

U062
18-105-25 E
Uintah County, UT

X-3 CORE LOG

WHITE RIVER SHALE PROJECT

HOLE:

X-3

Depth	TM	FRX	FP	0	Cal/ 50 Ton	Lith	Rock Description
339	+130	90°	.84		7.5		Oil Shale - low to medium grade,
340					6.7		brown to dark brown,
341			.09		6.6		thinly laminated
342			.12		8.0		
343			.62		12.2		
344			.72		11.9		
345					12.8		345.24-.45 Sandstone layer,
346			.24.94		9.5		oil saturated
347			.10.91		10.9		Oil Shale - low grade, light brown
348			.75		11.2		
349	+120				28.5		Oil Shale - high grade, dark brown
350			.17		19.4		350.40-.48 Sandstone layer,
351					9.4		oil saturated
352					8.6		
353			.20.90		2.0		Marlstone - light gray, hard
354			.83		2.8		
355			.78		9.0		Oil Shale - medium grade, brown
356			.80		24.2		
357					12.2		
358			.29		10.8		358.29-.45 Sandstone layer,
359	+110		.39		9.2		oil saturated
360			.78		10.8		360.10-.18 Sandstone layer,
361			.65		14.2		oil saturated
362			.20		16.5		362.05-.35 Sandstone layer,
363			.83		11.6		oil saturated
364					9.7		Oil Shale - low grade, light
365			.40.64		9.0		to medium brown, silty
366			.59		8.8		
367					8.2		
368			.94		9.4		
369	+100		.70		11.8		
370			.80		12.2		
371					19.2		371.45-.94 Sandstone layer,
372					10.9		oil saturated
373					11.4		Oil Shale - low grade, light to
374			.00		10.7		medium brown, silty
375			.98		10.9		
376					11.9		
377			.19		11.9		
378			.68		11.2		
379	+90				10.8		
380			.44		12.6		380.20-.60 Sandstone layer,
381			.40		10.4		oil saturated
382			.18		11.3		
383			.14		13.0		Oil Shale - low to medium grade,
384			.15		11.0		brown
385			.97		8.9		
386			.92		16.5		
387					14.3		
388			.77		9.9		

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Depth	±MM	FRX	PP	0	Gal/ 50 Ton	Lith	Rock Description
389	+80		.01.98		8.6		
390					4.0		Oil Shale - low to medium grade,
391					8.3		brown to dark brown
392					16.2		thinly laminated
393					13.8		
394					10.3		
395			.27.32		9.9		
396			.56		9.4		
397			.67		9.4		
398			.96		17.9		
399	+70		.28.51.99		7.3		399.00-400.60 Upper Wavy Bed
400			.32.60		8.9		Sandstone layer with inter-
401			.34		11.3		bedded shale, sandy layers,
402			.60		11.9		oil saturated, contorted
403			.09.72		13.5		bedding
404			.77		15.3		
405					15.5		
406			.46		21.4		Oil Shale - low to medium grade,
407					12.6		brown to dark brown
408			.00		10.6		
409	+60		.61		8.4		
410					7.0		
411			.69		10.2		
412					13.6		Oil Shale - low grade, light
413			.57.70		10.5		to medium brown, silty
414		87°			6.2		
415					8.1		
416			.15		8.2		
417			.33		4.7		
418					11.1		
419	+50				16.1		
420					11.4		
421			.33		8.5		
422			.85		8.9		
423					14.5		
424			.24		36.4		Oil Shale - high grade, black
425					16.1		Oil Shale - low grade, light
426			.61		12.1		to medium brown, silty
427					11.5		
428			.92		13.8		
429	+40		.86		13.1		
430					14.1		
431					35.7		Oil Shale - high grade, black
432					15.4		
433			.58		14.9		
434					18.7		
435			.53		31.4		Oil Shale - high grade,
436			.95		9.0		dark brown
437			.67		5.7		
438			.33.65		5.0		

