

		Essential Petroleum Resources Limited		Findra 1					
Depth m		SAMPLE DESCRIPTIONS							
From	To	Sst	SlT	Clayst	Lst	Marl	Co	Vis Por	Description and shows:
4	20								Basalt
20	27								mottled red and yellow clay
27	62								LIMESTONE: off white to yellow calcarenite
62	90				100				CALCARENITE: off white to light grey and light brown, fine to coarse grained, firm friable to occasionally hard.
90	144				100				CALCARENITE: as above becoming finer grained grading to 50% CALCISILTITE: light grey, calcareous-sandy micrite, abundantly fossiliferous with fragments of shells, byrozoans, forams and rare shark teeth.
144	150				90	10			CALCISILTITE as above grading to MARL: light grey, 20-40% clay. Extremely fossiliferous ? Coquina or fossil frgment lag deposit at base of Pt C Ist.
150	160								cement contamination
160	170				30	70			MARL: light grey, calcareous-silty and very finely calcareous-sandy, trace fossiliferous markedly less fossil than above, grades to CALCISILTITE
170	180				20	80			MARL: silty sandy, grades to CALCILSILTE: as above, minor echinoid spines.
180	190					100			MARL: light grey to greyish brown, sticky, soft, minor echinoid spines.
190	200				10	90			MARL: as above grades to calcisiti
200	210				10	90			MARL as above
210	220					100			MARL: light grey to greyish brown, occasionally medium greyish brown, 30-40% clay, very sticky, common echinoid fragments and forams.
220	230					100			
230	240					100			MARL as above, fine to occasionally very coarse fossil material in marl matrix.
240	250					100			MARL: very light grey to very light grenenish to bluish grey, very fine ley dspersed glauconite? fossiliferous as above,
250	260					100			MARL: as above
260	270					100			
270	280				20	80			MARL: as above, grades to CALCISILTITE.
280	290				5	95			MARL: light grey to light brownish grey, as above, grades to trace CALCARENITE, glauconitic, micritic, hard.
290	300				60	40			CALCARENITE: mottled yellow to medium grey, very fine to medium grained, micritic ,microcrystalline, minor very fine quartz silt in matrix. MARL: as above
300	310				60	40			CALCARENITE: as above becoming greyish orange, very densely cemented, hard aggregates, minor fossils.

									CALCARENITE: as above becoming red to grey mottled, very well cemented. SANDSTONE: medium brown, silty to very fine grained, moderately sorted, subangular to subrounded, quartzose, sucrosic, firm aggregates with moderate to dense dolomitic and calcareous cement. trace loose coarse and very coarse quartz grains.
310	320		30		50	20			CALCARENITE: as above SANDY CLAYSTONE: brown, soft, dispersive with abundant brown very fine quartz grains.
320	330			80	20				SANDSTONE: clear to translucent, brown, very fine to ver coarse grained, poorly sorted, angular to subrounded, inferred porosity, nil.
330	340	80		20					SANDSTONE: as above, occasionally perfectly rounded quartz grains
340	350	70		30					SILTSTONE: light grey to brownish grey, calcareous in part. SANDSTONE: as above
350	360	50	50						SANDSTONE: as loose grains, clear to white, fine to very coarse, subangular to well rounded, clean, trace brown silty matrix, inferred porosity good, in part poor
360	370	100						g	SANDSTONE: as above becoming cleaner
370	380	100						g	SANDSTONE: as above, SILTY CLAYSTONE: dark brown, soft, dispersive, common pyrite nodules.
380	390	40		60					SANDSTONE: loose grians washing out
390	400	20		80					SILTSTONE: greyish brown, very clayey, very finely micaceous, grades to SILTY CLAYSTONE,
400	410	5	80	15					SILTSTONE: two types, greyish brown, with mottled brick red pacthes and ?laminae, also moderate brown, grades to SILTY CLAYSTONE: very soft, amorphous.
