

From UNOCAL 11/87

JRD

Corehole: LOUISE (9'-713')

- 9'-19' oil shale, med. lt. gy. to med. dk. gy., fine-banded, w. indur., oxidized, lim. stn. from 15' to 15'6"
- 19'-
28'8" oil shale, med. lt. gy. to med. gy., fine-banded, w. indur., scat. carb. mat.
- 28'8"-
39'3" intbd. oil shale and sdy. sltst; lt. gy. to med. lt. gy.; fine-banded to massive; w. indur., some contorted bedding; scat., small, carb. stringers common in oil shale and sltst.
- 39'3"-
49'8" as above
- 49'8"-
59'3" as above
- 59'3"-
69'3" intbd. oil shale and sdy. sltst.; med. lt. gy. to lt. gy.; oil shale fine-banded; banding com. contorted; sltst. is massive, structureless; w. indur.
- 69'3"-
79'3" sltst., lt. gy., w/minor intbds. oil shale, med. lt. gy., w/contorted banding; w. indur.
- 79'3"-
89'3" oil shale, lt. gy. to med. lt. gy., contorted banding, sparse, scat. frgs. carb. mat., w. indur.; thin intbds. of sltst. (approx. ½"-3") scat. thruout;
- 89'3"-
99'3" as above
- 99'3"-
109'3" as above
- 109'3"-
119'3" as above, w/banding becoming less contorted, more "planar"
- 119'3"-
129'3" as above
- 129'3"-
138'8" as above, w/contorted banding common
- 138'8"-
148'8" as above, w/both contorted and planar banding
- 148'8"-
158'6½" as above

158'6 $\frac{1}{2}$ "-
 168'6 $\frac{1}{2}$ " at 159' massive, sdy. sltst. bcm. com., w/minor intbds. of oil shale,
 $\frac{1}{2}$ " to 1" thick, lt. gy. to med. lt. gy., scat. carb. mat., com. conc.
 in $\frac{1}{4}$ " to $\frac{1}{2}$ " thick zones.

168'6 $\frac{1}{2}$ "-
 179'4" as above

179'4"-
 189'4" as above, w/contorted bedding common

189'4"-
 199'4" as above, w/pyrite nod. noted at 197', and asphaltic material noted
 at 198'6"

199'4"-
 213'8 $\frac{1}{2}$ " as above, w/oil shale beginning at 213'

213'8 $\frac{1}{2}$ "-
 223'8 $\frac{1}{2}$ " oil shale, med. gy. to brn.-gy., fine-banded, w/scat. beds. of sltst.,
 $\frac{1}{2}$ " to 1" thick, w. indur.

223'8 $\frac{1}{2}$ "-
 234'4" as above, w/scat. zns. of brn.-blk. oil shale

234'4"-
 243'11" oil shale, med. brn.-gy. to med. lt. gy., fine-banded

243'11"-
 252'11" as above, w/some contorted banding from 247' to 248'

252'11"-
 262'10 $\frac{1}{2}$ " as above

262'10 $\frac{1}{2}$ "-
 272'9" as above, w/1" tuff. bed at 267'

272'9"-
 283'7 $\frac{1}{2}$ " as above, w/conc. black, asphaltic mat. and assoc. pyrite at 274'

283'7 $\frac{1}{2}$ "-
 295'4" as above

295'4"-
 306'4" as above

306'4"-
 316'4" oil shale, med. brn.-blk. to med. gy., fine-banded, w. indur.

316'4"-
 326'1" as above, w/ $\frac{1}{4}$ " to 1" tuff. beds at 320'6" and 323'8"

326'1"-
 336'7" as above

336'7"-
 346'6" as above, w/scat., thin, "platy" frgs. carb. mat. com. thru-out interval

346'6"- 356'4½"	as above (w/carb. mat.)
356'6"- 366'3"	as above, w/¼" to 1" tuff. beds at 363'7" and 365'10"
366'3"- 376'3"	as above
376'3"- 386'3"	as above
386'4"- 396'3"	as above
396'3"- 406'2"	as above
406'5"- 416'5"	as above
416'5"- 426'5"	as above
426'5"- 436'5"	as above, w/tuff. beds, ½" to 3" thick, scat. from 431' to 432'6"
436'5"- 445'5"	oil shale, lt. gy. to brn.-blk., fine-banded, w/scat. tuff. beds, ½" thick, and scat., thn., plty., carb. frgs. com. thru-out interval
445'5"- 455'2"	as above
455'10"- 465'10"	as above
465'10"- 475'10"	as above, w/tuff. beds common from 468'6" to 469'
475'10"- 486'	as above, w/4" tuff. bed at 484'10"
486'- 495'2"	as above, w/1"-2" tuff. beds from 491'7" to 492'6"
495'2"- 505'2"	as above, w/tuff. zone (w/analcite) from 504' to 505'
505'2"- 515'6"	as above
515'6"- 526'6"	as above, w/scat. tuff. beds from 519' to 522'
526'6"- 535'6"	as above, w/minor fracture at 25° angle at 534'

Thick or wavy tuff

535'6"-
546' as above

546'-
556' oil shale, brn.-gy. to med. gy., fine-banded, w. indur.

556'-
566' as above

566'-
575'6" as above

575'6"-
586' as above

586'-
600'4" as above, w/tuffaceous blk., asphaltic material, and pyrite x-tals, intbd. w/oil shale from 596'6" to 600'

600'4"-
619'1" oil shale, brn.-gy. to med. gy. to med. dk. gy., fine-banded, w/scat. thin tuff. zns.

619'1"-
637'8" as above, w/zns. of contorted banding (mahogany marker at 633')

637'8"-
655' oil shale, lt. gy. to brn.-blk., fine-banded, w/contort. banding com.; ox. zn. 6" thick at 644' (zn. is lim. stn.)

655'-
673'3" as above

673'3"-
691'9" as above, w/blk. zns. at 683'6" to 684', & 690' to 690'6"

691'9"-
713' as above, w/blk. zns. at 692' to 693'; 694' to 696'; 697' to 698'; and 700' to 700'6"