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Depth	±MM	FRX	PP	0	Gal/ 50 Ton	Lith	Rock Description
439	+30		.07.62		3.3		
440			.06.25.76		3.2		Oil Shale - low grade,
441			.48.83		7.8		buff to brown
442			.14.50.66		4.6		
443			.65		4.4		
444			.07.63		6.6		
445					1.8	III	Marlstone - light gray, hard
446			.91		1.6	III	
447			.35		2.9	III	
448			.23.88		7.4		Bottom 'A' Groove
449	+20				17.3		
450			.12		40.6		Oil Shale - high grade,
451			.21.93		18.0		dark brown to black
452					15.9		
453			.40.67		17.8		
454			.62.94		10.0		
455			.17		17.5		455.00-.25 Sandstone layers,
456					24.7		455.76-456.03 oil saturated
457			.56		31.8		
458					20.4		Oil Shale - medium to high grade
459	+10				36.4		brown to black
460			.94		35.7		
461					32.1		
462			.05		20.7		Oil Shale - medium grade, brown
463					17.3		
464			.20		11.4		
465					17.2		
466			.72		18.8		
467					9.6		
468			.74		13.7		
469	0				10.3	III	469.52-.92 Mahogany Marker
470					12.4		sandstone layer,
471					8.9		oil saturated
472					13.4		
473			.18.37.85		26.2		
474			.10.43		43.4		
475			.88		31.3		Oil Shale - medium to high grade,
476					19.8		brown to black
477			.61.99		21.5		
478			.13.25		14.7		
479	-10				34.4		
480					33.0		'Mahogany Zone' Oil Shale -
481			.83		32.6		medium to high grade,
482			.34.40.48		48.8		brown to black
483			.21.62.87		76.2		
484			.89		72.3		
485			.22		51.5		
486			.24.92		36.0		
487			.42		56.2		
488			.76		37.0		

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Depth	±MM	FRX	PP	0	Gal/ 50 Ton	Lith	Rock Description
489	-20		.55		20.1		
490					17.9		Oil Shale - medium to high grade,
491					36.1		brown to black,
492					32.8		thinly laminated
493					17.4		
494			.50.82		17.2		
495					24.3		
496					54.5		
497			.03.10.12		40.4		497.62-.72 Sandstone layer
498			.40		44.7		
499	-30		.94		30.8		
500					19.6		
501					29.2		
502					35.9		
503			.57		15.3		Oil Shale - medium to high grade,
504			.97		18.7		brown to dark brown
505			.20.93		14.4		
506			.34		17.4		
507					30.0		
508			.38		31.8		
509	-40		.78		14.1		
510			.10.85		8.2		
511			.13		12.4		
512			.10		15.5		
513			.15		32.3		Oil Shale - high grade,
514					36.3		dark brown to black
515					31.4		
516					24.7		
517			.23		23.4		
518					26.4		
519	-50				32.4		
520					21.7		
521			.12		20.3		
522			.21		12.6		Oil Shale - medium grade,
523		T90°	.73		11.4		calcareous
524			.30		14.8		
525			.24		20.4		
526			.26.53		20.0		
527			.60		10.1		Oil Shale - low grade, Calcareous
528			.10.53.92		11.6		528.58-.67 Sandstone layer.
529	-60		.36.53.91		6.3		oil saturated
530			.37.65		3.2		
531			.25		10.6		
532			.00		19.3		
533			.09.53		8.5		533.67-.97 Sandstone layer.
534			.30.92		8.6		oil saturated
535			.46		26.8		
536					25.8		
537			.70		9.7		Oil Shale - low grade, light brown
538					6.0		

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Depth	±MM	FRX	PP	0	Gal/ 50 Ton	Lith	Rock Description
539	-70		.15		15.6		
540			.81		46.4		Oil Shale - high grade, black
541					16.3		
542					7.0		Oil Shale - low grade, buff
543			.09.29.73		3.3		to brown
544			.26.57		4.4		
545			.69.81		4.8		
546			.48.85		20.7		546.72-547.55 Sandstone layer:
547			.30.55		21.9		oil saturated
548			.11.80		14.3		548.38-550.00 Sandstone layer
549	-80		.02.32.93		19.9		oil saturated
550					15.6		
551			.76		8.8		Top 'B' Groove
552					6.9		
553		85°	.09		3.2		Oil Shale - low grade,
554			.73		6.7		buff to brown
555			.39		7.3		
556			.52		4.7		
557			.39		5.2		
558			.56		7.8		
559	-90		.34		4.8		
560		85°	.72		9.1		
561			.76		8.7		
562					5.2		
563					4.0		
564			.78.89		4.2		
565					7.8		
566			.29		7.0		566.12-.29 Sandstone layer,
567		55°			7.7		oil saturated
568		45°			7.6		
569	-100		.82		5.1		
570		45°			2.2	TLT	Marlstone - light gray, hard
571		45°			3.8		
572			.17		4.3		
573			.08		3.1		
574					2.5	TLT	Marlstone - light gray, hard
575					5.0		
576			.73		3.3		576.98-577.10 Sandstone layer,
577			.5		5.3		oil saturated
578		90°	.57.72		1.6	TLT	
579	-110				0.9	TLT	Marlstone - light gray, hard
580			.41		1.8	TLT	
581					1.4	TLT	
582					1.9	TLT	
583			.25		2.0	TLT	
584			.65		2.0	TLT	
583			.05.93		2.8	TLT	
586		85°	.60.82		1.6	TLT	
587			.90.96		1.9	TLT	587.90-.96 Sulfide layer