410	420	5	70	25					SILTY CLAYSTONE: light brown to moderate occasionally dark brown to reddish brown, very finely sandy in part, soft. SANDSTONE: as loose grains, coarse to very coarse,
420	430	5		95					SILTY CLAYSTONE: light brown to moderate brown to reddish brown, very finely sandy in part, soft.
430	440			100					SILTY CLAYSTONE: moderate brown, soft, amorphous, sticky, fossiliferous in part,
440	450			100					SILTY CLAYSTONE: moderate brown, soft, amorphous, sticky, fossiliferous in part,
450	459			100					SANDSTONE: brown, translucent as loose grains, fine to very coarse poorly sorted, subangular to subrounded, abundant silty matrix washing out, occasionally clean, inferred porosity, poor to occasionally good. no shows
459	468	80	20					p-g	SANDSTONE: as above, predominantly very caorse grained, becoming clean, common composite quartz grains, patchy silty & pyritic matrix in part.
468	474	90	10					fair	SANDSTONE: grey to yellowish brown, loose grains, fine to very coarse, subangular to angular, quartzose, minor lithic and common composite quartz grains, SILTSTONE: dark grey, pyritic , hard.
474	477	90	10					fair	SANDSTONE: as above SILTSTONE: dark grey, firm to hard, non calcareous, finely sandy, common black glauconite grains.
477	480	60	40					fair	

480	483	20	60	20				p	SANDSTONE: as above, dark brown silt adhering to grains, inferred porosity poor. SILTSTONE grades to GLAUCONITIC CLAYSTONE: black to very dark grey, olive black, firm to hard, non calcareous. Common fine to coarse black irregular to spherical glauconite pellets.
483	486	60	40						SANDSTONE: as loose grains, grey, yellowish grey, fine to coarse grained, SILTSTONE: dark grey, very finely sandy, firm to friable, common black glauconite grains.
486	489	40	60						SANDSTONE: as loose grains, fine to coarse, silty matrix washing out. GLAUCONITIC SILTSTONE as above
489	492	20	50	30					Glauconitic CLAYSTONE: silty, abundant black glauconite grains, grades to SANDSTONE, and SILTSTONE: very dark brown, firm to hard cemented aggregates in part, in part dispersive,
492	498	10	90						SANDSTONE: dark brown, ?chamositic & glauconitic nodules in dark brown dispersive silty matrix, grades to SANDY SILTSTONE, very finely quartz sandy, clayey, commonly very pyritic, common dark brown to black glauconite pellets washing out.
498	501	80	20					p-g	SANDSTONE: as loose grains, clr to white, occasionally light grey, fine to coarse predominantly medium, moderate sorting, subangular, quartzose with trace grey lithic grains and composite quartz grains, commonly with dense pyrite cement. Inferred porosity good, poor where cemented. n/s. Grades at base of interval to SILTSTONE: sandy, speckled light to dark greyish brown, micaceous, friable, very pyritic in part and to SILTY CLAYSTONE.
501	504	90	10					g	SANDSTONE: as loose grains, clr to white, occasionally light grey, fine to very coarse, moderate sorting, subangular, quartzose with trace grey lithic grains and composite quartz grains, occasionally with dense pyrite cement. Inferred porosity good. Circulated sample at 504 m, no shows, no gas.
504	507	95	5					g	SANDSTONE: as above, trace pyrite cement, predominantly loose, trace silty matrix washing out
507	513	60		30				fair	SANDSTONE: as above trace pyrite cement, predominantly loose, abundant light brown argillaceous matrix washing out. SILTY CLAYSTONE: light brown to greyish brown, speckled, very finely sandy, pyritic in part, very soft.
513	516	20		80					SILTY CLAYSTONE: as above
516	522	20		80					SILTY CLAYSTONE: as above, soft, sticky, SANDSTONE: as loose grains washing out.
