, hard, brittle, n ϕ , weak yellow green flores, ns, nc Qtz: clear ang-sub rdn, no cem, nf, ns, nc
3010-20	*			Dolo: AA
3020-30	*			Dolo: AA, dolo-white xtal, dense, weak yellow green flores
3030-40	*			Dolo: AA
3040-50	*			Dolo: AA
3050-60	*			Dolo: white, granular, dense, clear-grey, xtal, sucrosic, rhombs, excellent vug ϕ , pyr, hematite stain, weak yellow green flores, ns, nc
3060-70				Dolo: AA
3070-80				Dolo: AA
Lost Circulation at 3083. No samples until 3180				

3180	*				Dolo: lmy, white, dense-xtal, sucrosic, weak yellow green flores, ns, nc Qtz: clear, sub ang-sub rdn, fn-med grn, no cem Cave: Sh-grey, black, brown, red; Ls-tite, xtal, min flores, nc, ns
3180-90	*				Dolo, Qtz, Cave: AA
3190-3200	**		*		Dolo: lmy white, dense to xtal, small rhombs, fair interxtal ϕ , vug ϕ , weak yellow green Flor, ns, weak c
3200-10	*				Dolo: AA, dolo-buff-tan, xtal, vug ϕ , pyr; Qtz-sub an-sub rdn, fn-med
3210-20	*				Dolo: AA, flores decreases with increase of buff Ls
3220-30	*				Dolo: AA
3230-40	*				Dolo: AA
3240-50	*				Dolo: AA
3250-60	*				Dolo: AA
3260-70	*				Dolo: AA
3270-80	*				Dolo: AA
3280-90	*				Dolo: AA
Base/Hunton-Top/Maquoketa Sh log top: 3285 correlates to 3305 in sw-sw sec 5-4s-14e or 23' hi					
3290-3300					Sh: lt grey-lt green, lam-blky, soft
3300-10					Sh: AA
3310-20					Sh: AA, silty
3320-30					Sh: AA, silty
Base/Maquoketa Sh-Top/Viola log top: 3338 correlates to 3356 in sw-sw sec 5-4s-14e or 21' hi					
3330-40					Sh: AA, silty
3347-15"					Sh: AA
3347-30"		***			Dolo: tan-brown, fn-med xtal, rhombs, good interxtal ϕ , vug ϕ , oil stained-dead, nf, nc
3347-45"		***			Dolo: AA
3347-3350		***			Dolo: AA
3350-60		**			Dolo: buff, fn-med xtal, rhombs, interxtal ϕ , vugs, oil stained-dead, nf, nc
3360-69		**			Dolo: buff, med-crs xtal, rhombs, interxtal ϕ , vugs, oil stained-dead, nf, nc
3369-20"		**			Dolo: AA, good interxtal & vug ϕ
3369-40"		**			Dolo: AA, good interxtal & vug ϕ
3369-80		**			Dolo: AA, good interxtal & vug ϕ
3380-90		**			Dolo: AA, pink-buff, good interxtal & vug ϕ
3390-3400					Dolo: white-pink-buff, crs xtal, rhombs, vugs, interxtal ϕ , nf, ns, nc Chert: white, buff, hard, nf, ns, nc

3400-10				Dolo, Chert: AA
3410-20				Dolo, Chert: AA
3420-30				Dolo: AA, becoming more gran, tan-brown, dense; Cherty-AA
3430-40				Dolo: buff-tan-brown, mottled in part=tite, gran-xtal, cherty, nφ, nf, ns, nc
3440-50				Dolo: AA
3450-60		**		Dolo: AA, dolo-white, opaque, crs xtal, rhombs, pyr, interxtal φ, nf, oil stained-dead, asphaltic interxtal pore fill, nc
3460-70		**		Dolo: AA, dec in white, become med xtal, dead oil stain
3470-80		**		Dolo: AA
3480-90		**		Dolo: AA
3490-3500		**		Dolo: brown, xtal, med grn-dense xtal, interxtal φ, nf, dead oil stain
Base/Viola-T/Simpson Group log top: 3500 correlates to 3520 in sw sw sec 5-4s-14e or 23'hi				
3500-10		**		Sh: grey-grey green, mottled with black inclusions, blk
				Dolo: tan-brown, med xtal-dense xtal, rhombs, dolo-opaque, crs xtal, nf, dead oil stain, nc
3510-20		**		Dolo: AA
3520-30		**		Dolo: AA
				Sh: grey-green with clear dolo xtals on faces
3530-40				Sh: AA
				Dolo: grey-brown, med xtal, interxtal φ, rhombs, dense dolo with calcite & qtz filled fractures, nφ, nf, ns, nc
3540-50				Ls: brown, dense, nφ, nf, ns, nc; shale drops out
3550-60		**	***	Ls: AA, becomes mottled, grey-white, pyr, nφ, nf, ns, nc
				Ss: clear, med grn, well rdn, well sorted, calcite cement, gilsonite inclusions, nf, stain, sli stream cut
3560-70				Ls: AA
				Sh: grey-green, pyrite
				Ss: AA, nf, ns, nc
				Dolo: brown, xtal, rhombs, nf, ns, nc
Simpson Upper Sand log top: 3570 correlates to 3590 in sw-sw sec 5-4s-14e or 23'hi				
3573-15"				Ls, Sh, Ss, Dolo: AA
3573-30"	***	***	****	Ss: clear, med grn, well rdn, poor sort, barely calcite cement-friable, blue green flores, light hydrocarbon odor, brown live oil stain, spotty asphaltic inclusions, fair to good cut=mild stream throughout; abundant free Qtz-sub ang-sub rdn, fine-crs grn, well rdn-'faceted'
3573-45"	***	***	****	Ss: AA
3570-80	***	***	****	Ss: AA

3580-90					Dolo: buff, fn xtal, sucrosic-dense, nφ, nf, ns, nc
Simpson Lower Sand log top: 3598 correlates to 3620 in sw-sw sec 5-4s-14e or 25'hi					
3590-3600					Dolo:
3605-20"	***	***	***	***	Ss: clear, fn-crs grn, subang-subrdn, poor sort, silica cement, hard-fair friable-loose grains, good φ, orange flores, light hydrocarbon odor, dark brown oil stain, asphalt-black, sticky (cements grains), instant cut with continuous fair stream throughout . Abundant pyrite. Abundant loose Qtz grains, brown oil stain on grains
3605-40"	***	***	***	***	Dolo: buff-pink, xtal, nφ, probably cave
3605-10	***	***	***	***	Ss: AA
3610-20	**	**	**	**	Ss: AA
					Ss: clear-opaque, med-crs grn, poorly cemented, glauconite, asphaltic cement, orange flor, brown stain, fair cut AA.
Dolo: white, fine-med xtal, interxtal φ, nf, ns, nc; dolo, grey-brown mottled, dense, nφ, nf, ns, nc Hematite and Pyrite Sands: fine-crs, xtals-sub ang-well rdn grains of 100% pyrite. Crs, well rdn, pellets of 100% hematite, some well rdn hematite grains with pyrite. Sample bag is bright red					
Granite or Granite Wash log top: 3626 correlates to 3656 in sw-sw sec 5-4s-14e or 33'hi					
3620-30					Granite or GW: large grains, angular, sharp (fresh cut vs weathered?), med grey-grey green, Qtz; white-grey feldspars, biotite, heavy minerals, nf, ns, nc.
3630-40					Granite or GW:AA
3640-50					Granite or GW:AA
3650-60					Granite or GW:AA
3660-30"					Granite or GW:AA
Total Depth: 3660' reached 5AM 6/28/01					