

SEC. 29 TWP. 10S RGE. 24E LOCATION 949/NL 2382/EL
FARM SOUTHAM NO. #3 ELEVATION 5334 GR.
OWNER GULF STATE Utah COUNTY Uintah
SAMPLES FROM 70 TO 300 EXAMINED BY A.D. Glidewell DATE 10-25-72

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
		Hole spuds in Uinta Fm.
70	80	SS - E. to med., gy. to buff, some silty, sl. calc, tr. dark mica, arg. - sub. arg., loose grains.
80	90	SS - E.-m., gy., poorly sorted, tr. mica, some shaly, gy. siltstone.
90	100	Siltstone - tan, arg., dolomitic
100	110	Silt - a.a., tr. Silt-gy, sl. calc., some SS-E, gy., arg., mic., tr. dk. bn. marlstone.
110	120	Siltstone - tan to buff, sl. calc., v. finely micaceous
120	130	Silt - a.a., w/SS - buff, fine, mic., friable.
130	140	Silt - buff to lt. bn. dolomitic, finely micaceous
140	150	SS - m.-E., sub. arg., gy., calc., tr. pyrite, tr. silt - as above.
150	160	Silt - tan-buff, arg., v. f. micaceous, sl. dolomitic.
160	170	Silt - as above, tr SS - gy-tan, E., tr. pyrite.
170	180	SS - E.-m., gy-tan, sub. arg., calc. sl. mic., many black mineral grains.
180	190	SS - buff, E.-m., calc., tr. Silt - lt. tan, mic.
190	200	SS - gy-buff, E.-m., arg. - sub. arg., sl. calc., tr tan siltstone.
200	210	Silt - tan, arg., dolomitic.
210	220	SS - gy, E.-m., sub. arg., tr. pyrite, w/Silt-tan.
220	230	Siltstone - tan, dolomitic, v. finely micaceous, tr. SS - tan-buff, E., silty.
230	240	Shale - tan-gy, dolomitic, silty, w/some Silt tan, dolomitic.
240	250	Siltstone - tan, dolomitic, v. finely micaceous.
250	260	Silt - a.a., w/some SS - gy, fine, micaceous.
260	270	Siltstone - tan, arg., sl. calc., tr. pyrite.
270	280	SS - as above, w/Silt - tan, dolomitic.
280	290	SS - gy-tan, E. tr pyrite, micaceous tr tan Silt.

SEC. 29 TWP. 10S RGE. 24E LOCATION _____
FARM Southam NO. #3 ELEVATION 5334 Gr.
OWNER GULF STATE Utah COUNTY Uintah
SAMPLES FROM 300 TO 610 EXAMINED BY A.D. Caldwell DATE 10-25-7

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
300	310	ss-gy, f, sub. argy, tr. pyrite, tr. tan siltstone.
310	320	as above
320	330	ss-tan-gy, f-v.f., mic, silty, tr. silt-tan, dolomit
330	340	ss-gy-tan, f-m, v. micaceous, tr. pyrite, trace tan silt.
340	350	as above
350	360	ss-gy-buff, f, mic, silty, tr. tan silt.
360	370	Siltstone-tan, dolomitic, tr. ss-as above.
370	380	ss-gy-buff, f, mic, silty, dirty, poorly sorted.
380	390	ss-as above
390	400	ss-buff-gy, f-v.f., mic, silty, poorly sorted.
400	410	Silt-tan, dolomitic, some ss-a.a.
410	420	Silt-tan, dolomitic, w/sh-tan, nearly a marlstone
420	430	Marl-lt. tan, dolomitic, tr. silt-a.a.
430	440	Silt-tan dol, v.f. mic, within strata of marl-lt. tan
440	450	Silt-tan, dolomitic, v.f. micaceous, tr. tan, minor
450	460	Silt-a.a, tr. tan Marl or shale.
460	470	Silt-tan, sl. dolomitic, v.f. micaceous.
470	480	Silt-as above.
480	490	Marlstone-br-tan, dolomitic, hard, dense.
490	500	Marlstone-as above.
500	510	Marl-m. br, some tan, dolomitic, tr. pyrite.
510	520	Marl-as above.
520	530	Silt-tan, dol, v.f. mic, w/Marl-br-tan as above
530	540	Marl-lt. br-tan, w/tr. tan silt-as above.
540	550	Marl-a.a, tr. tan silt.
550	560	Marlstone-m. brown, dolomitic, tr. pyrite
560	570	Marlstone-a.a.
570	580	Marl-lt. tan, tr. silt-tan.
580	590	Marl-m. br, some lt. tan Marl-dolomitic.
590	600	Marl-lt. tan, tr. silt-tan.