522	531	30		70					SILTY CLAYSTONE: medium brown, very finely silty and sandy, soft, SANDSTONE: two types, fine to very coarse loose quartz as above, also very fine pyritic aggregates with
531	537	20	30	50					SILTY CLAYSTONE: as above, grades to SILTSTONE: brown to reddish brown, hard to very hard, cemented with silica. SANDSTONE: loose and pyrite cemented as above
537	543	40	30	30					as above
543	549	30	40	30					SANDSTONE: as loose grains, clear to translucent, abundant clay matrix washing out, SILTSTONE: light grey to brown, speckled, soft, grades in SILTY CLAYSTONE in part, very hard, silicified.
549	555	10	20	70					SILTY CLAYSTONE: as above

555	561		20	80					SILTY CLAYSTONE: medium greyish brown, as above soft, homogenous, rarely sandy, glauconitic, grades to SILTSTONE:
561	567		20	80					SILTSTONE: light brown, sandy, trace glauconite, in part very hard, silicified, grades to SILTY CLAYSTONE: soft, as above, finely sandy
567	573	40	60					p	SANDSTONE: as loose grains, clear, very fine to fine grained, well sorted, quartzose, silty matrix washing out. SILTSTONE: light brownish grey, very finely sandy, very soft, dispersive,
573	579	30	70						as above, occasional fine grained well cemented sandstone aggregates, trace fine black glauconite grains washing out
579	585	70	30					n	SANDSTONE: two types, 1. loose clear quartz as above, 20% of sample. 2. mottled grey, brown, speckled greenish grey, very fine grained, sucrosic, well cemented aggregates, hard, nil visual porosity. SILTSTONE: light greyish brown very finely sandy, dispersive.
585	591	10	90					n	SILTSTONE as above becoming very finely sandy grades to silty sandstone,
591	597	40	60						SANDSTONE: two types as above,
597	603	10		90					SILTY CLAYSTONE: medium brown, very silty, very finely sandy, soft, sticky, trace forams,
603	609			100					SILTY CLAYSTONE: medium to dark brownish grey, soft sticky, trace fossil fragments, common pyrite nodules.
609	615			100					SILTY CLAYSTONE: as above, minor shelly fossils, occasional very coarse quartz grain as discrete inclusion in claystone.
615	621	5		95					SILTY CLAYSTONE: greyish brown speckled green and black, finely glauconitic. Trace fine sand washing out. no shows
621	627	5		95					SILTY CLAYSTONE: greyish brown to greenish grey, glauconitic, trace fine quartz sand washing out.
627	633	80		20				fair	CBU at 633m SANDSTONE: as loose grains, clear, green, yellow, quartz 70% glauconite 30% fine to medium grained, well sorted, angular to subrounded, clean in part, in part washing out of SILTY CLAYSTONE: greenish to yellowish grey, glauconitic as above. No shows. NB glauconite common in top of interval.
633	639	70	30					fair	SANDSTONE: as loose grains, clear, yellow, yellowish green. Predominantly clean loose grains, fine to medium occasionally coarse and very coarse grained, moderately sorted, angular, common composite grains.
639	645	80	20					t	SANDSTONE: as above, abundant glauconite, no shows, SILTSTONE: dark grey to greenish grey, glauconitic, pyritic,
645	648	70	30					n	Glauconitic SANDSTONE: black, quartz 50% glauconite 50%, very fine to coarse grained in silty glauconitic/chamositic matrix, hard. Grades to GLAUCONITIC SILTSTONE: firm to hard,
648	651	70	30						GLAUCONITE SANDSTONE: olive black greensand, quartz 10%, black glauconite pellets in black, silty/glauconitic matrix, firm to friable occasionally very hard.
651	657	10	70						SANDSTONE: as above, SANDY SILTSTONE: medium greyish brown, soft, very finely sandy,

657	663	20	40	40					SANDY SILTSTONE: medium greyish brown, trace yellow mineral fluorescence, no cut, SANDSTONE: loose, quartz and glauconite as above washing out of claystone? , trace pyrite nodules.