SEC. 29 TWP. 10S RGE 24E LOCATION
 FARM Southam NO. #3 ELEVATION 5354 Gr.
 OWNER GULF STATE Utah COUNTY Uintah
 SAMPLES FROM 610 TO 870 EXAMINED BY A.D. Glidewell DATE 10-25-72

FROM	TO	LITHOLOGIC DESCRIPTION FORMATION AND REMARKS
610	620	Marlstone - lt. bn. & tan, dolomitic, tr. tan silt.
620	630	Marl - as above.
630	640	Marl - tan, sl. silty, dol., tr. m. bn. Marl, tr. crm - tan tuff, sl. dolomitic.
640	650	Marl - bn. some tan, tr. crm. tuff.
650	660	Marl - bn. some bk, dol., tr. wh. Sodium minerals?
660	670	Marl - bn - tan, some contorted, w/ dissolved sod. minerals, leaving a porous material.
670	680	Marl - m. - dk. bn. some tan, tr. crm - tan tuff.
680	690	Marl - bn - tan, tr. Tuff - crm - tan, tr. wh. Sodium minerals.
690	700	Marl - tan and bn, tr. wh. Sodium minerals.
700	710	Marl - med. bn. & tan, tr. Sod. min.
710	720	Marl - as above.
720	730	Marlstone - m. bn. grading to lt. tan, sl. dolomitic.
730	740	Marl - bn. some w/ir. porosity, tr. Gilsenite.
740	750	Marlstone, bn. & tan, tr. wh. Sod. minerals.
750	760	Marl - tan & m. - dk. bn; tr. hydrocarbon residue as gilsenite.
760	770	Marl - tan to lt. bn; tr. amb. - bn., waxy minerals.
770	780	Marl - tan to bn; tr. v. ex. pyrite.
780	790	Marlstone - m. - dk. bn. and tan, dolomitic.
790	800	Marl - as above, tr. pyrite.
800	810	Marlstone - med. bn, dol., tr. bn - bk Marl - with solution cavities lined w/ xls.
810	820	Marl - tan to med. bn; dol., tr. pyrite.
820	830	Marl - as above, chips covered with coating of silt size dust, poss. cavities.
830	840	Marlstone - m. - dk. bn, dol., tr. pyrite, tr. Marl - bn. with porous texture and small cavities.
840	850	Marl - lt. - med. bn, tr. tan, v. ex. dol., tr. pyrite.
850	860	Marlstone - lt. to dk. bn. dolomitic, tr. pyrite.

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
870	880	Marlstone - tan to dk. bn, some bk, tr pyrite.
880	890	Marl - m. bn, some tan, varved Marlstone, tr. pyrite
890	900	Marlstone - as above.
900	910	Marl - tan to m.-dk. bn, dolomitic.
910	920	Marlstone - as above, tr. gillsonite, some pyrite.
920	930	Marlstone - tan to bn, tr Dol. - gy-tan, v. f. xln.
930	940	Marl - m. - dk. bn, dolomitic
940	950	Marlstone - tan to bn - dk. bn, dolomitic, tr. pyrite
950	960	Marl - mostly m. - dk. bn, dolomitic
		Start coring at 961'

SEC. _____ TWP. _____ RGE. _____ LOCATION _____

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OWNER _____ STATE Utah COUNTY Uintah

SAMPLES FROM _____ TO _____ EXAMINED BY _____ DATE _____

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
961.0	962.45	oil sh, gy brn, fair, tendency to fracture conchoidal after described as (T.F.C.)
962.45	962.5	Tuff, brn, oily
962.5	965.0	oil sh, dk gy brn, moderate, weak parting tendency (w)
965.0	965.05	Tuff, brn, oily, pinch & thin centering bedding plane
965.05	965.15	oil sh, blk-dk gy brn, Rich-Moderate
965.15	965.35	Tuff, brn, oily, slightly contorted bedding
965.35	966.0	oil sh, blk-tan-gy brn, fair-moderate, 2mm tuff lense
966.0	968.2	Tuff (WAVY Tuff) 1/2" brn-lgy, wavy gr lines, slight amount of oil, but minimal
968.2	970.05	oil sh, brn gy, moderate-fair, W.P.T.
970.05	970.1	Tuff, dk brn, slight oil saturated
970.1	971.4	oil sh, brn, moderate-fair
971.4	971.75	oil sh, brn blk-brn, Rich-Moderate, slightly contorted bedding, 2mm tuff lense, W.P.T.
971.75	973.65	oil sh, brn gy, Fair, T.F.C.
973.65	973.7	Tuff, tan, thin black line in the middle
973.7	974.6	oil sh, blk-brn-brn gy, fair-moderate, T.F.C.
974.6	978.6	oil sh, brn gy, fair, T.F.C., Tuff inclusions at 975.5 and a few thin gy tufts at 977.0-977.6
978.6	981.3	oil sh, gy brn, fair, T.F.C.
981.3	984.0	oil sh, 1/2" brn-gy-lgy, fair, high T.F.C.
984	987.5	oil sh, tan-gy-brn, moderate-fair - Fractured 989.0-989.8, slight T.F.C.
987.5	989.2	oil sh, blk-brn-brn, moderate, Fractured 987.9-989.2 possible fracturing because of full barrel because it is near the top of Core #3
989.2	991.0	oil sh, Tan-lgy, fair, slight T.F.C.
991.0	992.2	oil sh, blk, <u>Pitch</u>
992.2	995.4	oil sh, gy brn, moderate-fair, T.F.C., Tan tuff lense at 994.0
995.4	998.4	oil sh, tan-brn, moderate-fair, W.P.T.

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SAMPLES FROM _____ TO _____ EXAMINED BY _____ DATE _____

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
999.4	1001.0	Oil sh, Tan-gy-brn-brn, moderate, slight T.P.
1001.0	1002.2	Oil sh, brn-Tan, fair, w.T.P.
1002.2	1003.15	Oil sh, brn-blk brn, moderate-Rich, contorted bedding. Thin 2 mm tuff at 1002.4, a few other tuff incl.
1003.15	1005.9	Oil sh, gy-brn, poor-fair Fractured - 1004.2-1005.6
1005.9	1009.7	Oil sh, brn-Tan, fair, high tendency to part on bedding plane (H.T.P.), much tuff finely disseminated
1009.7	1009.8	Tuff, Tan
1009.8	1010.3	Oil sh, Tan, poor-fair
1010.3	1010.85	Tuff, Tan, bedding slightly contorted
1010.85	1018.8	marlstone, Hgy-gy, very little oil Top of A Grove (T.P.)
1018.8	1020.0	Oil sh, blk-gy moderate 3-2mm undulating tuffs 1019.9
1020.0	1021.35	Oil sh, dk-gy-gy, poor-fair
1021.35	1021.75	Tuff, H-orange brn
1021.75	1023.7	Oil sh, Tan-gy-Hgy, poor-fair, slight tendency to part
1023.7	1024.65	Tuff & interbedded Oil sh, much has bleaching oil on surface
1024.65	1025.35	Oil sh, Tan-blk-gy, moderate, contorted
1025.35	1025.7	Tuff, dk brn, very oily
1025.7	1026.1	Oil sh, blk, rich, contorted
1026.1	1026.3	Tuff, blk, oily
1026.3	1027.2	Oil sh, blk brn, Rich
1027.2	1029.8	Oil sh, dk brn, RICH, high tendency to part
1029.8	1031.25	Oil sh, brn blk, Rich, 2cm Tuff 1030.75
1031.25	1032.7	Oil sh, brn, moderate-Rich, 5cm Tuff 1031.6, slight tendency to part
1032.7	1039.9	marlstone, Tan-gy-Hgy, poor - a few thin sections of lean oil
1039.9	1039.75	Tuff, very oily mahogany marker
1039.75	1042.9	Oil sh, Tan-Hgy-gy, poor-fair, T.F.C.
1042.9	1042.95	Tuff, H-brn, undulating
1042.95	1043.8	Oil sh, blk brn, Rich, T.P.
1043.8	1045.0	Oil sh, dk brn, moderate-Rich, T.P.
1045.0	1045.5	Oil sh, H-brn-brn, moderate, some tuff inclusions
1045.5	1048.0	Oil sh, dk blk brn, Rich, T.P. (1047.8 2cm brn tuff)
1048.0	1048.8	Oil sh brn blk, Rich T.P.

RECORD OF SAMPLE DESCRIPTION

GULF 1-1181 PRINTED IN U.S.A.