663	669	50	40	10				n	SANDSTONE: pale grey to greyish brown, very fine grained, silty, poorly sorted, micaceous, as loose grains and silty aggregates, trace glauconite, common coarse pyrite nodules, grades to SANDY SILTSTONE and SILTY CLAYSTONE: very light grey, massive,
669	675								
675	681	70							SANDSTONE: light grey, light green, very fine to fine grained, silty, poorly sorted trace carbonaceous specks, trace red lithic grains, SILTONE: light grey, calcareous, firm to hard, blocky.
681	687	90		10				t	SANDSTONE: as above, very fine to fine grained, silty in part, in part moderately well sorted, grey and green lithic grains becoming abundant. no shows SILTY CLAYSTONE: , off-white to very light grey, to greyish brown, occasionally red mottled, iron stained, minor pyrite nodules.
687	693	80		20				t	SANDSTONE: as loose grains, clear, white, black, green, biotite, grades to SANDY CLAYSTONE> off white, sticky.
693	699	90		10				t	SANDSTONE: greenish grey as above, friable silica cement, abundant cherty and consolidated siltstone lithic grains, trace brick-red lithic grains. SILTY CLAYSTONE: as above
699	702	80		20				t	SANDSTONE: greyish greenish brown, predominantly loose grains, fine to coarse predominantly medium grained, angular to subangular, SANDY CLAYSTONE: as above
702	708	100						t	SANDSTONE: as above abundant black, grey, green, white, rare red, silty and cherty lithics, trace mica, slight calcareous cement and silica cement. trace BROWN COAL.
708	714	10		90					SILTY CLAYSTONE: very light brownish grey, predominantly homogenous, occasionally with trace irregular carbonaceous material, soft to firm, trace fine pyrite,
714	723	100							SANDSTONE: greenish grey, loose abundant multicoloured lithic grains as above
723	732	10		90					SANDY CLAYSTONE: very light brown, speckled, very fine quartz and lithic grains, blocky, soft, trace carbonaceous material.
732	741	10	40	50					SANDY CLAYSTONE: very light grey to very light brown, off-white, rarely very pale bluish grey, very silty grades to thinly laminated SILTSTONE.
741	750		50	50					as above
750	759		20	80					SILTY CLAYSTONE: very light grey, very light brown, occasionally medium brown, dark grey, very soft, rarely pale bluish grey, predominantly homogenous, very finely sandy in part. Trace pyrite
759	768		20	80					laminated SILTY CLAYSTONE as above, soft, very fine sandy in part
768	777	100						t	Quartz lithic-arenite, grey, greenish grey, abundant lithic grains as above, fine clay matrix washing out
777	786	100						t	Quartz lithic-arenite, grey, greenish grey, abundant lithic grains as above, lithics 70% lithics 30%
786	795	70		30				n	arenite as above interlaminated with SANDY CALYSTONE as above

795	804	100						quartz lithic arenite as above, light grey clay, matrix washing out, trace biotite.
804	813	100						SANDSTONE: as above
813	822	90	10					SANDSTONE: as above becoming argillaceous, grey and multicoloured lithic grains.
822	831	10		90				SANDY CLAYSTONE: light brown, very finely sandy, occasionally fine and medium sand. Lithic grains washing out.
831	849			100				SANDY CLAYSTONE: grades to CLAYSTONE: light brown, light grey, occasionally darker colours, trace pyrite nodules. Sandy/carbonaceous laminations.
849	858	30	20	50				SANDSTONE: grey, brown, very fine grained to fine grained, poorly sorted, predominantly firm calcareous aggregates with carbonaceous/micaceous laminae, grades to sandy SILTSTONE and CLAYSTONE: a/a
858	867	10	50	40				
867	876		40	60				
876	885		30	70				
885	889		30	70				laminated silt and clay as above
889								TD