 PAGE NO. 113

SEC. _____ TWP. _____ RGE. _____ LOCATION _____

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OWNER _____ STATE _____ COUNTY _____

SAMPLES FROM _____ TO _____ EXAMINED BY _____ DATE _____

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
1054.55	1054.5	Oil sh, black with many tan lenses of tuff, very high tendency to break along bedding planes into bit, waxy luster when broken
1054.6	1055.0	Tuff & oil sh, 50% each Tan-BLK, Rich
1055.0	1056.3	Oil sh, BLK, Rich, waxy, High T.P.
1056.3	1056.6	Tuff, brn, waxy, oily
1056.6	1058.5	Oil sh, gy brn-brn, moderate
1058.5	1059.35	Oil sh, blk, Rich, T.P. minor tuff
1059.35	1059.85	Tuff, blk brn
1059.85	1060.1	Oil sh, brn blk, Rich, T.P.
1060.1	1063.0	Oil sh, brn-gy brn, moderate, slight T.P.
1063.0	1063.8	Oil sh, brn blk, Rich, T.P.
1063.8	1069.35	Oil sh, dk brn, Rich, T.P.
1069.35	1069.95	Tuff, brn, oily
1069.95	1066.0	Oil sh, blk-dk brn, Rich, T.P.
1066.0	1067.5	Oil sh, gy brn-brn, Rich-moderate, T.F.C.
1067.5	1068.7	Oil sh, brn-blk brn, Rich, High tendency to part
1068.7	1070.0	Oil sh, Tan-dk brn, moderate, T.P.
1070.0	1071.6	Oil sh, dk brn-brn, Rich-moderate
1071.6	1072.05	Oil sh, blk brn, Rich, T.P.
1072.05	1072.9	Oil sh, 1/4 brn, moderate
1072.9	1073.5	Oil sh, blk brn, Rich, T.P.
1073.5	1073.55	Tuff, brn, oily
1073.55	1078.9	Oil sh, brn-Hbrn, moderate, High T.P.
1078.9	1089.0	Oil sh, dk brn, Rich, Slight tendency to part minor Tuff & siltstone inclusions
1089.0	1089.9	Oil sh, brn blk, Rich
1089.9	1085.0	Oil sh, dk brn
1085.0	1090.0	Oil sh, brn-tan, fair-moderate
1090.0	1091.0	Oil sh, dk brn, moderate-Rich
1091.0	1092.0	Oil sh, blk brn, Rich — 2cm Tuff, dk sh at 1091.8
1092.0	1096.7	Oil sh, gy brn-tan-brn, moderate, slight T.P.

RECORD OF SAMPLE DESCRIPTION

PAGE NO.

SEC. _____ TWP. _____ RGE. _____ LOCATION _____

FARM _____ NO. Southern 003 ELEVATION _____

OWNER _____ STATE _____ COUNTY _____

SAMPLES FROM _____ TO _____ EXAMINED BY _____ DATE _____

FROM	TO	LITHOLOGIC DESCRIPTION, FORMATION AND REMARKS
1099.3	1099.5	Tuff, dk brn, oily
1099.5	1100.8	Oil sh, Tan-yy brn, fair
1100.8	1100.25	Tuff, brn, oily
1100.25	1102.0	Oil sh, dkgy-brn blk, Rich-moderate, Slight T.P.
1102.0	1105.6	Oil sh, Tan-Hbr-yy, poor-fair
1105.6	1106.8	Oil sh, dk brn blk, Rich, High T.P.
1106.8	1107.5	Oil sh, yy brn, fair, T.F.C.
1107.5	1112.5	Oil sh, Hgy-tan, fair-poor, might be considered marls here high tendency to part
1112.5	1113.3	Oil sh, blk brn, Rich, Contacted
1113.3	1113.8	Tuff, wavy brn, some oil
1113.8	1114.6	Oil sh, brn blk, Rich
1114.6	1115.75	Oil sh, gy-brn-yy-some fine blk streaks, poor-fair
1115.75	1115.8	Tuff, dk brn, U.S. oily
1115.8	1119	Oil sh, yy brn, fair-poor, T.F.C.
1119	1120.5	marls here, Tange, poor, T.F.C.
1120.5	1125.2	Oil sh, Hgy-brn, fair-poor, slight tendency to part
1125.2	1130	marls here, Hgy-yy-tange, S.T.P.